IMPACT

THE JOURNAL OF THE CENTER FOR INTERDISCIPLINARY TEACHING & LEARNING

VOLUME 9, NUMBER 2, SUMMER 2020

BU College of General Studies

TABLE OF CONTENTS

ABOUT US

Impact: The Journal of the Center for Interdisciplinary Teaching & Learning is a peer-reviewed, biannual online journal that publishes scholarly and creative non-fiction essays about the theory, practice and assessment of interdisciplinary education. *Impact* is produced by the Center for Interdisciplinary Teaching & Learning at Boston University College of General Studies. *Impact* accepts submissions throughout the year and publishes issues in February and July. Please submit your essays for consideration at https://citl.submittable.com/submit.

Impact provides free and open access to all of its research publications. There is no charge to authors for publication, and the journal abides by a CC-BY license. Authors published in *Impact* retain copyright on their articles, except for any third-party images and other materials added by *Impact*, which are subject to copyright of their respective owners. Authors are therefore free to disseminate and re-publish their articles, subject to any requirements of third-party copyright owners and subject to the original publication being fully cited. Visitors may download and forward articles subject to the citation requirements; all copyright notices must be displayed. If readers want to search by journal subject they might use these words: education, graduate, undergraduate, interdisciplinary, disciplines, curriculum, higher education.

ISSN 2325-0232 ISBN 10-0615582478
ISBN 13-978-0-615-58247-4

EDITORIAL STATEMENT

Dear Readers,

Every essay, interview and book review published in *Impact* is important and special to our readers, the College of General Studies, and the Center for Interdisciplinary Teaching & Learning. However, it may be that each essay, interview and review in our summer 2020 issue has a special resonance for us because it came to fruition in the midst of Covid-19. In the context of a global pandemic, themes such as democracy, general education, and how we teach history and safeguard the environment become even more meaningful. Not only must we stay safe and hold our loved ones just a little closer to us, but also we must reaffirm our commitment as teachers and scholars.

Part of our commitment as teachers and scholars is to host a forum on teaching diverse texts.
On Friday, February 26, 2021, Boston University's College of General Studies (CGS) will host a colloquia for Ph.D. candidates who are close to graduating and applying for jobs in academia and whose research interests include teaching diverse texts and facilitating respectful classroom dialogue, especially in general education. We welcome colloquia participant applications from Ph.D. candidates who have experience teaching general education and who are interested in a day and a half symposium where they will present on their research and teaching and will interact with nationally recognized scholars, pedagogues and Boston University students. A joint offering through Boston University's Office of Diversity and Inclusion and the College of General Studies, participants will receive a stipend to cover transportation, accommodations and food for the day and a half experience. Please send your CV and a one page statement of interest and experience to Dean Natalie McKnight, College of General Studies at cgsdean@bu.edu by October 15th, 2020. Please refer to CITL's website for additional announcements: http://www.bu.edu/cgs/citl/.

We hope to see some of you at this forum, and we wish all our readers and writers good health as they renew their commitments as teachers and scholars.

Best,

Megan

Megan Sullivan, Editor-In-Chief, Director of the Center for Interdisciplinary Teaching & Learning

ABOUT THIS ISSUE'S AUTHORS

Stacey Stanfield Anderson is an Assistant Professor of English and Director of the Composition Program at California State University Channel Islands. Over the past 25 years, she has taught college writing to a wide array of audiences from community colleges to private research universities. Her teaching and scholarship has increasingly centered on interdisciplinary collaboration, particularly in the areas of scientific literacy, the rhetoric of inclusivity and sustainability, and effectively communicating the urgency of our unfolding climate crisis. She has served on a variety of professional, editorial, and non-profit organizations across California. Please visit staceyanderson.cikeys.com for more information about her work.

Heather Castillo is an Assistant Professor of Performing Arts, Dance at California State University Channel Islands. She has had multiple career paths. She started her career as a commercial dancer in Los Angeles performing in multiple television specials, industrial shows for brands such as American Express and with stars ranging from Andy Williams to Selena Gomez. Heather returned to school to complete her BFA and MFA in dance and choreography at UC Irvine with the goal of bringing her commercial dance experience to higher education. She created *Arts Under the Stars* eight years ago to synthesize her expertise as a professional dancer and academic by creating an opportunity for students to build communication skills between the fields of the arts, sciences, business, and education programs. Castillo continues to stay active as a professional choreographer and performer in Los Angeles and is enthusiastically and thoughtfully building a new dance program for the 21st Century at CSU Channel Islands. Please visit her website heathercastillo.cikeys.com for more information on her current research and dance projects.

Richard Samuel Deese is a Senior Lecturer for the Division of Social Sciences at Boston University. He is the author of *We Are Amphibians: Julian and Aldous Huxley on the Future of Our Species* (2015), *Surf Music* (2017), and *Climate Change and the Future of Democracy* (2019). His research interests include the history of science, global environmentalism, and transnational democratic movements since the end of World War Two.

Brady Harrison is Professor of English at the University of Montana. He is the author or editor of several books, most recently *Punk Rock Warlord: The Life and Work of Joe Strummer*. A co-edited collection, *Teaching Western American Literature*, is forthcoming from the University of Nebraska Press.

Kathryn Lamontagne is a Lecturer in Social Sciences at Boston University's College of General Studies. She is a social and cultural historian who works in areas of gender, sexuality, identity, and faith in the British Atlantic world. She has published on English ethnicity and culture in New England (2017) and has a manuscript in preparation on progressive Catholic women in late-Victorian Britain. Kathryn is an early career scholar (PhD, Boston University, 2020) with an extensive background working in public history, ranging from the Royal Household, Buckingham Palace, London to The Breakers, Preservation Society of Newport County, Rhode Island.

Marco Malvestio obtained a Ph.D. in Comparative Literature at the University of Padua in 2019. As a Post-Doctoral Fellow at the University of Toronto, he works on the ecological issues raised by twenty-first century Italian science fiction and weird fiction. His publications include articles on Philip Roth, William T. Vollmann, Roberto Bolaño, Jeff VanderMeer, and Bret Easton Ellis, and on Italian science fiction. He co-edited with Valentina Sturli a volume on contemporary horror fiction, *Vecchi maestri e nuovi mostri. Tendenze e prospettive della letteratura horror all'inizio del nuovo millennio* (Mimesis, 2019). *The Conflict Revisited: The Second World War in Post-Postmodern Fiction*, a book based on his doctoral thesis, is scheduled for publication by Peter Lang in 2020.

Kristin Novotny, Ph.D., is Assistant Dean for the First Year Experience and Professor of Interdisciplinary Studies in the Core Division at Champlain College. She is a political theorist and conflict mediator by training, an interdisciplinarian by design, and a practitioner of collaborative, immersive, project-based "maker pedagogy." Novotny formerly taught in and was Chair of the Political Science Department at Saint Michael's College.

Alecos Papadatos worked as an animator, animation director, and storyboarder for major European animation production companies from 1984 to 1994. In 1990, his love for drawing led him to the print media and he now writes and draws comics for two Greek newspapers. He spent 2003 to 2008 drawing the graphic novel *Logicomix*, which went on to become an international phenomenon. He lives with his family in Athens.

Kiki Patsch is currently an Assistant Professor and Interim Chair of Environmental Science and Resource Management at California State University Channel Islands in Camarillo, California. Patsch completed her undergraduate degree at the University of Virginia in Environmental Science and earned her Ph.D. in Earth and Planetary Sciences with a focus on coastal geology, processes, and hazards at the University of California Santa Cruz. Through her work, Dr. Patsch aims to bridge the gap between policy makers, scientists, engineers, and private citizens on issues related to coastal resilience in the face of climate change and sea level rise. Dr. Patsch's past and current

ABOUT THIS ISSUE'S AUTHORS

research focuses on coastal geomorphology and processes, shoreline hazard assessment, sediment budgets analysis, sea cliff and beach erosion, reductions in the natural supply of sediment to the coast, and coastal armoring along the California Coast. Please visit her website sandshed.org for more information on her current research projects.

Adam Sweeting is Associate Professor and Chair of the Division of Humanities in the College of General Studies at Boston University. He is the author of *Reading Houses and Building Books: Andrew Jackson Downing and the Architecture of Popular Antebellum Literature* and *Beneath the Second Sun: A Cultural History of Indian Summer.* He is part of a faculty team leading an interdisciplinary course on climate change at BU.

Katheryn Wright, Ph.D., is an Associate Professor of Interdisciplinary Studies in the Core Division at Champlain College. She teaches and writes about media geography, digital pedagogy, and global screen cultures. Her book, *The New Heroines: Female Embodiment and Technology in 21st Century Popular Culture* (Praeger, 2016), examines posthuman subjectivity in teen and YA literature and film.

ANNOUNCEMENTS

Latest Announcements

On Friday, February 26, 2021, Boston University's College of General Studies (CGS) will host a colloquia for Ph.D. candidates who are close to graduating and applying for jobs in academia and whose research interests include teaching diverse texts and facilitating respectful classroom dialogue, especially in general education. We welcome colloquia participant applications from Ph.D. candidates who have experience teaching general education and who are interested in a day and a half symposium where they will present on their research and teaching and will interact with nationally recognized scholars, pedagogues and Boston University students. A joint offering through Boston University's Office of Diversity and Inclusion and the College of General Studies, participants will receive a stipend to cover transportation, accommodations and food for the day and a half experience. Please send your CV and a one page statement of interest and experience to Dean Natalie McKnight, College of General Studies at cgsdean@bu.edu by October 15th, 2020.

Please refer to CITL's website for additional announcements: http://www.bu.edu/cgs/citl/.

IMPACT ESSAY COMPETITION

Every December, the editors of *Impact: The Journal of the Center for Interdisciplinary Teaching & Learning* invite submissions of scholarly and creative non-fiction essays between 1,000 and 5,000 words on any aspect of interdisciplinary teaching or research. The author of the winning essay will receive a $250 award and publication in *Impact*.

Essays should be readable to a general, educated audience, and they should follow the documentation style most prevalent in the author's disciplinary field. Essays for this contest should be submitted by the first Monday in December to http://CITL.submittable.com/submit. See our general submission guidelines in Submittable.

CITL reserves the right to not publish a winner in any given year. Faculty and staff from the College of General Studies are not eligible to submit to this contest.

ESSAYS

When the Past *is* the Classroom: Merging 'Reacting to the Past' and Experiential Education

Kathryn Lamontagne, Boston University, College of General Studies

My thanks to the online Reacting Faculty Lounge for introducing me to so many incredible experiential reactors sharing their efforts. Thanks are especially extended to: Jenn Worth, Mark Carnes, Verdis L. Robinson, Kate Jewell, Charlotte Carrington-Farmer, Rebecca Stanton, J.J. Sylvia IV, Leslie Regan, Jace Weaver, Traci Levy, Margaret Tonielli Workman, Brian Klunk, Jason Locke, and John O'Keefe.

Imagine a classroom where a trumpet-playing student leads a march through the halls of their academic building while playing the "Internationale," or the class walls are covered with student-created propaganda advocating for women's suffrage. This same classroom will be the site of weeks of debate, laughter, and dismay as students take part in the gamified role-playing pedagogy of Reacting to the Past (RTTP). Reacting to the Past was developed at Barnard College by Mark Carnes in the late 1990s and has slowly grown in practice to over 400 campuses with a game library spanning hundreds of years and topics (Carnes, Minds on Fire). This pedagogy employs a number of learning styles such as lecture (passive), role-playing (active), creative (active), and speeches (rhetoric) (Berrett). RTTP has become increasingly popular over the past few years and tellingly, in 2020, the American Historical Review published eight reviews of games available via Norton, Reacting's publisher.

Now, push this dynamic format further and imagine that your students are playing The Threshold of Democracy: Athens in 403 B.C. (2015) while in Athens on a Maymester or semester abroad as was the case for J.J. Sylvia from Fitchburg State University, Massachusetts (Ober et al.) Or, taking part in Frederick Douglass, Slavery, and the Constitution, 1845 (2019) in Rochester, the longtime home of Douglass, as Verdis L. Robinson's students at Monroe Community College did over a number of semesters (Higbee and Stewart). Charlotte Carrington-Farmer regularly runs The Trial of Anne Hutchinson (2013) at Roger Williams University, taking advantage of its location near Portsmouth, Rhode Island, the town Hutchinson helped found in 1638 (Carnes and Winship). The capacity for student engagement with a historical game, alongside external activities/visits, presents a truly vibrant opportunity for students to master metacognitive knowledge of a topic. Students are forced to confront ideas and primary sources head-on inside and outside of the classroom. Consequently, student buy-in to the game is heightened over the composite experience and correlates to the acquisition of increased summative learning and student retention (Olwell and Stevens; Higbee, The Scholarship of Teaching).

In this paper, I aim to show how RTTP can be further elevated via the use of experiential education outside of the classroom, or reimagined in a virtual world. By this, I mean that active role-playing and learning inside the classroom could be further augmented by on-site (or virtual) visits to spaces relevant to their RTTP game. It may also be the handling of objects or material culture relevant to game play. This kind of whole learning experience effectively immerses the student in the subject matter, creating a level of expertise seldom captured in introductory or general education classrooms. Experiential education "evoke[s] an impression of the 'whole' subject to be explored and engage the students in several simultaneous ways" which makes it a natural counterpart, if not synonymous with RTTP (Caine et al. 127). Therefore, a dynamic hybrid experience can be achieved using RTTP with site visits, careful planning, 'character' assignments, and creating student buy-in.

I begin by outlining how the pedagogy of RTTP itself works. Then, drawing on my past experience teaching introductory, interdisciplinary general studies/core program courses in the social sciences, but specifically the fields of history and political science, I revisit how myself and others have used experiential education and RTTP successfully within this framework (Lazrus and Kreahling McKay). In doing so, I recount the moments of synergy and synthesis in RTTP and experiential education that create a provocative, active student-centered experience in- and outside of the college classroom.

How does RTTP work?

RTTP uses a number of different platforms to disseminate game play. Each game begins as an idea that is then shepherded through a multi-stage approval and testing process which begins at Barnard where the RTTP Consortium is based. The Editorial and Consortium Boards are comprised of members from universities across North America. RTTP is generally restricted to college students and faculty, but some high schools have participated. There are ongoing changes (2020) to previously established practices regarding institutional memberships for game materials and pay barriers. At the time of this writing, students would generally purchase a game book from Norton and the faculty member at the home institution would access instructor materials/student role sheets directly from the online community/

Consortium at Barnard. Faculty could also access a "Faculty Lounge" on social media (namely, Facebook) to share materials, links, etc. Many Faculty Lounge members actively share rubrics, character extensions for larger classrooms, and suggestions to maximize student buy-in by utilizing online platforms Slack or Discord.

Faculty materials are vital for the success of RTTP. Available as PDF documents, these materials include multi-page role sheets, instructions for each classroom period of game play, how game play can be adjusted for class numbers/ length of classes, and additional activities. These additional activities can be as simple as film suggestions, additional primary sources, or most importantly, in-class activities. For example, Mary Jane Treacy developed a number of in-class activities that can be integrated into the larger game, such as instant speeches and a play on 'Three truths, one lie' for game play in Greenwich Village, which can be easily recreated in other non-RTTP classrooms. Students are always "in character" and to make sure that others know who their character is and their motivations 'Three truths, one lie' (where students make 4 claims about their character and the other students guess which one is the lie) quickly checks comprehension, forces quick rhetorical action, and reinforces the import of intimately knowing character/historical motivations. This is a fast-paced activity that functions similar to an oral quiz, but is also fun and appeals to oral learners. Faculty game materials also contain secret information for the faculty member, or, rather Game Master, to share with select roles. Of note, advice on everything from optimal number of students to course meeting lengths are readily available.

