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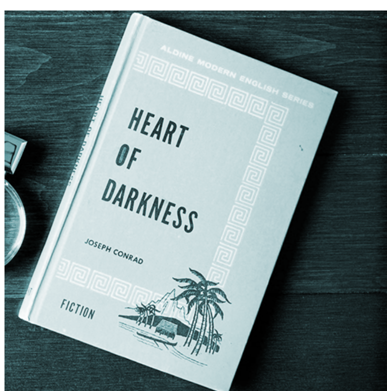

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ABOUT US

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.

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EDITORIAL STATEMENT

Dear Readers,

Welcome to the Summer 2022 issue of *Impact: The Journal of the Center for Interdisciplinary Teaching & Learning*. The essays in this issue explore interdisciplinarity in the classroom and/or education.

Our first contributor argues that making the economics curriculum more interdisciplinary corrects some common American misconceptions about Africa and encourages students to develop a richer understanding of both economics and Africa, while also teaching students that Africa need not be relegated merely to economic development courses and instead shows how Africa, particularly the Swahili Coast, was both inventive and innovative.

In our second contribution, three authors writing together explore the power of storytelling in interdisciplinary learning communities, or cohorts of first-semester students enrolled in general-education classes that connect through a common theme. The authors detail how they developed their learning community around storytelling, while also arguing that interdisciplinary learning communities grounded in storytelling are high-impact practices that help students connect to their school community, classes, and to each other and to see their learning as relevant in their lives.

Using two classification schemes (Biglan's disciplinary classification scheme and Holland's hexagon of occupational interests and personality characteristics) that are relevant for understanding collaborations between disciplines in multidisciplinary and/or interdisciplinary education to analyze disciplinary collaborations in education, our third contributor measured the correlation between the two classification systems to determine the relationship between them. Based on the study, the author argues the two classification schemes and their relationships provide helpful frameworks for understanding disciplinary similarities and differences, while also providing important insights about how members of collaborating disciplines may complement or differ with one another.

Our *Impact* book reviewers inform readers about one author's new interdisciplinary and ground-breaking work in modern history that shows that Africa and Africans played an indispensable role in making the modern world, another author's look at an "Orphic bend" through the work of five major twentieth-century US poets, and, finally, an author's interdisciplinary analysis of antebellum childhood.

We hope you enjoy the various insights shared within this issue, and we continue to wish all our readers and writers good health and fortitude as 2022 continues to unfold.

All the best,
Lynn

Lynn O'Brien Hallstein, Editor-In-Chief, Director of the Center for Interdisciplinary Teaching & Learning

ABOUT THIS ISSUE'S AUTHORS AND EDITORS

Crystal Bickford is an Associate Professor of English at Southern New Hampshire University and a former writing program administrator and academic support specialist. She has served three terms as the Learning Assistance Association of New England (LAANE) president and is the current president of the Northeast College Reading and Learning Association (CRLANE) while also serving as the national special interest group leader in educational technology for the national CRLA. She has taught in higher education for nearly thirty years and holds expertise in interdisciplinary studies, composition, rhetorical studies, nonfiction writing, and business communications. She works for the American Red Cross as a Disaster Action Team Supervisor and enjoys photography, kayaking, and travel in her free time.

Ngina Chiteji is an Associate Professor at New York University's Gallatin School of Individualized Study, and Associated Professor of Public Service the NYU Wagner School. She received her Ph.D. in Economics from the University of North Carolina. Her scholarship includes articles about macroeconomic policy, retirement saving, wealth inequality, and active learning strategies designed to incorporate data analysis in the classroom. She teaches both standard economics courses and courses that cross the boundaries of economics, political science, history, science, and philosophy.

Jeanne M. Hughes is an Associate Professor of English at Southern New Hampshire University. She teaches General Education composition and reading skills classes as well as upper-level linguistics, grammar, and literature. In all classes, her focus is on creating learning environments where students are both academically challenged and actively involved. She includes storytelling in various forms, including art, literature, social media, and guest speakers, as a foundational element in her classes, which provides students with a way to connect to others and to course content. Her current research is focused on teaching writing and critical thinking through personal stories and using literacy narratives to increase student metacognition.