Many "reactors" begin with an introductory micro-game such as Mary Beth Looney's micro-game "Bomb the Church," which introduces students to role playing, followed by a few days of building rhetorical confidence (how do I give a speech? connect with my audience?). This is then followed by 2-3 class periods of traditional lecturing on relevant historical, social, and political information and grappling with primary sources (See Fig. 4.). Primary sources are included in all game books, so students generally do not need to purchase additional texts (although this may vary depending on the game). Students would then 'learn' their assigned character and begin to make plans with others in their faction. Greenwich Village (GV13) has three factions of labor, suffrage, and indeterminates; but other games, such as Henry VIII, have multiple factions (Treacy, Greenwich Village; Coby, Henry VIII). In most instances the characters are "real" figures but there is an element of fiction to some games. For example, Kelly McFall and Abigail Perkiss, Changing the Game: Title IX, Gender, and College Athletics (2020) is set at a fictional university with fictional characters, but of course the battle over Title IX in the US was very real. This is then followed by actual student-led game play where the major factions battle for the support of the indeterminates. Game play consists of speeches, debates, creating personal influence (termed 'PIPs' in RTTP nomenclature) through relationships and the creation of artifacts. Artifacts can include posters, costumes, newspapers, skits, media, music, poetry, articles, and art (See Figs. 1 and 2). Each class day would be dedicated to "Feminist Mass Meeting" for GV13 or, in the French Revolution game a meeting of "The National Assembly" or, sermons in a "Boston Church," as is the case in the Trial of Anne Hutchinson (Treacy, GV13; Popiel et al.; Carnes and Winship). The student owned gamebook and faculty materials have a timeline of what major actions happen during each class period, which is often the most confusing aspect to newcomers of how to "play" a game without a standard "board." Students are invited to dress and speak in character to further the role-playing element of the pedagogy. In the past, my own students have taken this segment of the pedagogy the furthest and become character actors, changing into a wig or certain tie before class to fully engage in their role.

The game is played in the classroom, but also in the dorms, and over the internet, creating an all-encompassing learning environment. Most importantly, the students conduct the class and the instructor becomes the observer, flipping the classroom and the implications of how information is mediated and experienced. During the Pandemic of 2020, the use of Slack and Discord as ex cathedra settings for debates and discussions has been especially robust. There is a dynamism in the Reacting classroom that is seldom found in a traditional lecture or discussion classroom as the issues of yesterday become the debates of today (Carnes, Minds on Fire 1-16). Critical thinking, creating arguments, responding quickly to constituent concerns, and objectivity are all skills that are intuitively embraced in the RTTP class (Galbraith).

Experiential Education

When the already dynamic RTTP experience tumbles out of the classroom, we see a complete immersion in the historical topic, rarely accomplished in the traditional classroom via PowerPoint, discussion sessions, or a textbook. History is mediated by the primary sources – and, combining RTTP and the 'primary source' of a space/artifact is theoretically invigorating. Primary sources, whether they be the written word or a material object (building, painting, etc.) are the building blocks of unpacking the historical narrative. Consequently, the more varied the sources a student can access to engage with this narrative, the greater their level of achieving mastery. To borrow from Pierre Nora, through experiential education the participants are engaging with (re)locating "lieux de mémoire" or, sites of memory, and imbuing them with further layers of meaning. This is not historical reenactment, but historical exploration that is

accomplished by plumbing the emotional depths of real people. Students are not meant to copy what was done, but via careful analysis consider the 'maybes,' 'what could have beens,' frustrations, and tensions that they themselves experience in their roles. To push the construct to its furthest, bringing the students into the space, lieux de mémoire itself, creates the opportunity for the highest level of coherence and historical, rhetorical understanding. By doing so, the experiential inside and outside of the classroom goes beyond game play into serious theoretical and pedagogical work.

Consider again the student who has played or is playing Greenwich Village, 1913 as did Kate Jewell's students at Fitchburg State in 2018, which was then followed by a visit to Greenwich Village led by Columbia University's Rebecca Stanton. Jewell's students spent class time in their imagined space of 'Polly's,' a hangout for the bohemian set in Greenwich Village on MacDougal Street, and then visited the historic Polly's (the building is still there and owned by New York University) and a contemporary bohemian hangout, La Lanterna di Vittorio. They also visited the Triangle Shirtwaist Factory and Washington Square Arch. Jewell's student, Kaitlynn Chase, currently a Master's candidate in English at Clark University, recalled the power of this experience in the actual Greenwich Village as seminal, as it allowed her and her classmates in the Honors program to "completely connect to the [realness of] the people" in GV13 and "helped put that into perspective." In addition to visiting GV13 sites of memory, Jewell's students had also played Jason Locke's Vice in New York, 1895 (unpub.) and found the connection between the two games based in the city incredibly enlightening. The students then visited the Merchant House Museum and the Tenement Museum in New York City. Chase felt visiting the Merchant House was "amazing" and made the game more "tangible." Jewell echoed this idea and felt that the RTTP classroom-based pedagogy underpinned with post-game experiential visits was integral to her class not just learning the historic materials but internalizing them, "one student even became a history major," after the course. Additionally, most of the students had never been to New York City and physically seeing the Triangle Shirtwaist Factory and the Washington Square Arch were moments of synergy between reading and really experiencing the past. It is easier to "react to the past" when you can physically walk the streets of New York City or Paterson, New Jersey where these events changed history (Treacy, Paterson).

Students do not need to necessarily travel far to take part in experiential education. New York, Verdis L. Robinson's Douglass students from a Rochester Community College dined at Delmonico's in the same city, where John C. Calhoun advocated for slavery in abolitionist Rochester as part of the Frederick Douglass game. My own students felt the power of the past when they walked the streets of nearby downtown New Bedford, Massachusetts where Douglass fled after escaping slavery. One student reflected after our course,

> Standing in front of the Nathan and Polly Johnson house with the Park Ranger, a house that was a stop on the Underground Railroad that Douglass lived in was surreal in many ways. I felt so connected to this man that lived 100 years ago instantly and it made it more real than in class, but class already felt really real too!

This kind of powerful use of the historic space creates an opportunity for students to experience their character, the game topic, and themselves across multiple domains. Further, it illustrates that experiential education does not require a flight, major expense, or hours-long drive, which are incredibly important in a world that has now experienced full-scale online learning. Stanton, based in New York City, regularly takes student to the Metropolitan Museum of Art to access Ancient Greek or Chinese artifacts (Athens 403 BC, Confucianism and the Succession Crisis of the Wanli Emperor) and the City Museum of New York for changing exhibits related to games, which can also be visited virtually (Ober et al; Gardner and Carnes). Leslie Regan from the University of Illinois at Urbana-Champaign enthusiastically uses on-campus museums such as the Krannert Art Museum for students to view John Sloan prints, a character in GV13, or women in sport (Changing the Game). As mentioned earlier, Carrington-Farmer (Anne Hutchinson) brings her students to spaces throughout the capital and East Bay of Rhode Island that Hutchinson shared with Roger Williams, her university's namesake. She also makes great use of free tours from the National Parks Service and long-time relationships with rangers, such as John McNiff in Providence. Carrington-Farmer has used an exhaustive number of experiential activities in tandem with the Hutchinson game including visits to Danvers and Salem, Massachusetts and London. Traci Levi, from Adelphi University, just outside of New York City, brought her Constitutional Convention/GV13 students to the Tenement Museum as well (Coby, Constitutional Convention; Treacy, GV13).

As part of the learning outcomes for my introductory interdisciplinary political science and history course at Roger Williams University, the university required that I organize 'events' – one on-campus and one 'field trip' – for my class. This provided me with an opportunity to teach a hybridized model that ran the gamut from traditional lecture to experiential education to interactive game play via RTTP. It became apparent over two semesters that the hybrid model

ESSAYS – CONTINUED

was extremely successful in that it greatly increased student buy-in to a required general education class for non-majors, helped develop strong relationships between first-year students which improves overall retention, and was, most importantly, fun. The dynamism of the hybrid model succeeds because it brings together trips and game play – active learning is, by its very nature, fun. The opportunity to have 'fun' while learning is the hallmark of experiential education, as stated earlier it correlates directly to the acquisition of increased summative learning. The success of the model can be measured in student feedback surveys with comments ranging from, "I had no idea history didn't need to be boring, it was fun," "I never talked in class before this one, it is actually fun to be involved and it makes class go by really fast," "I'm a math and engineering person and don't really like arguing and politics but this was fun and I got to role play," and "playing a game in class and going places and doing stuff together was really fun. I liked making stuff too like TikToks and posters. I felt like I was procrastinating because I was doing fun stuff, but it was class work!" The common denominator here is "fun" and the power of the promise of fun significantly increases student buy-in for the game.

For our on-campus event, I worked closely with Michelle Farias, archivist at the Redwood Library and Athenaeum in Newport, to curate a collection of primary and secondary sources for my students to examine before beginning game play (See Fig. 3). Farias graciously came to campus and gave a mini-presentation on the incredibly wide-ranging sources from the Redwood collection that fit into our game, but also the course itself. She brought suffrage texts belonging to Gilded Age bon vivant Alva (Vanderbilt) Belmont, bound issues The Masses (ed. Max Eastman, a character in GV13 and featured prominently in the game), but also anti-suffrage texts written by women, which shocked the students as they had not realized that any woman might be against the right to vote for herself (Goodwin, Anti-Suffrage). For many first-year students this was their first time physically handling primary sources (but, also handling materials over 50 years old). Most reported previous primary sources were only viewed online and included explanatory blurbs. In this case, students 1.) interacted with an archivist and confronted the import of historical repositories 2.) learned how to handle delicate materials 3.) considered the value of provenance (i.e. who was Alva Belmont? Why do I care that she owned this particular book?) and, 4.) saw how primary sources can be integrated into real life scenarios and used as tools to support arguments. Here, it is evident that experiential education is not necessarily leaving one space to travel to another (which often privileges the able-bodied or others) – it can be in as simple as looking at common objects in a very different way in one's home or an after-hours classroom space.

Some pedagogical examples for RTTP which bridge the gap between a traditional active, off-site experiential aspect and a more physically passive experience are using films, and in our current pandemic world virtual visits to museums, galleries, and archives. I have had a great amount of success by holding after-hours movie and pizza nights that I use to show clips from Labor films, suffrage and labor rallies, Traffic in Souls (1913) and even Charlie Chaplin's Modern Times (1936). Viewing these sources during game play, but outside of the gaming classroom, furthers the pedagogical reach by adding an additional layer of immersion in the topic. Carrington-Farmer, as part of the Anne Hutchinson game, has run a 'Writing with a Quill Workshop' to tap into the quotidian as part of understanding the lives of the game characters. Others have been successful in using their own athletic staff and players to discuss the effects of Title IX on their campus. Over the pandemic crisis of the 2020 Spring semester, many professors have brought RTTP online and created new types of "experiential visits" to add to their games – virtually visiting museums such as the Musée D'Orsay in Paris or the Guggenheim in New York City. Consequently, while it may seem that experiential education dictates a physical visit, it is evident that value and experience can be achieved wherever the opportunity for engagement presents itself. Student immersion in the topic is the key aspect in combining the experiential and the game itself.

In closing, Reacting to the Past is an innovative and engaging pedagogical format that stretches the classroom in many ways. Augmenting RTTP with immersive experiential education of any kind outside of the physical classroom space, whether it be study abroad, local visits, the archives, workshops, films, or in the virtual world, offers a heightened environment for the acquisition of summative knowledge for university students. Further, the students and the faculty member have fun while creating stronger interpersonal relationships with each other, which also benefits the university in terms of student retention. Most importantly, the dynamic combination of RTTP and the experiential, offers general education students in introductory level classes the opportunity to master historical and rhetorical understanding of a topic in an innovative, inspiring way.

ESSAYS – CONTINUED

Fig. 1 "Labor March" and Suffrage Leaders, Roger Williams University, 2018

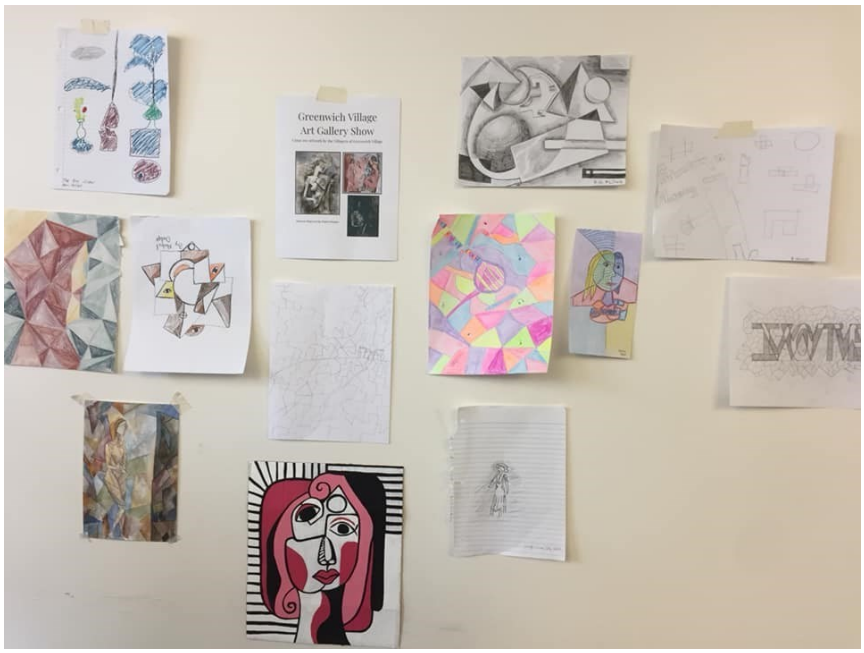


Fig. 2. "Armory Show, 1913" and Suffrage Posters (mixed in with the traditional college posters) from Roger Williams University, Bristol, Rhode Island

ESSAYS – CONTINUED

Fig. 3. Visit from archivists, the Redwood Athenaeum and Library, Newport, Rhode Island

Fig. 4.(below) Example class schedule for *Greenwich Village, 1913* (90 minute blocks) and experiential visits

RTTP Overview	Looney's "Bomb the Church"	Lily Lamboy and methods of Rhetoric videos	Session 1: Women's Rights and Suffrage	Session 2: Labor and Labor Movements	Session 3: The Spirit of the New (Traditional Lecture with Activity)	Assign Roles and students get to know each other in role
Archival visit to view *The Masses* and other sources	Students exposed to the RTTP methodology	Students exposed to public speaking	Overview of issues in traditional lecture format, primary sources integrated	Overview of issues in traditional lecture format, primary sources integrated	Overview of issues in traditional lecture format, primary sources integrated. Session begins with considering modern art actively.	Meet with students privately and in factions to discuss role sheets, ideas, goals.

Session 4: The Suffrage Cause	Session 5: Labor Has Its Day	Session 6: The First Feminist Mass Meeting	Session 7: An Evening with Mabel Dodge	Session 8: Thus Speak *The Masses* and the Vote	Session 9: 1917—Facing the War and Debriefing the Game	Additional Experiential:
Suffrage leaders argue their cause. This session takes place at Polly's, a restaurant, and works when catered with light snacks.	Labor leaders argue their cause. Film and Pizza Evening	Indeterminate and Wild Card students engage with ideas of Labor and Suffrage more carefully. Present own ideas.	Another session that benefits from music or food. Those who have stood out in game play are asked to speak.	Final arguments and game vote, presentation of student writing and art in character.	What really happened?	Visit to Greenwich Village, Paterson, NJ, Provincetown, or Washington, D.C.

Works Cited

Berrett, Dan. "How 'Flipping' the Classroom Can Improve the Traditional Lecture." Chronicle of Higher Education, February 19, 2012.

Caine, Renate Nummela, et al. 12 Brain/Mind Learning Principles in Actions: The Fieldbook For Making Connections, Teaching, and the Human Brain. Corwin, 2005, p.127.

Carnes, Mark C. Minds on Fire: How Role-Immersion Games Transform College. Harvard University, 2014.

Carnes, Mark C. and Michael P. Winship. The Trial of Anne Hutchinson: Liberty, Law, and Intolerance in Puritan New England. Norton, 2013.

Carrington-Farmer, Charlotte. Interview with the author. January 10, 2020.

Chase, Kaitlynn. Phone interview by author. January 29, 2020.

Coby, J. Patrick. The Constitutional Convention of 1787: Constructing the American Republic. Norton, 2017.

Coby, J. Patrick. Henry VIII and the Reformation Parliament. Norton, 2013.

Galbraith, Gretchen. "'I had almost forgotten I was in a classroom setting': Reacting to the Past and Engagement with Historical Thinking." The Role of Agency and Memory in Historical Understanding: Revolution, Reform, and Rebellion, edited by Gordon Andrews and Yosay Wagdi, Cambridge Scholars Publishing, 2017, pp. 377-39.

Gardner, Daniel K. and Mark C. Carnes. Confucianism and the Succession Crisis of the Wanli Emperor, 1587. Norton, 2014.

Goodwin, Grace Duffield. Anti-Suffrage: Ten Good Reasons. Duffield and Company, 1915.

Higbee, Mark and James Brewer Stewart. Frederick Douglass, Slavery, and the Constitution, 1845. Norton, 2019.

Higbee, Mark D. "How Reacting to the Past Games 'Made Me Want to Come to Class and Learn': An Assessment of the Reacting Pedagogy at EMU, 2007-2008." The Scholarship of Teaching and Learning at EMU, 2:4, 2008, http://commons.emich.edu/sotl/vol2/iss1/4

Jewell, Katherine Rye. Phone interview by author. January 24, 2020.

Lazrus, Paula Kay and Gretchen Kreahling McKay. "21: The Reacting to the Past Pedagogy and Engaging the First-year Student." To Improve the Academy 32:1, 2013, pp. 351-63.

Lazrus, Paula Kay. Building the Italian Renaissance: Brunelleschi's Dome and the Florence Cathedral. University of North Carolina Press, 2019.

Locke, Jason. Riis, Roosevelt, and the Reformers: Policing Vice in New York, 1895. unpub.

Looney, Mary Beth. "Bomb the Church," 2017, Accessed March 20, 2020. URL: http:/arthistoryteachingresources.org/2017/11/bomb-the-church/.

McFall, Kelly and Abigail Perkiss. Changing the Game: Title IX, Gender, and College Athletics. Norton, 2020.

McKay, Gretchen K. et al. Modernism versus Traditionalism: Art in Paris, 1888-89. University of North Carolina Press, 2018.

Nora, Pierre. "Between Memory and History: Les Lieux De Mémoire." Representations, no. 26, 1989, pp. 7-24.

Ober, Josiah, et al. The Threshold of Democracy: Athens in 403 B.C. Norton, 2015.

Olwell, Russell and A. Stevens. "'I had to double check my thoughts': How the Reacting to the Past Methodology Impacts First-Year College Student Engagement, Retention, and Historical Thinking." The History Teacher, 48:3, 2015, pp. 561-572.

Popiel, Jennifer et al. Rousseau, Burke, and Revolution in France, 1791. Norton, 2015.

"Reacting to the Past Consortium, Barnard College," 2020, Date of access: March 5, 2020. https://reacting.barnard.edu/consortium.

ESSAYS – CONTINUED

"Reviews of Role-Playing Classroom Games: Reacting to the Past." The American Historical Review, 125:1, February 2020, pp. 146-159.

Treacy, Mary Jane. Greenwich Village, 1913: Suffrage, Labor, and the New Woman. Norton, 2015.

Treacy, Mary Jane. Paterson 1913: The Silk Strike. unpub.

ESSAYS – CONTINUED

Collaborating for the Coast in Performing Arts, Environmental Science and Resource Management, and English

Stacey Stanfield Anderson, English Department
Heather Castillo, Performing Arts Department
Kiki Patsch, Environmental Science and Resource Management Department
California State University Channel Islands

* * *

Abstract: This article presents a case study of an interdisciplinary, collaborative project that spanned three courses in three disciplines and involved over ninety students. We explore the institutional and curricular frameworks that supported the project, from inception to execution, and the challenges and rewards of a student-driven, interdisciplinary collaboration that places as much emphasis on the process as on the final product.

* * *

"So what is it about California, the most populous of the United States, and the Pacific Ocean, the world's largest body of water, covering one-third of the planet, that creates such a powerful cross-current of culture, risk and reward, history, economy, and mythology?"

Environmental Journalist David Helvarg,
The Golden Shore: California's Love Affair with the Sea (2016, p.4)

"We've long forgotten how collaboration became a natural instinct. For most of us, in the dailiness of family life, collaboration is a learned habit. It's a welcome balance to the ego's incessant hunger for self-gratification. It's a recognition that there's more to life — more opportunity, more knowledge, more danger — than we can master alone. It's the building block of community. And because it's a balance to our self-absorption, It's a powerful tool for socialization and tolerance."

Choreographer Twyla Tharp,
The Collaborative Habit: Life Lessons for Working Together (2009, p. 20)

Introduction: Plunging into Interdisciplinary Collaboration

Imagine a tiny film crew and three women on a shoreline in southern California near Mugu Rock at the start of the iconic Malibu coastline (Figure 1). None of these figures appear dressed for a day at the beach, but one begins dancing into the waves anyway, ignoring the sharp rocks jutting up from the sand and seemingly missing the posted warning sign about rip currents. The movement of the dancer in the water is mesmerizing, embodying all the dancer has just shared in her absorbing interview about the influence of the beach and the ocean on Twentieth Century Modern Dance. All wait in anxious anticipation as the dancer prepares for her bold finish, bravely allowing herself to fall backwards into the waves. Fascination turns to momentary panic as the waves threaten to swallow up the dancer, and a lifeguard runs over with his signature red-rescue torpedo just as the dancer finally frees herself from the beautiful but voracious waters of the Pacific Ocean. Relief turns to joy as the group celebrates capturing on camera what was necessarily a single take.

We three authors, all faculty at California State University Channel Islands (CSUCI), were the women in the scenario described above. The fearless dancer was Heather Castillo, Assistant Professor of Performing Arts-Dance and the founding director of Arts Under The Stars, a signature event that engages students, faculty, staff, and community members in collaborative, interdisciplinary research resulting in an immersive multimedia performance. The other two women were Kiki Patsch, Assistant Professor of Environmental Science and Resource Management (ESRM) and Stacey Anderson, Assistant Professor of English and Composition Program Director. Patsch and Anderson were interviewing Castillo for their *Beaches on the Edge project, an interdisciplinary collaboration intended to explore diverse perspectives* on "how and why we value beaches across disciplines" and to "help citizens. . . prioritize preserving our sandy beach environments in the face of climate change, sea level rise, and the coastal pinch of development" ("Welcome to Beaches on the Edge").

ESSAYS – CONTINUED

Figure 1: Patsch and Anderson film Castillo at Mugu Beach for part of their project, Beaches on the Edge, *8 August 2017. Photo Credit: Larkin Patsch*

Both *Arts Under the Stars* and *Beaches on the Edge* were funded by campus-wide initiatives that support CSUCI's Mission Pillars, encourage collaboration among disciplines, and promote integrative and experiential learning. The opportunities afforded by these initiatives and our shared passion for the California Coast converged in a joint undertaking that was both inspired by and influenced our classroom teaching, encompassed the efforts of 93 students across three courses in three distinct disciplines, and extended its reach across the campus and into the community. The performative research project that resulted, "Obituary to the Beach," epitomized the value of campus incubators for sparking novel inquiry and the prolific nature of the California Coast that has vitalized our collective creative, scholarly, and pedagogical efforts (Introduction Video; Highlights Reel).

The Coast-Classroom Connection

Founded in 2002, CSUCI is the newest campus in the country's largest state university system, the CSU (Figure 2). Many of our students are second-generation Americans whose parents work the rich agricultural fields that connect our campus to the coastal shores that lie just five miles away. Since its inception, CSUCI has encouraged efforts that are genuinely collaborative (not merely coordinated or cooperative) and interdisciplinary (not simply multidisciplinary or cross-disciplinary; Gunawardena, Weber, & Agosto, 2010). As the name of our campus suggests, CSU Channel Islands also draws faculty who are passionate about the coast and often find ways to integrate it into their teaching and research, regardless of discipline. While most CSU campuses are named after the cities or counties in which they are situated, we are named after the National Park that is just a short boat ride away.

Figure 2: California State University Channel Islands, located in Camarillo, California. The Ventura County-based university also operates facilities in nearby harbors and a research station on Santa Rosa Island (one of the islands in Channel Islands National Park), April 2019.

An exemplar of this coastal orientation is a class titled *ESRM 335: The Beach*, an upper division, interdisciplinary, writing intensive class Patsch's department developed that "explores the sociocultural importance of sandy beaches in southern California, . . . integrates diverse perspectives on California's beach culture and society, and focuses on issues pertaining to coastal development and sustainability" (Catalog Description). Patsch taught *The Beach* for the first time in the spring 2017 semester, curating guest speakers representing a range of disciplinary perspectives on the value of the coast. During one class session, Castillo delivered an animated and interactive presentation exploring the influence of the ocean and the beach on the history of Modern American Dance, including its imprint on the choreography of Isadore Duncan, the Mother of Modern Dance (Duncan, 1927).

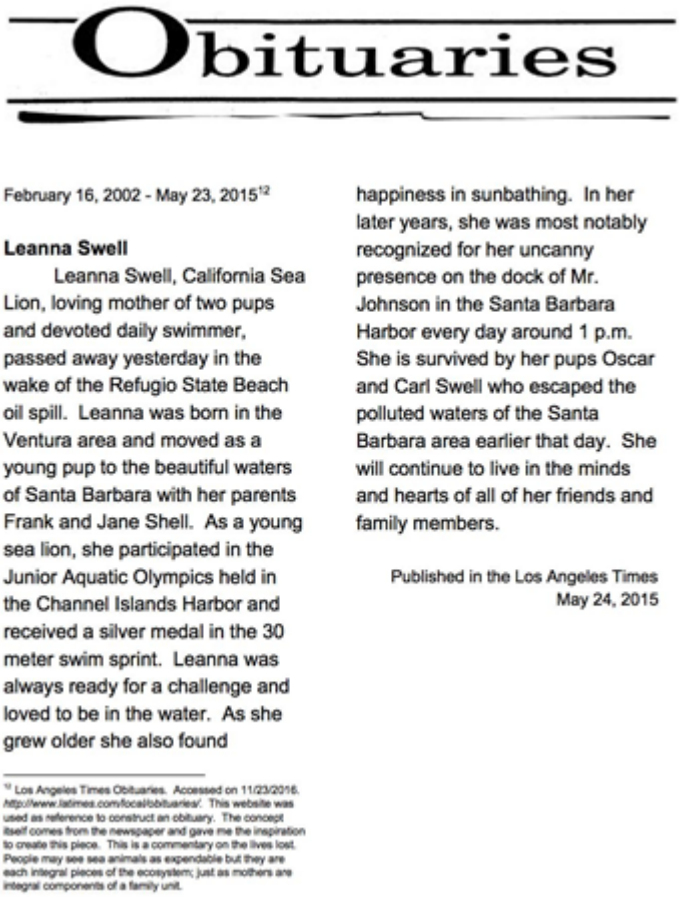
Inspired by *The Beach* class, Patsch and Anderson applied for and received an internal interdisciplinary Research, Scholarship, and Creative Activities (RSCA) grant intended to facilitate collaboration between at least one faculty member from STEM (Science, Technology, Engineering, and Mathematics) and at least one from Arts and Humanities. Patsch and Anderson undertook their joint project, *Beaches on the Edge*, with the goal of drawing upon their respective areas of expertise in coastal science and composition and rhetoric. The collaboration began in the summer of 2017 with video interviews conducted on location at Mugu Beach with members of the campus and local community to glean their perspectives on the importance of the beach. This included Castillo, whose ocean-drenched interview was described in the vignette that opened this article.

As Castillo dried herself off following her immortalized plunge into the Pacific, she asked Patsch and Anderson if they would like to continue their collaboration by integrating work from their upcoming courses into *Arts Under the Stars*, an interdisciplinary, multimedia event merging creative arts and research into multiple projects and performance produced under a common theme. The theme for the *2018 Arts Under the Stars* event was "Empathy." Anderson and Patsch began contemplating how they could develop a project around the notion of conveying empathy for the California Coast. Drawing on perspectives from science and English, Patsch and Anderson initially struggled to envision communicating the value of and threats to the sandy beach ecosystem through performing arts even as they understood the long legacy of the arts in raising awareness of environmental issues (Curtis, Reid, & Ballard, 2012).

ESSAYS – CONTINUED

Eventually, Anderson recalled a multigenre writing project that her colleague in English, Kim Vose, had shared with her from a course titled *Writing as Reflective Practice*. Students were asked to create a multigenre project around a research topic from their own discipline. One student, English major and ESRM minor Lauren Zahn, wrote about her work in the summer of 2015 while responding to and monitoring the Refugio Oil Spill off the California Coast with her ESRM class. One of Zahn's most compelling pieces was an obituary to a sea lion mother who had passed away as a result of the spill, leaving behind her orphaned pups (Figure 3). It was a surprisingly moving text that put readers inside the minds of creatures who must endure the effects of human-induced disasters resulting from our dependence on oil and offshore drilling.

In revisiting Zahn's project, we stumbled on the notion of a performance centered on an obituary for the California Coast, capturing all that would be lost if the coast continues to be neglected and exploited. We reached out to Zahn, who responded enthusiastically to taking the lead on coordinating and curating the online program and resources for the project as well as collaborating with the over ninety students from the three courses in the spring 2018 semester that would be involved: *English 330: Interdisciplinary Writing* (another upper division, interdisciplinary, general education, and writing intensive course); *ESRM 335: The Beach*; and *Performing Arts 391: Production*. Students enrolled in the latter class would oversee all aspects of the production (including choreography, staging, music, videography, as well as performance and dance), while students from English and ESRM would be primarily responsible for research, writing, and communicating the significance of the topic both on the website and at the event itself.



Obituaries

February 16, 2002 - May 23, 2015[12]

Leanna Swell

Leanna Swell, California Sea Lion, loving mother of two pups and devoted daily swimmer, passed away yesterday in the wake of the Refugio State Beach oil spill. Leanna was born in the Ventura area and moved as a young pup to the beautiful waters of Santa Barbara with her parents Frank and Jane Shell. As a young sea lion, she participated in the Junior Aquatic Olympics held in the Channel Islands Harbor and received a silver medal in the 30 meter swim sprint. Leanna was always ready for a challenge and loved to be in the water. As she grew older she also found happiness in sunbathing. In her later years, she was most notably recognized for her uncanny presence on the dock of Mr. Johnson in the Santa Barbara Harbor every day around 1 p.m. She is survived by her pups Oscar and Carl Swell who escaped the polluted waters of the Santa Barbara area earlier that day. She will continue to live in the minds and hearts of all of her friends and family members.

Published in the Los Angeles Times
May 24, 2015

[12] Los Angeles Times Obituaries. Accessed on 11/23/2016. http://www.latimes.com/local/obituaries/. This website was used as reference to construct an obituary. The concept itself comes from the newspaper and gave me the inspiration to create this piece. This is a commentary on the lives lost. People may see sea animals as expendable but they are each integral pieces of the ecosystem; just as mothers are integral components of a family unit.

Figure 3: CSUCI student Lauren Zahn produced this fictional obituary as part of a multigenre writing project that became the inspiration for "Obituary to the Beach."

Communicating Science with Performing Arts

Advocating to the general public for the protection and preservation of California's beaches includes conveying complex scientific data through compelling and innovative artistic vehicles that capture the singular spirit of the "California imaginary" to reach both hearts and minds. "Obituary to the Beach" exemplified the potency of interdisciplinary collaboration for coordinated integration on multiple platforms.

As teachers-scholars-creators from diverse disciplines, we approached "Obituary to the Beach" with a shared understanding that natural sciences often intimidate the general public, particularly those who feel uneducated or insecure with their knowledge base in the sciences (Schwartz, 2014). Climate change, the associated sea level rise, and the consequences to California's developed shorelines and the coast are no exception, particularly as the dire nature of these issues may compel citizens to close their eyes to the problem altogether. Given the urgency of our current moment, it is ethically imperative that the general public understand the value of ecosystems like sandy beaches and the consequences of coastal management alternatives, thus allowing them to be fully engaged and informed during public policy-making. Scientists are tasked to find effective ways to communicate often complicated material in a way that is content-driven yet digestible, engaging, lasting, and fun, with the goal of getting the general public interested and invested in the science enough to start asking their own questions, realizing the relevance to their own lives, and then becoming the instruments of engagement and communication themselves (Curtis et al., 2012; Stolberg, 2006).

Participating in performing arts is similarly intimidating for those who are not practitioners. At the same time, artistic products such as dance can hold sway over audiences in an age of "information overload" and evoke action in a way that text-based media may not (Branagan, 2005). Artists who collaborate with scientists are challenged to create socially conscious, well-informed pieces that impact audiences. Ongoing discourse between artists and scientists is essential to the creation of art that is accurate and moving without sensationalizing the subject or potentially working against the cause of a more sustainable future. Through our own collaboration, we have come to understand that both the arts and the sciences often ask people to confront uncomfortable realities. Both scientists and artists frequently engage in their respective fields because they have a deep passion for social or environmental change (Curtis, 2009). These common bonds forge a kinship between seemingly divergent disciplines and foster thriving, productive collaborations that can bring about needed action and change.