John W. Mackey is Chair of the Social Sciences Division of Boston University's College of General Studies, where he received the Peyton Richter Award for Interdisciplinary Teaching in 2016. He is a contributing author of *The Modernization of the Western World: A Society Transformed* (Routledge, 2017) and his work has appeared in *Salon*, *The Conversation, Cognoscenti, The Globe P*ost, and *We're History*.

Justina M. Oliveira earned her Ph.D. in Industrial and Organizational Psychology from the Graduate Center, City University of New York. She is currently an Associate Professor of Psychology at Southern New Hampshire University. She incorporates service-learning and civic engagement in many of her courses and enjoys utilizing the arts to encourage deeper learning of psychology content. Her research and publications focus on workplace and social issues ranging from experiences of law enforcement and their use of humor, ethical considerations in survey use, the public's perceptions of transgender military veterans, and Latinas' experiences of discrimination at work. She strives to involve undergraduates in research projects, and many have obtained authorship through these collaborations.

Marlis Schweitzer is Professor in the Department of Theatre and Performance at York University in Toronto. She has written and edited a number of books, including *When Broadway Was the Runway: Theater, Fashion, and American Culture* and *Performance Studies in Canada* (co-edited with Laura Levin). Her most recent book*, Bloody Tyrants and Little Pickles: Stage Roles of Anglo-American Girls in the Nineteenth Century* was awarded the 2021 George Freedley Memorial Award from the Theatre Library Association.

Rob Turner is a Lecturer in 20th- and 21st-century literature at the University of Exeter. His research focuses on American literature, with a particular interest in experiments in the epic mode. His first monograph, *Counterfeit Culture: Truth and Authenticity in the American Prose Epic Since 1960*, was published by Cambridge University Press in 2019.

Jeanine Williamson is the veterinary medicine and engineering librarian and a professor at the University of Tennessee Knoxville. Her research interests include characteristics of disciplines and the individuals working in them. She published a book in 2018 titled *Teaching to Individual Differences in Science and Engineering Librarianship: Adapting Library Instruction to Learning Styles and Personality Characteristics.* In addition to disciplinary characteristics, she is interested in collaborations between disciplines, particularly in One Health research.

ANNOUNCEMENTS

Latest Announcements

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

Reimagining the Way Economics is Taught: The Value of Engaging with other Disciplines

By Ngina Chiteji, Gallatin School, New York University

“From abroad, I often see Africa perceived merely as a place of war, disease, and hunger, a sick entity deserving pity…”
M.G. Vassanji’s And Home was Kariakoo: A Memoir of East Africa, p. xiii

Introduction

Many scholars have expressed concerns about the views of Africa that Americans hold. Some scholars worry that Americans know very little about Africa; others worry that Americans’ perceptions of Africa are inaccurate or simplistic (see Kim, Wolff, Hershey and Artime, Wa’Njogu, and Osunde and Tlou for examples). This paper argues that making the economic discipline’s curriculum more interdisciplinary would position the discipline to correct some common misconceptions about Africa, or, at the very least, to avoid contributing to misperceptions, as making economics’ curriculum more interdisciplinary would allow the discipline to call attention to societies and places that are often ignored. The ancient Swahili Coast is one such example.