Collaborations between scientists and dancers are mutually dialogic and dynamic, as "Obituary to the Beach" vividly demonstrated. Dance in particular is an apt artistic medium for engaging with scientific ideas. There is even an annual "Dance Your Ph.D." contest founded by science journalist and molecular biologist John Bohannon and now sponsored by *Science Magazine* and the American Association for the Advancement of Science. One of the judges of the 2019 contest, artist Alex Meade, observed that "the body can express conceptual thoughts through movement in ways that words and data tables cannot. The results are both artfully poetic and scientifically profound" (Bohannon, 2019, para. 5). As a form of expression that is inherently in motion, the language and vocabulary of dance have the potential to reach broader audiences beyond the scientific community and to provide a "way of knowing" that enlightens scientists and lay people alike. In this manner, dance is not merely an interpretation or representation of scientific concepts but its own maker of meaning that contributes to the conversation and moves it forward (Sheets-Johnstone, 1999; Stolberg, 2006). Dance's ability to reach a broader audience is enhanced by the fact that it is a universal language. As Maxine Sheets-Johnstone writes, humans "share a common kinetic ancestry," and "movement is our mother tongue" (Sheets-Johnstone, 2016, p. 404).

Dance is also the language of the natural world, particularly the beach. Surfing, perhaps the most recognizable and increasingly potent signifier of the coastal "California imaginary," is fittingly characterized as a form of dance (Booth, 1999). Moreover, Modern American Dance is rooted in the ebb and flow of the very ocean that graces our local shores. Isadora Duncan, Mother of Modern Dance, famously asserted, "All these movements—where have they come from? They have sprung from the great Nature of America, from the Sierra Nevada, from the Pacific Ocean, as it washes the coast of California; from the great spaces of the Rocky Mountains—from the Yosemite Valley—from the Niagara Falls." Duncan traced her inspiration to Walt Whitman, a seminal figure in American environmental literary history. "In a moment of prophetic love for America Walt Whitman said: 'I hear America singing,' and I can imagine the mighty song that Walt heard, from the surge of the Pacific, over the plains, the voices rising of the vast Choral of children, youths, men and women, singing Democracy." Duncan continues, "When I read this poem of Whitman's I, too, had a Vision—the Vision of America dancing a dance that would be the worthy expression of the song Walt heard when he heard America singing" (Duncan, 1927, ch. 30, para. 21-22). In light of this context, "Obituary to the Beach" exemplified the convergence of performance, nature, and science that is inextricably tied to our coastal legacy and inspires us three authors across disciplines as scholars, creators, and teachers.

ESSAYS – CONTINUED

Contextualizing the Vulnerability of California's Shoreline Across Disciplines

"Obituary to the Beach" centered on the loss of California's sandy beach environments precipitated by offshore drilling, pollution, development, and climate change-induced sea level rise. As a geomorphologist, Patsch's teaching and scholarship are regularly informed by these sobering realities, the impacts of which we collectively explored in our respective courses and strove to communicate through our interdisciplinary collaboration.

As student researchers in ESRM 335 and ENGL 330 shared on our project website, over 80% of California's coast is actively eroding, and climate change/sea level rise will exacerbate the erosion of coastal areas, particularly across California's beaches (Griggs, 2005; Melius & Caldwell, 2015). California's sandy beach ecosystems are increasingly threatened by human-induced erosion caused by coastal armoring and reductions to sediment supply, sea-level rise, changes in land use and development, invasive species, marine debris, and excessive recreational use (Defeo et al., 2009; Dugan et al., 2017; Griggs, 2005; Melius & Caldwell, 2015; Schlacher et al., 2007). Several federal, state, and local government agencies, as well as NGOs and academic institutions, are debating how best to adapt California's coast to these dire threats as well as exploring the most effective ways to engage the general public in understanding these threats and acting to bring about needed change. Many of the coastal management options put forward, such as hardening the shoreline with seawalls or revetments as well as expanding beach replenishment, are detrimental to fronting beaches (Griggs, 2005; Griggs & Patsch, 2018; Runyan & Griggs, 2003). Communities will need to rely on local management to see the value in the sandy beach environment and make the choice to become part of the solution in preserving this valuable resource.

Notably, the disciplinary lenses through which we can view and value California's beaches are wide, varied, and intersecting, making them rich territory for interdisciplinary teaching and learning while at the same time underscoring how much depends upon their preservation. From an economic vantage point, sandy beaches are integral to California, generating over $5 billion in direct revenue to the state annually (King & Symes, 2004). In terms of infrastructure, wide beaches and dune complexes are natural buffers to storm surge, protecting back beach and low-lying ecosystems as well as human development and hardscape (Griggs, Patsch, & Savoy, 2005). Ecologically, beaches play an important role in terrestrial and marine nutrient cycling and are natural biological filters (James, 2000; King et al., 2018; Schlacher et al., 2007). Beaches also provide habitat for several of California's imperiled and endemic plant and animal species—including the Western Snowy Plover, the California Least Tern, and the tiger beetle —and are integral to the breeding, migrating, and wintering of many other animals (Lafferty, 2001). Recreational and commercial fishing also depend on beaches either directly as habitat or indirectly as an essential component of the food web. From a psychological perspective, beaches encourage outdoor recreation and are shown to benefit human mental health and well-being (Nichols, 1989; Pilkey & Cooper, 2014). Culturally, California's beaches play a vital role in inspiring artists, musicians, and dancers as well as in the growing popularity of surfing, skateboarding, and beach volleyball to create what we characterize as the "California imaginary" (Lemarie, 2015; Schwab, 2012; Voelz, Saldívar, & Bieger, 2013). When asked to name a word that comes to mind upon hearing "California," 56 percent of respondents replied, "beach" (Anderson, in progress).

California's shoreline is intrinsic to the state's identity and prosperity, a source of both prodigious strength and potential vulnerability. As David Helvarg writes, "It remains a challenge even to express what it is that links the innovative, entrepreneurial, and risk-taking spirit of Californians who've built the seventh largest economy on earth to the ocean that borders their state and state of consciousness, infusing both with a tidal flux, a belief that change is the only constant and if you can just catch that next wave you'll be on top of the world." If it weren't for the Pacific Ocean, Helvarg asserts, California would "be little more than a long skinny clone of Nevada" (Helvarg, 2016, p. 6).

These exigencies informed the curricula in both English 330 (*Interdisciplinary Writing; Figure 4*) and Environmental Science and Resource Management 335 (*The Beach*), each of which were facilitated through CSUCI's then newly adopted Learning Management System, Canvas. These classes had the advantage of being developed as interdisciplinary, upper division, general education courses that serve majors in their respective departments while drawing students from several other disciplines as well. Moreover, like most writing classes at CSUCI, ENGL 330 is flexible to be adapted to a variety of themes, making it an ideal fit for interdisciplinary, collaborative teaching and learning. Anderson taught the class online and built it around the theme of "The California Coast," developing a variety of written and multimedia research-based assignments, both individual and collaborative, that invited students to explore the multiple disciplinary lenses through which the coast can be viewed and valued. Anderson chose the core text for the class from one of several that Patsch used in *The Beach* class, David Helvarg's *The Golden Shore: California's Love Affair with the Sea* (2016). The text itself examines California's coast through a range of disciplinary perspectives and provided a strong foundation to launch students into their own interdisciplinary explorations of the coast. Learning outcomes for the modules in ENGL 330 were similarly inspired by the course learning outcomes from ESRM 335.

Figure 4: English 330 course banner showing the Santa Rosa Pier on the Channel Islands.

Students in the online ENGL 330 class began with a weekly reading journal that asked them to compose reflective and analytical responses to *The Golden Shore*. Students were asked to explain the intertwining natural and human-induced influences that have shaped the California Coast, analyze the diverse lenses through which the California Coast is perceived by various stakeholders, and evaluate the current state of the California Coast, including the benefits it provides as well as the challenges it faces. Students responded enthusiastically to the text and its multifaceted approach. This led to the next learning module that invited students to produce three research-based texts in different genres (an op-ed aimed at Ventura County residents, a blog entry directed at California readers, and a letter to the California Coastal Commission) on a coastal topic or issue of personal interest and a fourth assignment that was a reflective essay on what they had learned about the coast directed at the composition faculty who would be evaluating this module as part of our holistic assessment of student writing. Students then worked in groups to engage in collaborative inquiry projects that employed text, images, and video to create a VoiceThread presentation that illustrated and reflected upon the diverse lenses through which the California Coast can be perceived (psychological, economic, political, educational, environmental, musical, spiritual, cultural, ethnic, literary, artistic, biological, familial, and so forth).

Students in ESRM 335 (*The Beach*) similarly explored the coast through an interdisciplinary framework, examining the sociocultural importance of sandy beaches in southern California and analyzing the interaction of natural and human systems in the coastal zone. Students learned about the physical and biological aspects of California's beaches, anthropogenic stressors on the ecosystem, diverse perspectives on California's beach culture and society, and issues pertaining to coastal development, hazards, and resiliency. Learning outcomes included identifying current environmental and social issues concerning California's beaches, relating the physical and biological characteristics of the beach environment to challenges in managing this natural resource, and effectively communicating an understanding of course material in various written forms. Each student produced a research paper and presentation on an international beach and three blog posts for the class's Beach Blog. Students visited a different beach for each post, viewing each beach through a different lens from among those detailed above. Using text and images, students were asked to think critically about their environment, the beach ecosystem, and the interconnected nature of geology/physical processes, ecology, recreation and tourism, culture, and health and wellbeing that all comes together along the coasts.

While ESRM 335 is taught in CSUCI's Environmental Science and Resource Management department, its unique integration of scientific and cultural content, along with its emphasis on clear scientific communication and public outreach, supports the development of both aspiring practitioners in the sciences and those seeking to grow in scientific literacy and citizenship. The class underscores that is it incumbent upon scientists to engage with the public on issues that demand urgency and action so that communities can become engaged in decision making that informs coastal policy and practices. Each learning module includes a lecture from Patsch as well as a documentary and often a guest speaker. Topics in the spring 2018 semester included beaches of the world, evaluating the beach ecosystem, sandy beach ecosystems, beach culture (skateboarding, volleyball, music, surfing), and threats to the beach (sea level rise, sand mining, coastal development, trash, oil, driving on the beach).

In both the English and ESRM classes, immersing students in the subject matter detailed above prepared them to take on more self-directed activities as they transformed what they had been researching and writing about for a more creative, public-facing venue with *Arts Under the Stars* (*AUTS*). While Castillo's Performing Arts 391 class (*Production*) is the

curricular "home" of *AUTS*, the event relies upon collaborations across disciplines. The 2018 iteration of *AUTS*, under the theme of "Empathy," consisted of upwards of a dozen projects and performances involving students and faculty from Art, Communication, Computer Science, Education, English, ESRM, Nursing, and Political Science in coordination with those from the range of Performing Arts emphases (Dance, Theatre, Music). The scholarly and creative process described below represents a microcosm of the unique integration of content and approaches from diverse disciplines that makes *AUTS* such a distinctive event that empowers students to connect beyond the classroom and into the campus and community (Figure 5).

Figure 5: The Foundation for "Obituary to the Beach" *is made through ESRM 335, ENGL 330, PA 391.*

In the Hands of Students: The Interdisciplinary Collaborative Process of "Obituary to the Beach"

Integrating an ambitious scholarly and creative project into multiple courses and disciplines is necessarily an exercise in becoming comfortable with the unknown and trusting that the process will come to fruition within the constraints of an academic semester. This is a lesson with which Castillo is deeply familiar as the founding director of *Arts Under the Stars.* While this signature event has grown and evolved significantly since its first iteration in 2012, at its core is an understanding that students drive the creative process from start to finish. Faculty provide support and guidance but are ultimately responsible for maintaining a space where students can engage in their own process of making meaning and communicating that in the method they determine to be most appropriate to the content of their collective research. While instructors may provide the initial inspiration for a project, they must be willing to hand control over to students,

allowing them the freedom to take the project in whatever direction they see fit.

As a case in point, the title that Anderson, Castillo, Patsch, and Zahn had originally conceived of for this project was "The California Coast: In Memoriam," the remnants of which are still visible on the Canvas pages of our classes and on the website that students created as part of our project. Several weeks into the semester, it became clear that the students in the *Production* class who were taking the lead on the project had also taken the initiative to retitle it. As novices in this process, Anderson, and Patsch initially bristled at the change that Castillo's experience as director of *AUTS* and the instructor of the Production class had already prepared her to anticipate and even welcome. Ultimately, the revised title was a tangible indicator that the students were making the project their own and foreshadowed that the final product would also evolve significantly into something much more moving and meaningful than Anderson and Patsch and even Castillo had envisioned.

The creative and collaborative process of *Arts Under the Stars* is inherently incremental and recursive. Starting with a blank slate is as daunting as it is liberating, as is determining the dynamic among the various collaborators. There is no guarantee that the process will be productive or that the final product will be successful. This requires all parties to be brave and open, contributing freely without dread of rebuke or judgment from sharing ideas that are still in formation or may not pan out. It also requires a collective understanding and trust among artists and researchers. In each of our respective disciplines, integrating meaningful collaborations among students is a core value even as it can be a complicated and loaded process for those involved (Ingalls, 2011; Kennedy & Howard, 2014). In the writing classroom, the dance studio, and the field, collaborative work engages students as agents in their own learning. The process is instructive and valuable even if the final product is not as successful as intended. With a public, student-driven performative event like *Arts Under the Stars,* the wide visibility of the final product raises the stakes, and faculty must resist the urge to micromanage students and instead focus on scaffolding a supportive curriculum that helps them find their own way.

This curricular support includes familiarizing students involved in the performance itself with the elements that are available to bring the research to life and help participants bring their unique talents and ideas to the forefront. The outdoor canvas of the *Arts Under the Stars* performance space includes a 40x40 foot outdoor stage with a 10x16 foot LED screen in the background, a separate stage for live music, and an intricate lighting and sound system that supports both live and pre-recorded music. The space also includes an interactive area for the audience to wander and explore where art exhibits and activities can engage and educate. The space is filled with light, sound, and energy. The physicality of this space lends itself to scholarly and creative products that result from a phenomenological way of knowing—dance—that is rooted in bodily practice and memory rather than empirical knowledge acquired through texts (Conquergood, 2002; Sheets-Johnstone, 2016). In this manner, *Arts Under the Stars* disrupts the binary between "scholars/researchers" and "artists/practitioners" that performance studies both negotiates and challenges (Conquergood, 2002, pp. 152-154).

Students who enroll in Castillo's *Production* class do so with the understanding that the central content of the course, on which their entire grade will rest, will be managing and coordinating all aspects of the *AUTS* event, and that they will take the lead with regard to choreography, staging, music, videography, performance, and dance. In contrast, students in other courses that participate in *AUTS* do not typically know this will be part of their coursework until the semester begins. To set the stage for student engagement in *AUTS* across both a small online class (*Interdisciplinary Writing*) and a large face-to-face class (*The Beach*), Anderson and Patsch developed a shared learning module in Canvas that was imported into each course (Figure 6). The module included an overview that explained how the theme of the project emerged from Patsch and Anderson's ongoing scholarly and creative collaboration (*Beaches on the Edge*) examining multiple disciplinary lenses through which the sandy beach environment can be perceived and valued. Instructions explained that, via *Arts Under the Stars,* students in the English and ESRM courses would similarly contribute scholarly and creative work that takes a critical look at practices affecting the California Coast and evokes empathy for the losses incurred so far and those to come if humanity does not change its ways.

ESSAYS – CONTINUED

Figure 6: Learning Module Banner, using a picture from the Refugio Oil Spill

Students in both the ESRM and English courses were informed that participation would count towards 10% of their final course grade and that they could contribute in a number of ways. Patsch and Anderson created a Google Form that listed methods of participation and solicited their preferences based on their own interests and skill set. Additional resources were provided in the Canvas module to deepen student understanding of the project's theme and how they might contribute. The module expressed faculty enthusiasm for student involvement in the project, stating, "We are looking forward to a rich, creative, and inspiring collaboration that gives students the opportunity to take their learning outside the traditional class setting and engage them in the campus community." While participating in *AUTS* was worth a small percentage of their final grade, as compared to the entire grade for students in the *Production* class, students in *Interdisciplinary Writing* and *The Beach* could see how their contributions built on what they had learned all semester and allowed them the opportunity to express their interdisciplinary understanding of the course material through a more creative, collaborative, and flexible mode than would typically be available in those courses.

The primary aim of student participation in *AUTS* for the English and ESRM classes was scientific communication and reaching a broader audience on coastal issues that demand attention and action from the general public. Scholars across disciplines are trained to communicate within academic and professional discourse communities but not necessarily to engage with those outside of those circles, many of whom are directly impacted by the content of their research. When it comes to protecting and preserving the beach that is so tied to the identities and experiences of California residents, it is important to talk to people about how they relate to the beach and what value lens they bring to their perceptions. Do they see the beach as a site of natural beauty, economic prosperity, familial connection, or psychological respite? California's sandy beaches mean all these things and more, and the unceasing, anthropogenic demands that pose a growing threat to these environments have risen to the level of "wicked problems" that can only be addressed through a coordinated, interdisciplinary approach that engages multiple stakeholders in understanding the challenges and exploring and implementing potential solutions.

While we expected students in the Performing Arts class to be committed to the collaborative and creative process of *Arts Under the Stars*, as they knew what they were signing up for, we were inspired and pleasantly surprised with how students in English and ESRM rose to the occasion. Students from across disciplines stretched beyond their comfort zones and familiar modes of expression to contribute original artwork, poetry, video, and photography as well as curated and researched content on the various dimensions of our theme. Ten students took ownership of designing the website on which this content would be delivered, with a final product that was far more developed, polished, and engaging than we had imagined possible. Nine students filmed and edited videos about how people in their lives valued the beach, venturing beyond the lenses suggested in class and demonstrating how they were investing themselves in our shared process of inquiry. Additional students developed and disseminated marketing and social media materials to help promote our contribution to *AUTS*, "Obituary to the Beach," while others coordinated an interactive water color table to engage and educate young children over the course of the two nights of performances. This table was flanked by a massive, illuminated marine debris art piece that emerged from this collaboration and emulated how the project evolved and grew in its reach (Figure 7).

Figure 7: The interactive water color table allowed students to interact with the public and talk about ocean stressors. The marine debris sculpture and an oil painting rounded out the display. Photo Credit: Kiki Patsch

In the early weeks of the spring 2018 semester, when the planning and preparation for "Obituary to the Beach" were getting underway and students were starting to immerse themselves in our course material, ESRM began its annual seminar series with a presentation that included marine artist and environmental scientist Ethan Estess, who creates sculptures using found materials to communicate to and engage with viewers about perils facing our oceans. From this initial encounter, three students in *The Beach* class (art major Emma Akmakdjian and ESRM majors Sarah Parker and Allison Prather) collaborated with Estess to create a sculpture of a jellyfish created of discarded plastic water bottles. The sculpture, titled *Jellyfish,* debuted at the Getty Center in Los Angeles in mid-April before being relocated to the CSUCI campus as part of the *Arts Under the Stars* installation. The sculpture functioned as a vivid focal point during the *AUTS* performance weekend and helped draw attention to the message of "Obituary to the Beach." This synergistic, interdisciplinary opportunity was emblematic of the expansive possibilities that emerge when students are invited to break down the walls of the classroom.

The marine debris sculpture, water color table, publicity materials, and even the performance that will be described below all served the purpose of connecting with the general public and inspiring them to visit the "Obituary to the Beach" website (which audience members could locate via the digital program for the entire *AUTS* event) to learn more about the challenges facing our sandy beaches and how everyday people can get involved to make a difference. The content that the students in ESRM and English had explored in both their academic projects and in their contribution to *Arts Under the Stars* similarly informed the Performing Arts in their creative process. Students from ESRM educated those in Performing Arts on the threats to the beach that would be explored on stage through music, performance, and dance.

In Castillo's seven years of directing *Arts Under the Stars*, "Obituary to the Beach" was the apex of the interdisciplinary and collaborative potential of the event, involving 93 students across three courses. The performance itself, headed up by students in the *Production* class, began to take shape when the creative leaders were assigned to the project: Chelsea Rueda (performing arts major with an emphasis in dance) and Sammi Olson (ESRM major with a minor in performing arts). Together, they met with Zahn, Anderson, Patsch, and Castillo to discuss a plan for focusing and developing the production. The resulting piece told a multisensory story of a once healthy and whole ocean falling victim to various human threats—oil spills, marine debris, and coastal development—while Humanity blindly stands by, oblivious to the destruction until it is too late.

ESSAYS – CONTINUED

Rueda developed an improvisational structure to initiate a collaboration with the dancers. Performers explored various movements to initially create the effect of a whole and healthy ocean. Cascading fabric was added to the dancers' arms to extend their lines and flow, borrowing from the early dance pioneer Loie Fuller (Figures 8a and 8b). The six ocean dancers incorporated a variety of swirling maneuvers of varying speeds and patterns, recreating breaking waves, currents, changing tides, and other phenomena within the ocean. Olson, in turn, developed and performed the character of blinded Humanity. After the ocean movement was established for the audience, she entered the stage space in blue jeans and a t-shirt, blindfolded to represent humanity's lack of empathy, understanding, or willingness to see the effects of their everyday habits on the beach environment.

Figures 8a and 8b (a) Loie Fuller, Photo credit: Gilman Collection, Purchase, Mrs. Walter Annenberg and The Annenberg Foundation Gift, 2005, known for her extended lines and flowing movements, (b) interpreted by dancers in "Obituary to the Beach." Photo Credit: Ben Hytrek.

Throughout the piece, other dancers embodying threats to the ocean were introduced, changing how the ocean dancers moved and the paths they were able to take on stage. The three dancers embodying oil used more sensuous and bound movements, signifying the thick, slow, and smooth viscosity of this "desirable" element (Figure 9a). Oil production is seductive, and we are unable as humans to replace its hold over us with more environmentally friendly alternatives. When marine debris was introduced, the dancer, Raven Fierro (Figure 9b), employed variations of hip hop techniques like locking and krumping, fast and sharp dance moves that created jagged and bent shapes. When introduced to the fluid water in the ocean and the thick smooth and bound viscosity of oil, trash changed the visual energy and altered pathways of both. Each additional element cluttered the stage, giving the effect of a littered ocean. The final element added was coastal development. Students from *The Beach* class built boxes for the dancers to manipulate and leave in their wake as they moved robotically in suits to represent business economy, and culture (Figure 9c), with reflective glasses to mimic windows on buildings. These dancers incorporated lifts, weights sharing, and stackable movements to visually articulate building structures. Once all the elements were introduced, each overtook one of the ocean dancers until they disappeared and left the stage. The only two dancers remaining were Olsen, representing Humanity, and one ocean dancer who could barely continue to move. The ocean dancer collapsed into Olsen, who only then removed her blindfold to see the destruction she had wrought on the beach (Figure 10).

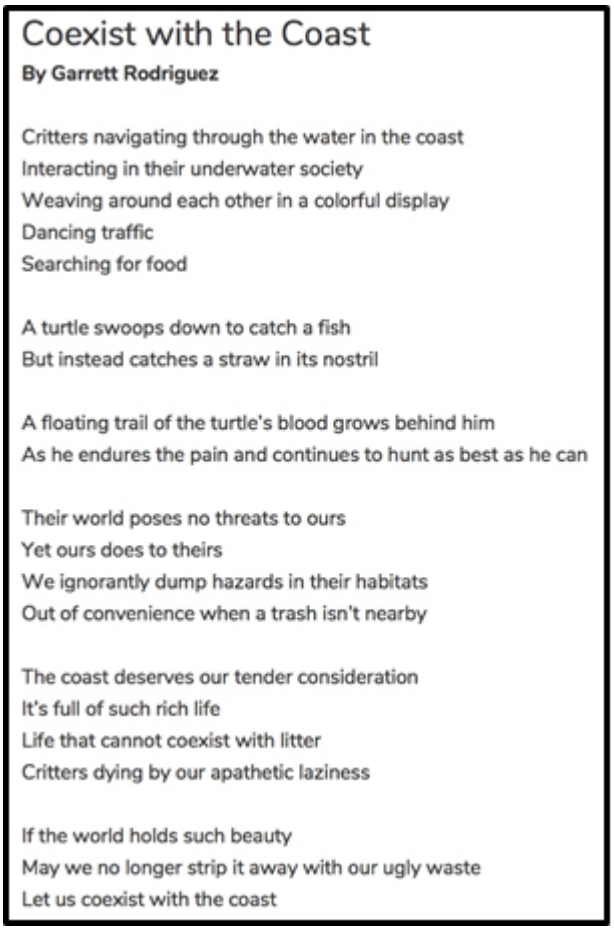
Figures 9a, 9b, and 9c: Dancers representing threats to the ocean and beach from oil, marine debris, and coastal development respectively. Photo Credit: Ben Hytrek

Figure 10: Sammi Olson portraying blinded Humanity as the ocean dances around her. Photo credit: Ben Hytrek

The accompanying music composition by CSUCI student Alec Bertrand created an aural landscape that complemented the visual elements. It began with the sounds of seagull and ocean life underscored by a rolling, constant guitar. As each element was introduced, so were additional sounds. To represent humans, a heavy beat was layered into the circular guitar riff. The sound of water bottles being crushed was added in when the visual element of trash was introduced. Sounds from a construction site were the final element added, representing development that is impinging upon the beach. With the introduction of each new disruptive element, more sea life sounds vanished from the soundtrack, such as the seagulls and ocean waves breaking on the shore. Eventually, the guitar stopped playing and there were no longer the soothing sounds of the sea. All that was left was the synthetic sounds that came after humans were introduced to the landscape.

ESSAYS – CONTINUED

Student Isaac Ortiz edited the accompanying background video using images from David Pu'u, a local cinematographer, as well as open source and iconic environmental footage. It also followed the pattern of the dancers and music using shots of pure ocean and introduced the elements through images as they appeared on stage and in the music. The performance culminated in a poem called "Coexist with the Coast," written by Garrett Rodriguez (Figure 11), a student in the *Interdisciplinary Writing* class, and performed by a student from the *Production* class, Noel DeVerges.



Coexist with the Coast

By Garrett Rodriguez

Critters navigating through the water in the coast
Interacting in their underwater society
Weaving around each other in a colorful display
Dancing traffic
Searching for food

A turtle swoops down to catch a fish
But instead catches a straw in its nostril

A floating trail of the turtle's blood grows behind him
As he endures the pain and continues to hunt as best as he can

Their world poses no threats to ours
Yet ours does to theirs
We ignorantly dump hazards in their habitats
Out of convenience when a trash isn't nearby

The coast deserves our tender consideration
It's full of such rich life
Life that cannot coexist with litter
Critters dying by our apathetic laziness

If the world holds such beauty
May we no longer strip it away with our ugly waste
Let us coexist with the coast

Figure 11: Coexist with the Coast by Garrett Rodriguez, a student in English 330: Interdisciplinary Writing, closed the performance.

Through the dance performance (Figure 12, click to link to video), the website content, and the experiential and interactive water color table and art displays, students transferred what they had been learning in their respective classes to connect with the campus and community to communicate threats to our sandy beach ecosystem. While the nature and scope of student contributions and collaborations varied, the process of participating in this larger endeavor gave students a broader sense of purpose and audience than is typically available in class assignments and resulted in a cohesive, immersive final product whose impact has endured and has provided a model for subsequent classes and collaborations.

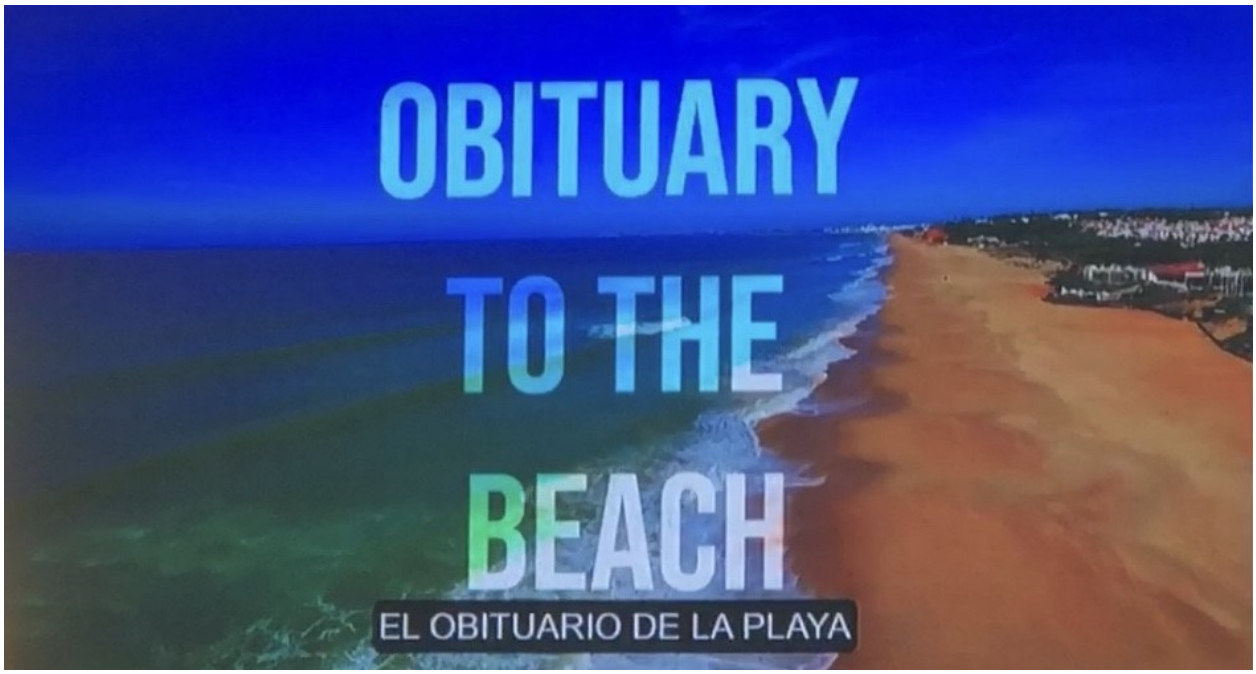


Figure 12: Click Image to Link to Video of "Obituary to the Beach Dance" Performance from Arts Under the Stars*, May 4, 2018. Photo Credit: Stacey Anderson*

Seeking New Shores

Our experience with "Obituary to the Beach" inspired us to further pursue our interdisciplinary collaboration for the *2019 Arts Under the Stars*, which took on the theme of "Metamorphosis." A coastal orientation continued to shape our efforts, as we collectively took on the issue of illegal sand mining and sand mafias. Our collaboration again spanned multiple classes across our disciplines: Patsch's ESRM 335 (*The Beach*) and ESRM 428 (*Intermediate Geographic Imaging Systems*); Castillo's Performing Arts 391 (*Production*), and Anderson's English 107 (*Advanced Composition*). The success of the 2018 project galvanized our teaching and enriched our work with students as we helped them become aware of the role they each played in our larger, collaborative, interdisciplinary effort.

Arts Under the Stars has become an institutionalized event at CSU Channel Islands as well as a container with a flexible framework that allows researchers from across campus to partner with the arts to tell stories, compel change, and prepare students for working relationships and collaborations post-academic life. As growing numbers of people experience *AUTS* as audience members, more are willing to take the risk and collaborate with Performing Arts to see their research realized through performance. As ESRM Major/Performing Arts Minor Sammi Olson wrote in her end-of-the-year reflection,

> *This semester has opened my eyes to who I really am as an artist and Arts Under the Stars was a huge part of that realization. With the theme of Empathy this year, the pieces I was a part of really taught me to see things from different perspectives and learn about important social issues that we deal with in our world today. I think that Arts Under The Stars is a valuable learning tool not just for students who take the class and participate in the event but also for the audience that comes to see the show. It's a way to educate, raise awareness of our social issues, and motivate people to take action or seek change in order to improve our world. I really value being part of something that has a lasting positive influence to the community.*

Olson's words are emblematic of the transformative potential of *Arts Under the Stars* and the value of institutionalizing such student-driven events. Additional student reflections on the impact of this interdisciplinary collaboration are captured in this word cloud, represented in the form of a dolphin (our school mascot; Figure 13).

ESSAYS – CONTINUED

Figure 13: Word cloud of student reflections after participating in "Obituary to the Beach" for Arts Under the Stars.

Modeling interdisciplinary collaboration for our colleagues is as important as doing so for our students. We know the process of *Arts Under the Stars* and integration can be uncomfortable, but we also know teaching and collaborating across disciplines are the ultimate reward. As our university grows, barriers among disciplines begin to emerge in spite of efforts to stay true to our core interdisciplinary mission. Recurring events such as *Arts Under the Stars* provide platforms for integrative collaboration that enrich and inspire the scholarship, teaching, and creative work of faculty as well as the educational experience of our students. As initiatives crystalizing pathways for students develop at CSUCI, spaces and events like *Arts Under the Stars* ensure the cross-pollination of our students' minds, requiring them to consider the other: the other genre or discipline; the other method of communicating; the other way people learn; the other type of arts; the other person who is their neighbor; and the other people with whom they will have to coexist and thrive in this world.

Works Cited

Anderson, S. (iPaper in prep). Public perceptions of the coast. California State University Channel Islands. https://coastalwiki.piratelab.org/opinion-poll/12_3/

Bohannon, J. (2019). The winner of this year's 'Dance You Ph.D." contest turned physics into art. *Science.* Retrieved from https://www.sciencemag.org/news/2019/02/winner-year-s-dance-your-phd-contest-turned-physics-art.