Misperceptions, Education and Correcting Mistaken Views

Among the researchers who have expressed concern about American views, McCarthy argues that most Americans have little understanding of the African continent, and that they subsequently form distorted views of her people. He adds that there is a long history of mischaracterizing Africa in the United States. Among the many pieces of evidence, he presents are the writings of the 19th century US explorer and career diplomat Henry Sanford who described the continent’s peoples as not understanding the benefits of trade and commerce, which, according to McCarthy, was an implicit denigration of African people. When studying contemporary attitudes toward the continent, Hershey and Artime found perceptions of Africa that involve “negative or simplified understandings” of the continent among present-day college students (637). Kim also found mistaken views and stereotypes among students. Specifically, when conducting an in-class experiment that asked students to draw a picture of what they think of when they think of Africa, she found that fewer than 3% of students drew images that could be characterized as positive (42). Instead, suggest her findings, Americans often view Africa as either violent and conflict-ridden, or primitive. Wolff would add devoid of history and any significant achievements to the list of ways that Westerners tend to view Africa (89). These are all specific ways that Americans think about Africa.

What is the potential role for education in correcting such misperceptions? Mwalimu Julius Nyerere said the following about education: “A man learns because he wants to do something. And once he has started along this road of developing his capacity *he also learns because he wants to be; to be a more conscious and understanding person*….” *(emphasis added;* 28). President Nyerere was noting that it is human nature for man to want to enhance his understanding. Even though Nyerere was speaking about adult education, this educational philosophy can inform how we think about a college education as well.

How, then, might the economics discipline play a role in correcting misperceptions and enhancing students’ understanding? Africa has a rich history. This history is commonly addressed in courses that are specifically about Africa that are taught in history and archaeology departments. An important part of this history includes the collection of city-states that populated the eastern seaboard during premodern and early modern times. These cities engaged in long-distance trade across the ocean long before the advent of GPS or even the compass, and many were quite prosperous. This paper argues that the study of the “Swahili Coast”—as the region is called—should not be left to historians, archaeologists, and cultural anthropologists. Specifically, it argues for the value of integrating a study of the Swahili Coast into undergraduate economics courses, where classroom discussions and analysis can be enriched by drawing examples from the region, while at the same time teaching economics majors that discussions of Africa need not be relegated merely to economic

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development courses where African states are typically used to showcase problems that need fixing and where Africa is presented as a region to be helped—an underdeveloped space that needs Western ideas or Western money in order to improve.

The Current Structure of the Economics Curriculum

We are interested in questions of pedagogy in this essay: in questions of how Africa is depicted in economics courses. More specifically, the paper is motivated by the possibility that a different depiction might offer a chance to expand students' understanding of Africa and their awareness that human ingenuity and innovativeness can be found everywhere (including Africa), and to maybe change perceptions of Africa that are held by US students in the process.

What can be said about how economics is currently taught? I have now taught economics courses for 20 years, in three different settings: (i) an economics department, (ii) at a School of Public Policy, and (iii) in an interdisciplinary division of a university. The standard structure of the economics curriculum in a typical American economics department has students taking two introductory courses designed to introduce them to the basic "principles" of microeconomics and the principles of macroeconomics. (In some schools, micro and macro principles are combined into one course instead of being taught separately.) Majors then take an additional microeconomics course and an additional macroeconomics course—both at the intermediary level. Here, there is a strong emphasis on teaching the theoretical and mathematical models that comprise the discipline's wisdom about how the economy and the economic agents within it operate. After this, students proceed to take elective courses in subfields such as labor economics, money and banking, environmental economics, international economics or economic development. To engage students, economics courses often focus on using contemporary examples, as it is thought that this is the best way to find examples that young people can relate to. The subject of Africa typically only comes up when students are studying economic development problems, either in the short units about long-run growth that appear in a macroeconomics course, or in the semester-long economic development course that majors can take as an elective.

This curricular structure means that when countries of Africa are mentioned in economics courses, it typically will occur when the discipline needs an example of a less-developed or "under-developed" country. While there is no reason to question the legitimacy of using African case studies when studying development economics, featuring Africa solely in relationship to problems like poverty, poor infrastructure, low levels of human capital, famine and disease, can inadvertently give the impression that there is nothing positive to say about Africa. That Africa has no accomplishments.