Booth, D. (1999). Surfing: The cultural and technological determinants of a dance. *Culture, Sport, Society, 2*(1), 36-55. doi:10.1080/14610989908721828.

Branagan, M. (2005). Environmental education, activism, and the arts. *Convergence, XXXVIII*(4), 33-50.

Conquergood, D. (2002). Performance studies: Interventions and radical research. *The Drama Review, 46*(2), 145-156.

Curtis, D. J. (2009). Creating inspiration: The role of the arts in creating empathy for ecological restoration. *Ecological*

Management & Restoration, 10(3), 174-184. doi:10.1111/j.1442-8903.2009.00487.x

Curtis, D. J., Reid, N., & Ballard, G. (2012). Communicating ecology through art: What scientists think. *Ecology and Society, 17*(2). doi:10.5751/es-04670-170203.

Defeo, O., McLachlan, A., Schoeman, D. S., Schlacher, T. A., Dugan, J., Jones, A., . . . Scapini, F. (2009). Threats to sandy beach ecosystems: A review. *Estuarine, Coastal and Shelf Science, 81*, 1-12.

Dugan, J. E., Emery, K. A., Alber, M., Alexander, C. R., Byers, J. E., Gehman, A. M., . . . Sojka, S. E. (2017). Generalizing ecological effects of shoreline armoring across soft sediment environments. *Estuaries and Coasts, 41*(S1), 180-196. doi:10.1007/s12237-017-0254-x.

Duncan, I. (1927). *My life*. Retrieved from https://gutenberg.ca/ebooks/duncani-mylife/duncani-mylife-00-h-dir/duncani-mylife-00-h.html (First printing, December, 1927).

Griggs, G. (2005). The impacts of coastal armoring. *Shore and Beach, 73*(1), 13-22.

Griggs, G., Patsch, K., & Savoy, L. (2005). *Living with the changing California Coast*. Berkeley: University of California Press.

Griggs, G. B., & Patsch, K. (2018). Natural changes and human impacts on the sand budgets and beach widths of the Zuma and Santa Monica littoral cells, Southern California. *Shore and Beach, 86*(1), 3-16.

Gunawardena, S., Weber, R., & Agosto, D. E. (2010). Finding that special someone: Interdisciplinary collaboration in an academic context. *Journal of Education for Library and Information Science, 51*(4), 210-221.

Helvarg, D. (2016). *The golden shore: California's love affair with the sea* (Reprint edition ed.). Novato, CA: New World Library.

Ingalls, R. (2011). Writing “eyeball To eyeball”: Building a successful collaboration. In C. Lowe & P. Zemliansky (Eds.), *Writing Spaces: Readings on Writing* (Vol. 2, pp. 122-140). Anderson, SC: Parlor Press.

James, R. J. (2000). From beaches to beach environments: linking the ecology, human-use and management of beaches in Australia. *Ocean & Coastal Management, 43*, 495-514.

Kennedy, K., & Howard, R. M. (2014). “Collaborative writing”. In G. Tate, A. R. Taggart, K. Schick, & H. B. Hessler (Eds.), *A Guide to Composition Pedagogies* (second edition ed., pp. 37-54). New York: Oxford University Press.

King, P., & Symes, D. (2004). *The potential loss in gross national product and gross state product from a failure to maintain California’s beaches*. A report for the Department of Boating and Waterways. Sacramento, CA.

King, P. G., Nelson, C., Dugan, J. E., Hubbard, D., Martin, K. L., & Battalio, R. T. (2018). Valuing beach ecosystems in an age of retreat. *Shore and Beach, 86*(4), 45-49.

Lafferty, K. (2001). Birds at a Southern California beach: seasonality, habitat use and disturbance by human activity. *Biodiversity and Conservation, 10*, 1949–1962.

Lemarie, J. (2015). Rhythms and cycles in Surf City USA®: commercializing surfing in Southern California. *Academia.com, 2015*.

Melius, M., & Caldwell, M. R. (2015). *2015 California coastal armoring report: Managing coastal armoring and climate change adaptation in the 21st century*: Stanford Law School. https://law.stanford.edu/wp-content/uploads/2015/07/CalCoastArmor-FULL-REPORT-6.17.15.pdf

Nichols, M. M. (1989). Sediment accumulation rates and relative sea-level rise in lagoons. *Marine Geology, 88*, 201-219.

Pilkey, O. H., & Cooper, J. A. G. (2014). *The last beach*. Durham, NC: Duke University Press.

Runyan, K., & Griggs, G. B. (2003). The effects of armoring seacliffs on the natural sand supply to the beaches of California. *Journal of Coastal Research, 19*(2), 336-347.

Schlacher, T. A., Dugan, J., Schoeman, D. S., Lastra, M., Jones, A., Scapini, F., . . . Defeo, O. (2007). Sandy beaches at the brink. *Diversity and Distributions, 13*(5), 556-560. doi:10.1111/j.1472-4642.2007.00363.x.

Schwab, G. (2012). *Imaginary ethnographies: Literature, culture, and subjectivity*. New York: Columbia University.

ESSAYS – CONTINUED

Schwartz, B. (2014). Communicating science through the performing arts. *Interdisciplinary Science Reviews, 39*(3), 275-289. doi:10.1179/0308018814z.00000000089.

Sheets-Johnstone, M. (1999). *The Primacy of movement (Advances in consciousness research*; v.14). Philadephia: John Benjamins Publishing Company.

Sheets-Johnstone, M. (2016). *Insides and outsides: Interdisciplinary perspectives on animate nature*. Exeter: Imprint Academic.

Stolberg, T. L. (2006). Communicating science through the language of dance: A journey of education and reflection. *Leonardo, 39*(5), 426–432.

Tharp, T. (2003). *The creative habit: Learn it and use it for life*. New York: Simon & Schuster.

Voelz, J., Saldívar, R. n., & Bieger, L. (2013). *The imaginary and its worlds: American studies after the transnational turn*. Hanover, NH : Dartmouth College Press.

RE-"MAKING" GENERAL EDUCATION: Envisioning Gen Ed as a Digital Humanities Makerspace

Kristin Novotny, Ph.D. and Katheryn D. Wright, Ph.D.

Dateline: Orlando, Florida. I'd brought index cards, toothpicks, and a roll of masking tape, but the icebreaker activity was my colleague's idea. "I participated in a great experiential exercise in my Wearable Computing course at the DHSI Summer Institute," Katheryn had said. "Maybe we should try it?"

So after discussing the activity — originally designed by Jessica Rajko — it came to pass that we began a presentation about the power of Digital Humanities at the Association for General & Liberal Studies (AGLS) 2019 annual conference by giving attendees 20 minutes to build the tallest free-standing structures they could. What could possibly be the connection between toothpick towers, Digital Humanities, and the future of General Education? It turns out that it's all about the power of "making."

Each year, AGLS hosts a conference where scholars and teachers in a variety of fields gather to interrogate general education, and learn about different approaches to liberal learning in a variety of academic contexts. We are interested in exploring how Digital Humanities and maker pedagogies can inform the theory and practice of general education.

Learning By Making. Unlike many icebreaker activities, our workshop built planning time into the process. Three groups of 3-4 people sat looking at their small piles of materials, forbidden to touch them for the first 10 minutes. "One person will take notes about the process and observe the interaction," we instructed them. "The note-taker can't touch the materials, but can help the group talk through the process." After 10 minutes of planning, the teams were given 10 minutes to build. When we announced it was time to build, the teams plunged into the task of constructing the towers.

ESSAYS – CONTINUED

Meanwhile, we circulated the room as participants deliberated the key components of a successful edifice. We watched as they judged how their sparse materials could be configured to optimize stability, lightness, height. One team stood the index cards on their long ends, cross-hatching them for maximal stability. Another team curved the cards into paper arcs. The final team made more of a stacked-tables structure, with toothpicks for legs. There was a lot of trial and error, a lot of laughter and frustration. Ten minutes flew by.

The Power of Debriefing. Next came arguably the most important part of the activity: the debrief. The entire group migrated from table to table as team participants talked through their process. They admired each others' handi-work, laughed and puzzled over their failures, making mental notes for "next time."

ESSAYS – CONTINUED

We focused the debrief on two broad categories of questions: **(1)** to what extent was your team's activity **process-based, iterative, and inquiry-based**? Did it focus on *how* to do what you did, on the sequencing? To what extent did you make adjustments and refine your ideas? How did question-asking move the process forward? **(2)** To what extent was your team's activity **collaborative and interdisciplinary**? Did you utilize different disciplinary and temperamental strengths, and if so, how? How did you decide who would take on which roles? What was the give-and-take of your interaction?

These structural and procedural questions were designed to illuminate a larger point: the tower-building exercise is an (admittedly low-tech) approximation of "Maker Pedagogy" (Bullock 2014). We define the concept of maker pedagogy below, tracing its relationship to and potential for the Digital Humanities. In our workshop, as in one recent analysis of feminist maker pedagogy, the "process of building is not a means to an end, but a metaphor for engaging theory" (Cipolla 2019, 272).

At the surface level, those who attended our AGLS workshop invested in the icebreaker activity because it was fun, hands-on, and posed an intellectual problem that seemed tantalizingly simple to solve. At a deeper level, the takeaway was the power of "making:" a key component in the practice of Digital Humanities that, we argue here, holds great potential to re-invigorate Gen Ed.

Making, Education, and Maker Pedagogy. In a cultural era of DIY craft beer, paint-and-sip parties, and Etsy pages, the concept of "making" is very on-brand. "Makerspaces" like this are popping up with increasing regularity in communities and on college campuses. According to John Spencer, a makerspace is "simply a space designed and dedicated to hands-on creativity" (Gonzalez 2018). Sheridan et al (2014) note that makerspaces "value the process involved in making — in tinkering, in figuring things out, in playing with materials and tools" (528). The process of making can be both generative and educative; it is *tinquiry*, in Mann's words: "tinkering as inquiry" (29).

Making is a powerful form of experiential education. Spencer argues that "[students] need to be able to engage in iterative thinking, creative thinking, critical thinking, they need to know how to pivot, how to change, how to revise, how to persevere. They need to solve complex problems. They need to think divergently. All of those are involved in that maker mindset" (Gonzalez 2018).

Indeed, because learning "is deeply embedded in the experience of making" (Sheridan et al, 528), it is important to bring attention to the practice of "Maker Pedagogy." We define Maker Pedagogy as the process of iterating ideas and plans in an interdisciplinary, collaborative educational space, with the intention of producing something concrete. What is produced could be a project, activity, paper, plan, theory, idea, or object. In addition: "This mode of teaching privileges activities that are interdisciplinary, immersive, integrative, multi-age, project-based, and collaborative. Maker Pedagogy entails that students are active, moving and Making, not memorizing" (Novotny 2019, 46).

Making is not only interactive; at its best it is an inclusive practice, driven by self-determination and authenticity (Mann 32). According to Byrne and Davidson, making erases or transcends disciplinary boundaries (2015, 11). Similarly, Sheridan and colleagues find that "[D]isciplinary boundaries are inauthentic to makerspace practice … Makerspaces seem to break down disciplinary boundaries in ways that facilitate process- and product-oriented practices, leading to innovative work with a range of tools, materials, and processes (2014, p. 527).

Making is not inevitably inclusive or barrier-breaking, however. While the maker movement has the potential to create "Maktivists" — creators "who make things for social change" (Mann 29) — educators like Cipolla warn that the mainstream maker movement valorizes market values and is deeply marked by gender, race and class distinctions (266-267). Identifying as a maker, argues Chachra, is "a way of accruing to oneself the gendered, capitalist benefits of being a person who makes products" (Chachra, 2015).

To oppose this, some authors believe we must practice *critical making* "as a form of intervention in hierarchical power systems," one that pays attention to the relationship between the maker and what is made, and centers the process of collective making rather than finished products (Cipolla, 266). Similarly, Novotny has argued that Maker Pedagogy can democratize the pursuit of knowledge due to its "potential to unmoor implicit boundaries in one's academic practice … [and] to broaden and complicate epistemological beliefs (how knowledge gets created, by whom, for whom)." It thereby invokes "an interesting, possibly disruptive set of power dynamics." (Novotny 2019, 56-57).

Maker Pedagogy and Digital Humanities: A Possible Model for Gen Ed? To define Digital Humanities simply, it (1) uses digital tools to interrogate questions important to the liberal arts and humanities, and (2) examines the contexts of digital and new media technologies. Digital Humanities, with its myriad methodological and interdisciplinary approaches, is a particularly good example of making that facilitates tinquiry and intellectual play.

Interestingly, Franzini (2016) defines DH not as a field but as

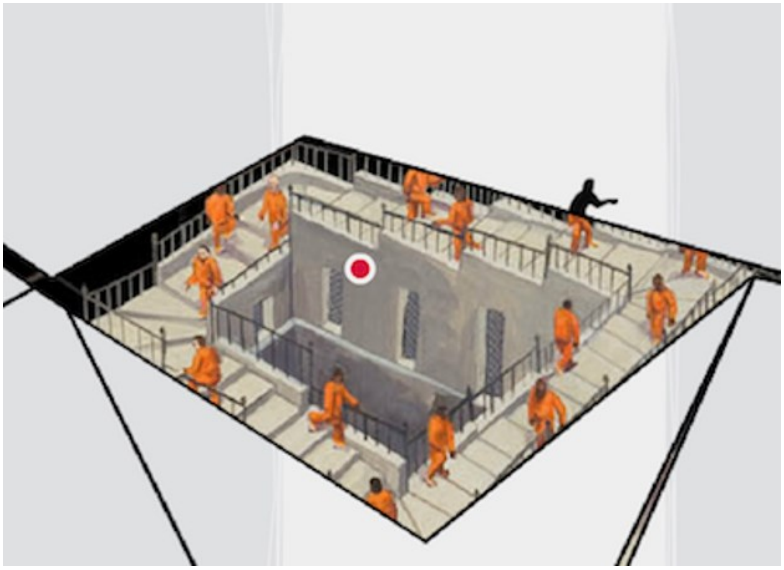
> *the digital alter ego of intercultural studies: a community bridge or a space where people from different disciples and backgrounds come together to learn how to talk to each other and to effectively combine skills to conduct joint and interdisciplinary research.*

She thus sees DH as a digital forum for interpreting and negotiating meaning, skills that are vital to liberal education. Digital tools have a unique potential to help us frame and understand places -- both in the past and present -- from a variety of perspectives and contexts.

An excellent example of a DH approach that works in this way is The Knotted Line (see image below). According to its website,

> *The Knotted Line is an interactive, tactile laboratory for exploring the historical relationship between freedom and confinement in the geographic area of the United States. With miniature paintings of over 50 historical moments from 1495-2025, The Knotted Line asks: how is freedom measured?*

The Knotted Line combines disorienting audio (that can be turned off) with a purposefully non-linear and, fittingly, knotty presentation format. The site enables users to uncover historical examples in the United States where human freedom has been subverted. In doing so, users move down a twisty, sinuous timeline where they use their mouse or trackpad to coax information/events to reveal themselves. Sometimes a glimpse reveals itself momentarily and then moves away, forcing the user to hunt for the elusive information. It's a powerful visual metaphor for the deliberately disguised nature of the carceral state.

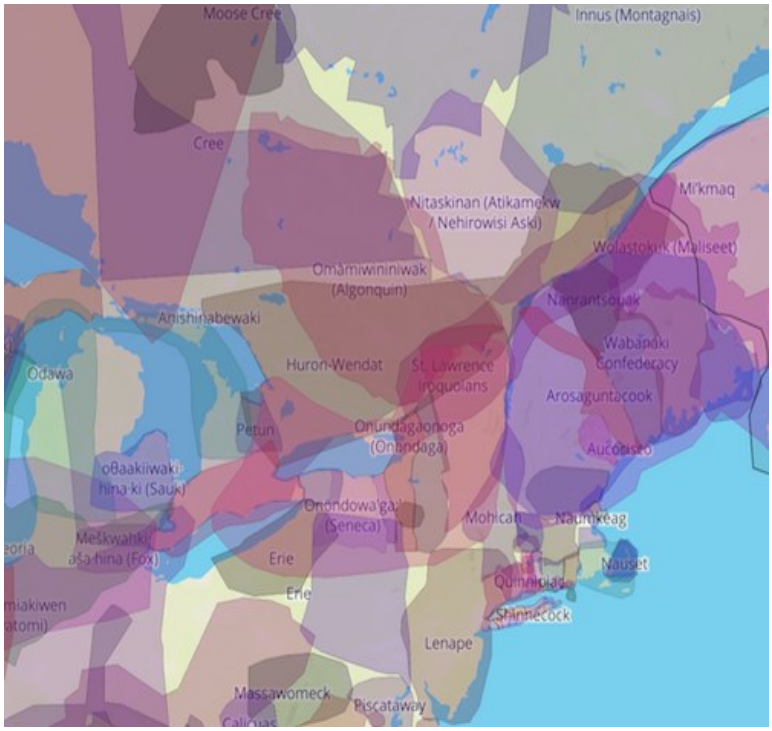


knottedline.com

Another terrific example of the ways in which hidden and contested meanings are digitally revealed is the Native Land website (see image below). Here the simple map — often assumed to be factual and value-free — is revealed to contain multiple layers of power, culture, and history.