How could things be different? Below I provide several examples of ways that incorporating information about the Swahili Coast could change things. In particular, we will see that it allows Africa to be discussed in contexts that don't involve problems. This creates the prospect of offering a more balanced view of the continent, rather than giving students the sense that there is nothing to say about Africa unless you happen to be talking about poverty and affliction.

Interdisciplinarity

As the title intimates, a key premise of this essay is that it would be possible to take an interdisciplinary approach when teaching economic concepts. What is the working definition of *interdisciplinary* in this essay? This paper conceptualizes interdisciplinary work as that which seeks to "make connections across different fields of knowledge" (Henley and Cook 3). Klein writes that the term *interdisciplinarity* gets associated with "integrating" and "blending" and "linking", and this is the primary way that my paper is employing the term (22). It views interdisciplinary work as work that integrates ideas or information from different disciplines—as establishing linkages between them by blending insights from them.

There actually are many different definitions of the term "interdisciplinary" in use, as many experts have noted. In a survey of the literature, Miller observes that, while there is agreement that integration is an essential element of interdisciplinary work—explaining that interdisciplinarity is almost always defined as involving "integration" of methods, concepts or tools from two or more different disciplines for some purpose—not all scholars view the term integration the same way (3). While providing a list of all the different ways the term "interdisciplinarity" gets used by scholars is outside the scope of my

paper, it is perhaps worth noting that in this essay the integration of knowledge from different disciplines will sometimes be in service of the goals of one discipline. At other times, the integration of knowledge and methods from different disciplines is done to facilitate an understanding of a topic that is deeper and richer than the understanding that would be obtained by viewing the topic from the perspective of economics alone. Both endeavors are forms of interdisciplinarity discussed in Miller.

Correcting the Misperceptions Problem through Interdisciplinary Approaches to Teaching Economics—Some Specific Examples

In what follows, I provide some specific examples of how one might take an interdisciplinary approach to teaching economics. I speak mainly from reflection upon my experience teaching an interdisciplinary seminar about trade, technology and Tanzania in a division of my home university that values interdisciplinary learning. An economist by training, designing this course challenged me to step outside my discipline and to engage with historical documents such as ancient Greek texts, Muslim travel diaries, and medieval maps; archaeological artifacts such as coins, pottery sherds and wall drawings on ruins; and concepts from physics related to winds, pressure systems, and wave patterns. The section begins with a brief overview of the Swahili Coast though, for readers who are unfamiliar with the region.

The Swahili Coast—Some Background Information

"Long before Portuguese caravels rounded the Cape, the East African coast played an important part in the Indian Ocean trading complex," marveled the historian Terry Elkiss (119). What does the term "Swahili Coast" refer to? As Lane and Breen note, the term is used in reference to the portion of the coast that extends roughly from Mogadishu, Somalia to either the Tanzania-Mozambique border, or down to Sofala in the southern region of Mozambique (19). Of course, in premodern times, the nations Somalia, Tanzania and Mozambique did not exist (at least not in their current configuration as nation-states); but the region still existed. The eastern coast of Africa was home to several boisterous market towns with vibrant communities. This coastline, the islands near its shore, along with the Comoros islands and parts of present-day Madagascar, are all considered to make up the Swahili Coast (Lane and Breen 19).

The term "Swahili Coast" is not just a geography term, however; it also invokes a sense of time. Archaeologists Wynne-Jones and LaViolette provide a useful chronology when describing what they call "Swahili civilization" in their seminal text *The Swahili World*. The authors note that we can think of three different periods when studying about the Swahili Coast: (a) the period from 0 to 600 CE, during which the Swahili Coast region was a series of scattered iron age settlements populated by "iron using farmers" (Wynne-Jones and LaViolette 6) with some cities along the coast serving as trade emporiums; (b) the seventh through eleventh century, during which time the coastal towns see an expansion of village life, and the emergence of economies that combine agriculture with animal husbandry, fishing and craft production, and when substantial foreign trade begins to occur, particularly with regions across the Persian Gulf; and (c) the period dating from 1000 to 1500 CE, when the now famous Swahili stone towns emerged and the region began to trade vigorously all throughout the Indian Ocean. This is a period that we might think of as the heyday of the Swahili Coast and a period during which substantial wealth was accumulated by some of the cities. This latter period comes to a close with the arrival of the Portuguese and East Africa's eventual colonization by Europe.

Describing one Swahili Coast city, the famous premodern Muslim explorer Ibn Battuta wrote, "Kilwa is one of the most beautiful and well-constructed towns of the world" (Ibn Battuta 31). Chinese historical records mention emperors who were dazzled by luxury-related items that they could obtain from the Swahili Coast, including ivory to make carriages during the Song Dynasty (960 -1279 CE), and incense as early as the Western Han dynasty of 110 -105 BCE (Zhao and Qin 432). Even the Portuguese were impressed by the region. In 1500, the explorer Pedro Cabral wrote of Kilwa: "…a beautiful country…In this land are rich merchants, and there is much gold and silver and amber and musk and pearls. Those of the land wore clothes of fine cotton and of silk and many fine things" (qtd. in Boston 11).

Wynne-Jones and LaViolette have called the Swahili Coast civilization "a rich and complex African civilization" (1). Below I make the case for why the Swahili Coast is worthy of study in economics courses and how it might be used to illustrate

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key principles of micro- and macroeconomics.

International Trade: One Area Where Theories Can Be Enriched Using Swahili Coast Examples

Most microeconomic textbooks introduce students to the international trade using the Englishman David Ricardo's trade model and the associated theory of comparative advantage. This theory states that the pattern of international trade will be determined mainly by different countries' relative advantage at producing different goods. Countries will export goods that they are particularly suited to producing (for example, when the cost of their production process is compared to the cost of production in their trade partner's country), and that countries will import the goods that they are not very good at producing. While Ricardo used England and Portugal as his examples to illustrate the essence of comparative advantage, one could easily use the Swahili Coast to explain the principle. Historical records indicate that one of the region's key exports was mangrove poles (Sutton 55). This wood was used to support the growth of urban areas on both sides of the Indian Ocean, as it was commonly used to build homes. Why was the Swahili Coast an exporter of mangrove poles? The answer is because it had a comparative advantage in the production of this item! Due to climate, mangrove trees grew abundantly on the Swahili Coast. This commodity therefore provides an example of the importance of comparative advantage in determining the pattern of trade (who exports what), while also illustrating how comparative advantage is often tied to factor endowments (in this case natural resource endowments), a fact pointed out by the Swedish economists Heckscher and Ohlin in the trade model that they developed years after Ricardo's in order to improve it. Both models are commonly taught in microeconomics and international economics courses.

What can be gained from integrating a discussion of the Swahili Coast into a discussion of comparative advantage? First, it serves to remind students that economics and history are deeply connected, despite the separation of the two that came about with the emergence of departments and siloed academic disciplines in academia around the 1800s. Models taught in economics departments are often based on systems of the past but this foundation of knowledge is often unrecognized. Second, incorporating information about the Swahili Coast provides an opportunity to integrate insights from archaeology with economic concepts because it is the findings of archaeobotanicists that provides evidence about plant use in the past (Walshaw and Stoetzel 350). Bringing such insights from archaeology into the economics classroom also allows students to talk about different ways of gathering evidence, giving them a chance to reflect upon the economics disciplines' preference for relying on statistics as evidence. Students are able to think about how artifacts can provide valuable evidence too, and to recognize that there can be contexts in which numerical data may not be available (so limiting one's self to phenomena that can be quantified would haphazardly reduce the scope of what one could study). Third, incorporating the Swahili Coast as one's example to illustrate the principle of comparative advantage presents an opportunity to feature Africa in an economics course in a way that isn't focused on African failures.

The Dhow and Sailing Technology—Enriching the Study of Both International Trade and Macroeconomics

> Wonders are many on earth, and the greatest of these/
> Is man, who rides the ocean and takes his way/
> Through the deeps, through wind-swept valleys of perilous seas/
> That surge and sway.