Native Land is a tool that maps out Indigenous territories, treaties, and languages. ...This tool is not meant to be an official, legal, or archival resource. It is instead a broadly researched and crowdsourced body of information. It is meant to encourage education and engagement on topics of Indigenous land—particularly, where you are located. Native Land brings about discussions of colonization, land rights, language, and Indigenous history tied to our personal histories. We hope this guide makes you, the reader, want to know about the land you live on.

ESSAYS – CONTINUED



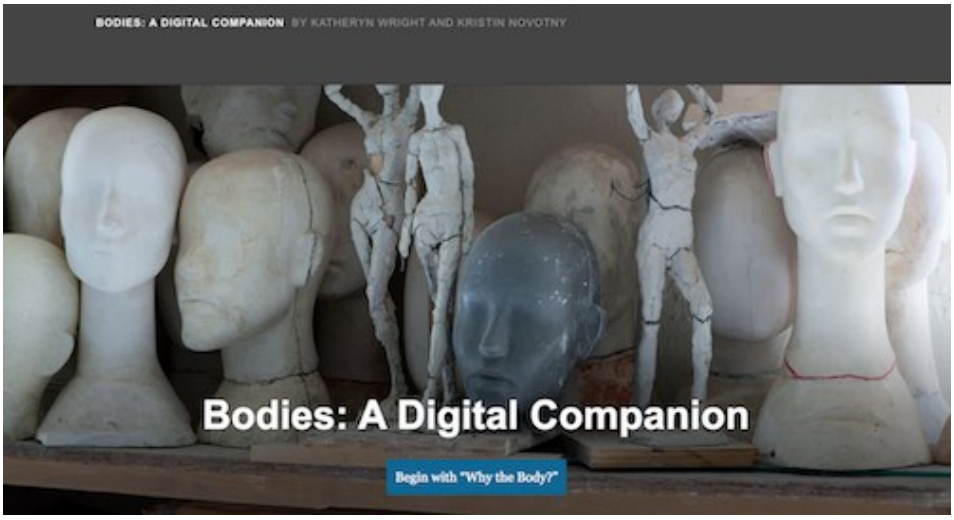
Native-land.ca

Digital Humanities projects are thus particularly adept at promoting immersive "place-based learning" that examines connections between local environments and broader conversations about specific concepts, inquiries, and/or theories. This can even be true in the context of commercial video gaming (see image below).

> Walden, A Game *is an exploratory narrative and open world simulation of the life of American philosopher Henry David Thoreau during this experiment in self-reliant living at Walden Pond. The game begins in the summer of 1845 when Thoreau moved to the Pond and built his cabin there. Players follow in his footsteps, surviving in the woods by finding food and fuel and maintaining their shelter and clothing. At the same time, players are surrounded by the beauty of the woods and the Pond, which holds a promise of a sublime life beyond these basic needs. The game follows the loose narrative of Thoreau's first year in the woods, with each season holding its own challenges for survival and possibilities for inspiration.*

Walden, A Game

As educators in a Core liberal studies program, we believe strongly in the possibilities of Digital Humanities to promote project-and-place-based, interdisciplinary academic work — so much so that we spent hundreds of hours constructing Bodies: A Digital Companion for our own courses.



ESSAYS – CONTINUED

Bodies: A Digital Companion is an online, interactive course text created on the free, open-source Scalar publishing platform. Prior to its creation, instructors in the sophomore-level "Bodies" course at our college switched amongst existing Bodies textbooks that did not precisely meet the needs of our students. While the idea for a new text was first envisioned as a printed reader, the digital text that resulted combines well-known academic writing about embodiment, new essays written by Bodies instructors about shared key concepts, and relevant media artifacts. The text is not only free and interactive, designed for born-digital students, but is highly amenable to modification with new materials and themes.

Circling Back, Looking Forward. The preceding examples of Digital Humanities work stand in stark contrast to older, more traditional disciplinary models of undergraduate education. We are all too mindful that Liberal/General Education often manifests itself in rigid, standardized curricula and "pick one from each column" requirements. Indeed, in a 2015 survey reported by AAC&U, a full three quarters of all U.S. colleges relied on distribution requirements (Jaschik 2016). We believe, however, that the Digital Humanities provides a possible remedy, a way to break out of the 'checklist' approach to liberal learning and offer a compelling alternative.

Participants in the AGLS workshop that began this article helped us to crowdsource preliminary responses to the question of "how can DH inform and transform Liberal/Gen Ed?" In thinking through the places where DH, maker pedagogy, and Liberal/Gen Ed intersect, one participant told us that "the maker mindset **is** the Gen Ed mindset." They further suggested that learning how to navigate complex webs of information is vital to both DH and Gen Ed, particularly as new forms of media become increasingly important. In a world in which policy matters are decided by Tweets, the ethics of the digital space becomes a crucial area of focus.

Our workshop participants also noted that the academic questions that matter most will be best answered in a multidisciplinary space. DH projects and methods can be used to encourage interdisciplinary collaboration among faculty in more traditional, distributive menu-based programs. This can open doors to further collaboration, and potentially help collapse traditional silos. Regardless of how far down a DH path schools prefer to go, DH projects like *Native Land* and *The Knotted Line* can be used immediately to engage students in discussions of equity and inclusion.

Here are other potential areas of opportunity to consider when implementing Digital Humanities:

- Embedded in a first year experience
- Course design
- Professional development
- Specific units
- Shared components across multiple sections of the same course
- Co-curricular opportunities
- Program outcomes
- Center/Institute/Research Hub
- Mission/Vision/Values

Overall, we are excited about the iterative, design-thinking practices of DH, and want to think more deeply about how the process that occurs in dedicated makerspaces can also happen in the context of Liberal/General education. U.S. academic structures are only beginning to consider what Digital Humanities and Liberal/Gen Ed could look like when mixed together. Let us dare to re-imagine, through interdisciplinary making practices, what Liberal/Gen Ed could be.

Works Cited

Bullock, S. "What is maker pedagogy?" (2015, May 24). Retrieved from http://makerpedagogy.org/en/what-is-maker-pedagogy-some-early-thoughts/

Byrne, D., & Davidson, C. (2015, June). *MakeSchools Higher Education Alliance State of Making Report*. Retrieved from http://make.xsead.cmu.edu/week_of_making/report

Chachra, D. "Why I Am Not A Maker." *The Atlantic*. (2015, January 23). Retrieved from https://www.theatlantic.com/technology/archive/2015/01/why-i-am-not-amaker/384767/

Cipolla, Cyd. “Build It Better: Tinkering in Feminist Maker Pedagogy.” *Women’s Studies* Volume 48, Issue 3 (2019), pp. 261-282.

Franzini, Greta. “Digital Humanities.” *YouTube* (2016). https://www.youtube.com/watch?v=l1XG7AXVJPE

Gonzalez, J. “What Is The Point of a Makerspace?” *Cult of Pedagogy*. (2018, May 20). Retrieved from https://www.cultofpedagogy.com/makerspace/

Jaschik, S. “Distribution Plus: Survey of Colleges Finds That Distribution Requirements Remain Popular but with New Features.” *Inside Higher Ed.* https://www.insidehighered.com/news/2016/01/19/survey-colleges-finds-distribution-requirements-remain-popular-new-features. Accessed 1 Apr. 2019.

Mann, Steve. “Maktivism: Authentic Making for Technology in the Service of Humanity.” *DIY Citizenship: Critical Making and Social Media*. Eds Matt Ratto and Megan Boler. *MIT Press*, 2014, pp. 29-51.

Native Land. *The Land You Live On: An Education Guide* (2019). https://native-land.ca/wp/wp-content/uploads/2019/03/teacher_guide_2019_final.pdf

Novotny, Kristin. “Maker’s Mind: Interdisciplinarity, Epistemology, and Collaborative Pedagogy.” *Journal of Interdisciplinary Studies in Education* Volume 8, Issue 1 (2019), pp. 45-62 https://ojed.org/jise

Sheridan, K.M., Halverson, E.R., Litts, B.K., Brahms, L., Jacobs-Priebe, L., and Owens, T. (2014). “Learning in the Making: A Comparative Case Study of Three Makerspaces.” *Harvard Educational Review*, 84(4), 505-532.

Wright, Katheryn and Kristin Novotny, eds. *Bodies A Digital Companion*. Common text for COR 240: Bodies, 2017. http://scalar.usc.edu/works/bodies/index

Interview With Alecos Papadatos, Illustrator of the Graphic Novel *Democracy*

Conducted by R. S. Deese, Boston University, September 29, 2019

What comic-book characters and genres did you love as a kid, and what is your favorite memory of spending time with comics?

In the sixties and seventies in Greece, there was only Tin Tin, Asterix, and Disney. I loved them all. I started reading these comics even before being able to read the text in the balloons. I remember trying to imagine the sound of the letter "A". "O" was easy to figure out.

Can you remember the first cartoons or comics that you drew yourself? If you shared them with others, what sort of reaction did you get?

I started copying my favorites on the back sheets of the school notebooks. Soon there was progress, schoolmates were excited, and I was the star of the class, along with the math champions. But the guy who pushed me into it was the least to want me into this career: my father. He showed me how to draw animation in the form of flip-books at the edge of the pages. I did it on a few of my textbooks, revealed to a couple of classmates, and then it became viral. Everybody asked me to fill their books with stick-figure animations with characters kicking and punching each other, planes transforming into flies, and so on. In the end, I started giving flip-book workshops. All the kids can draw, so everybody made his animation. The teachers got mad with "destroying the books with stupid doodles" and started distributing penalties.

When it comes to thinking about the medium of comics in a critical or theoretical way, are they any writers or artists whom you find to be especially persuasive or inspiring?

The main inspiration came from Robert Crumb, Charles Schulz, Carl Barks, Alex Toth, Jeff Smith and a few Europeans, like Hergé, Jean Giraud / Moebius, Loustal, Christophe Blain, Hugo Pratt, Blutch, Chabouté, Baudoin, Gipi. I cannot judge them as writers or artists, but they got a place in my heart with their ideas, their humanity, and their beautiful craftsmanship.

Both *LOGICOMIX* and *DEMOCRACY* shed light on major historical figures, exploring the time & place in which they lived. For this reason, some might categorize them as "educational comics." What would your reaction be to that sort of categorization? If you had to put these comics in a category or genre, what would you call it?

A comics critic once called *LOGICOMIX* "stealth education". Why not? But the leading writer of *LOGICOMIX*, Apostolos Doxiadis, is the one who best defined it: "Knowledge through Story". That means an awful lot, but it is no way any "popularization" of science, history, etc. It has nothing to do with a publisher's idea "let's produce a series of biographies or science stuff in the form of graphic novel to enlarge our catalog". I like history, among other subjects. The project is about a topic that speaks to my heart. It is exciting and challenging to turn it into a comic book, and I have the opportunity to share with the reader my knowledge and viewpoint on it. Bookstores want to categorize it as "non-fiction", I would like to call it "fiction", but who cares, it's the making and the reading that counts after all.

In *DEMOCRACY*, the reformer Cleisthenes initiates a number of democratic reforms in Athens; which of these reforms do you believe had the greatest significance for the subsequent political and social history of ancient Athens?

Cleisthenes established peace and collaboration while giving power to all free men to decide on their fate. It had never happened before in history. His "Trittyes" project (it means "Thirds"), explained in detail in the comic, was decisive for not letting people fight each other. They were deciding together on everything. It was the basis for the development of the democratic system over the next century, called the "Golden Era" of ancient Athens.

Taking a longer view, which of Cleisthenes ideas or reforms might have the greatest relevance for democratic societies in the twenty-first century?

Free speech and Equality before the law for all citizens are the reforms that make the most sense to us.

When you set out to story of Cleisthenes and his reforms, what part of that story did you find especially suitable to the medium of comics, and what visual ideas did you develop to explore it?

While doing some research, I read books by Josiah Ober and a couple of French historians on the subject of the reforms. The "free speech and equality before the law" change was easy to show and tell. However, the "Trittyes" reform was complex. French use to say ironically, "You don't have to draw it for me to understand it." I decided that Leander, the protagonist, and narrator, draws a map of Athens for his comrades on the ground with a stick. Then he uses garlic cloves, tiny flowers, and pebbles to define the whole structure of it. They get it! So I hope the reader gets it, as well.

There's an oft-cited quote from William Faulkner: "The past is never dead. It's not even past." As a modern Athenian, does this quote ring true to your own experience? What sights, sounds, or smells of your native city do the most to make you feel a connection to the ancient past that you describe in *DEMOCRACY*?

It's the unique balance of the East-Mediterranean sunlight.

What is your next project related to Athenian history, and why is it exciting to you?

After *DEMOCRACY*, the Belgian publisher Dargaud proposed to work together. We are preparing a biography of Aristotle with a Greek writer, Tassos Apostolidis. It's packed with lots of characters and many of the great man's fascinating ideas.

Book Review: Mariani, Giorgio. *Waging War on War: Peacefighting in American Literature*. Urbana: University of Illinois Press, 2015. xviii + 224 pp. ISBN (hardcover): 987-0-252-03975-1.

By Brady Harrison, University of Montana

In the Preface to *Waging War on War: Peacefighting in American Literature*, Giorgio Mariani lets readers know they should not expect an exhaustive study of the American literary tradition of anti-war writing, but rather a careful study of how a handful of works—some well-known, others less so—may be read as opposing war and violence: "I realize that some may find my choice of texts eclectic, as I move across historical periods and through many genres (epic and lyric poetry, short story, and novel)" (xi). Rather than proposing an anatomy of American peace writing, Mariani argues that his choices provide "an opportunity to comment on how the attempt to denounce and condemn war and violence is either enabled or complicated by a specific cultural context as well as by the use of a given literary form" (xi). In contrast, say, to Richard Slotkin, who provides, in his famous gunfighter nation trilogy, a sweeping study of violence and war in American literature, Mariani models how to sift through the complexities of individual works that have a place in what he terms "a national countertradition of peace seekers and justice seekers who oppose war and try to practice or imagine non-violent ways to transform the world" (xiii).

The book is divided into two sections, Part I: Theory and Part II: Readings, and in the three chapters that make up the first section, Mariani argues that although readers, film audiences, and scholars often refer to "anti-war" literature or films, the term remains largely undertheorized and that our sense of whether a work may be anti-war or not depends a great deal on our cultural contexts and reading strategies. Building on the work of Kate McLoughlin, Cynthia Wachtell, Leslie Fiedler, Kenneth Burke, Jacques Derrida, and others, Mariani asserts that the "critique of war can never come from a standpoint wholly external to it" (19): "As I will insist throughout this book, if we wish to grasp the critical (anti-war/pro-peace) aspects of war literature, we cannot restrict our analysis to the ways in which war is represented. We must also investigate how peace is implicitly (as is often the case) or explicitly constructed" (25). Contending that readers and scholars "should never obscure the rich, and by no means naïve, tradition of anti-war thinking visible in many strains of U.S. culture" (36), Mariani focuses, in Part II, on works that build upon and engage the intellectual and moral foundations of a robust, energetic ethic of nonviolence and peacefighting set forth in the work and example of Emerson, Thoreau, Gandhi, Addams, William James, and King and that seek (and perhaps stumble or contradict themselves) to think past or transcend war and to imagine (and explore the meanings of) peace. He reads, in turn—and here we readily see the author's eclectic approach—Joel Barlow's *Columbiad*, Melville's *Moby-Dick*, La Motte's *The Backwash of War*, Faulkner's *A Fable*, O'Brien's "How to Tell a True War Story," Kingston's *The Fifth Book of Peace*, two of Brian Turner's poetry collections, *Here, Bullet* and *Phantom Noise*, and Helen Benedict's novel, *Sand Queen*.

Among the readings—Mariani devotes a chapter to each of the works, save for the final chapter, "Literature and the Iraq War," where he analyzes Kingston, Turner, and Benedict in turn—most impressive, perhaps, is the chapter on La Motte's underappreciated collection of short stories, *The Backwash of War*. In "'Curious Anesthetics': Ellen La Motte and the Wounds of the Great War," Mariani analyzes several of the stories in *The Backwash of War*, and he finds in the tales, based upon La Motte's experiences as a volunteer nurse behind the French lines between 1915 and 1916, an "anatomy" of the Great War. Here, Mariani nicely sounds the complexities of La Motte's work and explores the myriad strategies she employs to register her disgust with the war and its violences and disfigurements; as he remarks, her stories are "animated by a sense of moral indignation" that one does not find so readily in works by Crane, Bierce, or Hemingway. Her collection amounts to an "anatomy" of ways to protest war and fight for peace, and Mariani finds that La Motte expertly details how combatants and leaders on all sides of the war practiced "a campaign of systematic devastation of women's minds and bodies" (144). The chapter, to say the least, is a major contribution to the study of La Motte's work, and readers will find much to admire (and to apply to their own thinking about how different texts wage war on war and fight for peace) in the chapters on Faulkner's (often dismissed) tale of mutiny, O'Brien's twists and turns in one of

the most famous stories in *The Things They Carried*, and Turner's complex, "cosmopolitan" poetry about U.S. (and coalition) intervention in Iraq.

Less successful, perhaps, are the chapter on the sacrificial in *Moby-Dick* and the treatments of Kingston and Benedict in the final chapter. These sections leave this reviewer wanting a much fuller, sustained analysis of the works under question. If we grant the author's assertion, for example, that "Ahab's world is unequivocally one of war" (107), the application of René Girard's study of the scapegoat to Father Mapple's sermon and, subsequently, to Ishmael and the white whale needs to be worked out in much more depth and detail; the analysis is fascinating, but idiosyncratic, and one can too easily lose sight of Mariani's larger aims. In a similar fashion, I would have welcomed a much more detailed consideration of Kingston's strange, hybrid text and the challenging cultural work it sought (and still seeks) to do.

In sum, *Waging War on War* is a fascinating, learned, lively, and much-needed study of how different American writers and activists have imagined, defined, and fought for peace even as they have gone to war or confronted the history of U.S. interventionism. As the author notes, there can be little doubt that while the American national narrative is steeped in war and violence, there exists a profound, albeit understudied and underappreciated countertradition that has sought to condemn brutality, to imagine war's other, and to consider the meaning of peace and how the nation might achieve a less violent and more open and reciprocal way of being in the world.

Book Review: Lukes, Daniel, ed. *Conversations with William T. Vollmann*. Jackson: University of Mississippi Press, 2020. 229 pp. ISBN (paperback): 9781496826701.

By Marco Malvestio, University of Toronto

Although he is one of the most preeminent American writers, scholarly studies on William T. Vollmann are famously scarce. As recently as 2015, in his preface to *William T. Vollmann: A Critical Companion*, edited by Christopher Coffman and Daniel Lukes, Larry McCaffery argued that, despite Vollmann's cult status and favorable reviews, "no extended treatment at all, no book-length scholarly studies" had so far been produced (xiv). While things have changed in more recent years (I am thinking of Palleau-Papin 2011, Qian 2012, Costa 2016, Ozcan 2019), this is still generally true. Specifically, it remains true because Vollmann's vast and ever-evolving production is almost impossible for a single scholar to control, not to mention to map, to summarize, and to analyze. It is precisely the wide variety of modes and topics in Vollmann's productions that makes him extremely complex to study and, at the same time, a most interesting subject for an interdisciplinary approach. Indeed, his oeuvre is one that draws on so many different fields, from astronomy to Japanese literary studies to environmental science, that a scholar working within one discipline cannot hope to grapple with the whole of his achievement. Too, Vollmann continuously merges different these genres, moving from science fiction to historical (meta)fiction to reportage to philosophical speculation to scientific compendium. Moreover, he is one of the few authors who successfully adopt different media, as his books are often crowded with his own drawings and photographs (or Ken Miller's, with whom he collaborated often in his early career).

In this context, Daniel Lukes provides an essential service to Vollmann readers and scholars. *Conversations with William T. Vollmann*, in fact, collects twenty-nine interviews with its subject, published in a period of time spanning from 1989 to 2019. Lukes inherited the project from writer and critic Michael Hemmingson, who was one of the first to publish extensively (although not academically *strictu sensu*) on Vollmann (*Expelled from, Eden: A William T. Vollmann Reader*, 2004; *William T. Vollmann: A Critical Study and Seven Interviews*, 2009; *William T. Vollmann: An Annotated Bibliography*, 2012) and who died in January 2014. Lukes's criterion for the choice of the interviews was, wisely, "to privilege hard-to-find, rare, or best yet new and unpublished material" (xi). This means that readers are unlikely to encounter pieces they have already read online, and that even the most die-hard among Vollmann fans will be able to find something new in the volume. The volume also contains an updated chronology of Vollmann's life and works.

Most interestingly, the chronological span of the interviews allows readers to confront Vollmann's opinions on almost every one of his books (even the most esoteric ones, such as *Kissing the Mask: Beauty, Understatement, and Femininity in Japanese Noh Theater*), and to trace the evolution of his public image. Vollmann has always been extremely self-conscious about his public appearance, and has used interviews, especially early in his career, to establish the image of a young writer, prodigiously cultivated and prolific, yet also fond of extreme life experiences. As Lukes highlights, "early and tabloidish portraits of Vollmann have about them a doomed-young-man vibe, as if he were a mythical creature soon to be snuffed out" or as if he possessed a "radical vulnerability," to quote Vollmann himself, as interviewed by Jonathan Coe, in a piece that is itself a crucial example of his practice of self-fashioning (Lukes, xii; Coe, 3). In other words, not only does the book provide a valuable source for the knowledge of Vollmann *the author*, it is also extremely useful (and in this aspect, quite unprecedented) for understanding Vollmann *the character*.

This considerations leads to another aspect of the relationship between Vollmann and his interviewers, which often borders that between the author and his fans, which is that the interviews are sometimes tinted with a safari-like tone, an exploration in the life of the eccentric writer William T. Vollmann:

> Some of the best interviews here are when the interviewer spends some quality time with Vollmann, getting a more rounded portrait of the writer in his element, in the daily life of Sacramento. A fan-like quality, or awe, permeates some of the pieces, pointing to Vollmann's cult following. Alexander Laurence[']s] and Michael Hemmingson's contributions give valuable glimpses into Vollmann negotiating private/public

> boundaries and a picture of the writer in public; David Boratav[’s] and Stephen Heyman’s show what it’s like to be invited into Vollmann’s spaces and hang out with “Bill.” (xiii)

Partisan as they may be, these interviews provide precious insight regarding Vollmann’s early steps as a public figure, and help to illustrate the cultish dimension of (some of) his readership. By giving so much attention, in his introduction, to Vollmann’s self-fashioning and the sometimes succubus-like role of the interviewers, not only does Lukes invite us to problematize the author’s self-presentation, but he also challenges Vollmann’s truthfulness, a common topic of Vollmannian scholarship and more careful reviews. Of course, such attention to crafting his own public image as author is not unexpected of someone who claims, when answering one of Tom McIntyre’s questions, that “there’s no such thing […] as real life” (48).

It is worth underlining, however, that, in addition to these considerations of Vollmann’s readers and interviewers, Lukes’s volume provides an extremely useful tool for scholars interested in every aspect of Vollmann’s work, as it covers all of his career and of his ideas. Besides comments on specific books, *Conversations with William T. Vollmann* contains the author’s own considerations of crucial aspects of his *oeuvre*, such as prostitution (in the interviews with Michael Coffey and Tom McIntyre), the war in the Balkans (Andy Beckett, Sam Whiting), the war in Afghanistan (Steve Kettmann, Paul Hunter), and the ethics of reportage (Donna Seaman). While not offering a strong critical apparatus (which was not, in any case, needed), Lukes’s effort to find and obtain the rights for these interviews is priceless, as it provides readers and scholars with an exhaustive collection of Vollmann’s opinions on a variety of themes, another brick in the growing building of Vollmannian scholarship.

Works Cited

Costa, Daniele. *Il perverso ritorno del reale*. Milano: Mimesis, 2016.

Hemmingson, Michael. *William T. Vollmann: A Critical Study and Seven Interviews*. Jefferson: McFarland, 2009.

——. *William T. Vollmann: An Annotated Bibliography*. Lanham: Scarecrow, 2012.

Hemmingson, Michael, and Larry McCaffery. *Expelled from Eden. A William T. Vollmann Reader*. New York: Thunder’s Mouth Press, 2004.

Özcan, Isil. *Understanding William T. Vollmann*. Columbia: University of South Carolina Press, 2019.

Palleau-Papin, Françoise, ed. *William T. Vollmann: le Roman Historique en Question. Une Etude de* The Rifles. Paris: Presses Sorbonne Nouvelle, 2011. Translated and revised as *William T. Vollmann,* The Rifles*: A Critical Study*. Bern: Peter Lang, 2016.

Qian, Cheng. *A Study of William Vollmann: Transgression in the Postmodern Context*. Xiamen: Xiamen UP, 2012.

Book Review: Cook, Benjamin I. *Drought: An Interdisciplinary Perspective*. New York: Columbia University Press, 2019. 215 pp. ISBN (paperback): 9-780231-176897.

By Adam Sweeting, Boston University

The title of Benjamin I. Cook's *Drought: An Interdisciplinary Perspective* succinctly states the author's intention to present a wide-ranging discussion of the multiple factors that contribute to the extended dry conditions that periodically and sometimes quite dangerously visit the landscape. Unlike a devastating hurricane, droughts, writes Cook, are "slow moving disasters, with effects that accumulate increasingly over weeks, months, and even years as moisture deficits propagate through ecosystems and the hydraulic cycle" (vii). They are also complex systems that sit "at the intersection of climatology, meteorology, hydrology, ecology, agronomy, and even economics." For Cook, a research scientist at the NASA Goddard Institute for Space Studies, the "fundamentally interdisciplinary nature of drought" poses a challenge to anyone seeking to comprehend fully the impacts and dynamics of such events (viii). The structure of Cook's book speaks to this challenge, with separate chapters on the various aspects of drought. Such an approach might better be described as *multidisciplinary* rather than interdisciplinary, since the chapters do not truly come together as a synthetic whole. To be sure, Cook expertly describes the mechanics of drought in clear, user-friendly prose that enables non-specialist readers to come away with a firm understanding of how and why droughts originate. More attention to the social and cultural aspects concerning the human experience of drought, however, would help to deliver on the interdisciplinary promise of the book's title.

The early chapters cover the basics of how water, the essential ingredient for life, functions within various Earth systems. Chapter 1 traces the hydrological cycle by which water travels by the processes of precipitation, evapotranspiration, and run-off through Earth's reservoirs (i.e., oceans, clouds, lakes, streams, aquifers). Chapter 2 covers the normal interaction of the water cycle and the global climate system, while Chapter 3 narrows the focus to consider the specific factors in the climate system that give rise to drought. These descriptions are accompanied by informative illustrations, though the small fonts used in the explanatory texts can make them initially hard to decipher. Non-specialist readers seeking a basic understanding of drought will want to pore over these chapters carefully. And, for places where the non-specialist might need assistance understanding the occasional technical or specific scientific term, Cook provides a helpful and thorough glossary.

In the early chapters, Cook also describes the different types of drought (meteorological, hydrological, and agricultural). We learn, too, that not all droughts are the same, and that we must pay particular attention to geographic specifics if we hope to understand them: "A drought in New York, relatively speaking, will still be wetter in terms of absolute values than a normal year in Arizona" (41). Vagaries in the climate system, too, can produce "snow droughts" with devastating impacts on historical spring run-off patterns, or "flash droughts" that occur with "little to no advance warning" and can lead to unanticipated agricultural losses (65).

Readers interested in how anthropogenic climate change will affect the frequency and extent of drought will want to examine closely the middle chapters in which Cook takes up the climatological conditions of the early Holocene and the likely impact of rising temperatures on the future hydroclimate. Through the use of paleoclimate proxies such as tree rings and lake sediments, we know that a warm and wet period during the mid-to-late Holocene (~9,000 to 2,000 years ago) gave rise to the so-called Green Sahara. A lush landscape vastly different from the Sahara we know today, the Green Sahara was produced by naturally occurring processes related to slight shifts in Earth's orbit; subsequent natural changes, in turn, pushed back the green and opened the way for sand. As Cook demonstrates, periods of relative dryness and moisture have always occurred. But now, anthropogenic climate change has thrown multiple monkey wrenches into the natural workings of Earth's systems. The likely result, Cook shows, will be deeper and more prolonged

droughts, such as the ones that recently descended on California and Syria. Cook describes the technical aspects of these disasters clearly and with great skill. But as with other aspects of the book, the human experience of drought goes missing. What fears, anxieties, or trepidations did they inspire? How might scholars from the social sciences or the humanities respond to them? Where are the poems or novels of drought? One is reminded in this context of John Steinbeck's depiction of Dust Bowl refugees in the opening chapters of *The Grapes of Wrath*. A less technical and more fully interdisciplinary discussion would add depth to these otherwise fine explications.

The book's full promise most closely comes to fruition in Chapter 6, where Cook presents case studies of the 1930s Dust Bowl in America's central plains and the Sahel drought in West Africa, which lasted from the late 1960s to the early 1990s. Here, we encounter how human land use practices and population trends contributed to soil erosion and degraded land. When these practices intersected with global climate patterns, they amplified the effect of long- term droughts; what began as naturally occurring meteorological events turned into agricultural and economic disasters. Although we do not quite get the sense of the human toll caused by these events, Cook presents them as emerging, at least in part, from human action. Droughts have always occurred and will continue to occur even if humans no longer walked the Earth. But we *are* here, and our actions are almost certainly making drought conditions worse, with profound implications for ecological and human health. As the climate warms, some parts of the world will see more rain, but others – the American southwest and sub-Saharan Africa, for example – will see much less. The depth and extent of drought will intensify. As we look toward a future defined by anthropogenic climate change, Cook's case studies offer a timely reminder of how our land use practices coupled with excessive greenhouse gas emissions will exacerbate dangerous conditions. There will be more of the "slow moving disasters" he describes in the Preface.

In the final two chapters Cook examines land degradation and the tapping of groundwater to support large-scale agriculture, two processes connected with drought that can be made worse by human action. Land degradation, defined here as the "sustained, sometimes irreversible, loss of ecological productivity and ecosystem services" results from soil erosion and compacting through poor soil management and overgrazing (143). How nations and communities manage their soil will emerge as one of the great agricultural challenges in the wake of climate change. So, too, will the way they manage groundwater in a period when we know drought will intensify. As Cook writes at the close of the final chapter, "water will remain a critical and challenging resource to manage in most regions of the world" (180). The quality of life for the human and non-human will be determined by how we confront the conditions we have created. Water management will indeed be a major resource challenge, and *Drought: An Interdisciplinary Perspective* does an excellent job of showing why. But how we manage water in our droughty future will also be a spiritual challenge that will test our commitment to environmental justice and the hope that our everyday aesthetic and imaginative encounters with water – the sustainer of life – will not run dry. It is these overtly anthropocentric aspects that go missing in Cook's otherwise excellent account of the meteorological and hydrological systems that give rise to drought.

PREVIOUS ISSUES

- Vol. 1, No. 1, Summer 2012
- Vol. 2, No. 1, Winter 2013
- Vol. 2, No. 2, Summer 2013
- Vol. 3, No. 1, Winter 2014
- Vol. 3, No. 2, Summer 2014
- Vol. 4, No. 1, Winter 2015
- Vol. 4, No. 2, Summer 2015
- Vol. 5, No. 1, Winter 2016
- Vol. 5, No. 2, Summer 2016
- Vol. 6, No. 1, Winter 2017
- Vol. 6, No. 2, Summer 2017
- Vol. 7, No. 1, Winter 2018
- Vol. 7. No. 2, Summer 2018
- Vol 8. No. 1, Winter 2019
- Vol 8. No. 2, Summer 2019
- Vol 9. No. 1, Winter 2020

Archived issues are available at OpenBU, and can be accessed at http://hdl.handle.net/2144/3910.

CENTER FOR INTERDISCIPLINARY TEACHING & LEARNING
COLLEGE OF GENERAL STUDIES, BOSTON UNIVERSITY
871 COMMONWEALTH AVENUE
BOSTON, MA 02215
617-353-2861
WWW.BU.EDU/CGS/CITL
CITL@BU.EDU