So wrote Sophocles in *Antigone* (90; lines 279-282). His words capture a spirit that imbues many people, not just the ancient Greeks.

One of the most interesting aspects of Swahili Civilization is the ships that were used to move goods across the Indian Ocean as part of the process of acquiring the items that Swahili society desired. The sailing technology in use at the time was innovative in that it made use of wind patterns in order to power the ships. The Indian Ocean is characterized by monsoons, strong winds that blow in a predictable fashion during certain times of the year. From November to February the Northeast monsoon blows from the west eastward, allowing travel from ports in India or the Persian Gulf to the Swahili

ESSAYS – CONTINUED

Coast; while from April to May the Southwestern monsoon facilitates movement in the opposite direction, away from the Swahili Coast back toward India and other places on the eastern side of the ocean. The boats that the Swahili Coast merchants who sailed the Indian Ocean used invoked the knowledge of these wind patterns. The dhow, as the famed boats were called, was made with a triangular sail, a type of sail particularly suited to harnessing monsoon winds in order to sail between the east African coast and the Asian continent. Accordingly, the dhow's use represents an incredible example of innovative sailing technology.

Weaving in a discussion of the dhow into an economics class creates an opportunity to construct a bridge between physics, archaeology and economics. As with mangrove poles, it is archaeological evidence that helps to establish the existence of the dhow during premodern and early modern times. For example, Neville Chittick's excavation of a site at Kilwa revealed etchings on the walls of a 14th century palace that includes an image of a dhow. Showing this archaeological finding opens up an avenue for a discussion of how it is, exactly, that Swahili Coast merchants were able to engage in trade. Discussion of the dhow lends naturally to a need to understand physics so that students can understand science of sea travel (for example, how pressure systems create wind, celestial navigation, and how to "read" waves), and the way the weather patterns that were specific to the region also created a situation in which the merchants who were traveling from the other side of the ocean ended up having to spend substantial amounts of time on the coast while they waited for the monsoon winds to change direction, which helps explain why Swahili society has a strong Muslim influence and included people with a mixture of African and Arab ancestry. Linking knowledge from the disciplines of archaeology and physics with economics helps give students a fuller understanding of international trade than they would otherwise obtain—an understanding of the topic that could not have been obtained by just studying trade using a single disciplinary lens. As one student wrote in his final paper for the course, economics can tell us what should be traded but not how trade actually happens. Merging the study of physics with the study of economics helped me to understand the "how." A true understanding of trade is incomplete without such blending of different disciplinary insights.

Lastly, with respect to long-distance trade, the dhow and its facilitation of commerce show that human ingenuity is not confined to the west. Ancient people in present-day developing countries can provide examples of how creative humans of the past were that students can learn from today. We learn about man's adventurous spirit from studying the Swahili Coast as we think about how brave people must have been to be willing to venture out onto the ocean. Taking an interdisciplinary approach to teaching international trade by including analysis of the Swahili Coast in class discussions therefore offers information about Africa that can provide a more balanced view of the region than what economics curricula currently present.

Having discussed the potential relevance of the dhow for a discussion of international trade, we next turn to discussion of how it might be used in a macroeconomics course. One key issue that macroeconomists are extremely interested in is technology. When economists use this term, they use it in an expansive way that captures all that is known about ways a society might produce goods and services from the different factors of production that the society has available to it, i.e., the ways it can generate goods and services to be used to meet human wants and needs. By "factors of production," loosely speaking, economists mean four key categories of inputs that can be used to produce output: physical capital that is needed (factories and equipment used to make items, for example), labor, human capital (knowledge and skills possessed by workers), and natural resources. While the amount of each of these inputs that a society has will influence its production capacity, macroeconomists also highlight the importance of *technological knowledge* for determining the total volume of output that can be generated from a society's factors of production. echnological knowledge refers to the way different factors of production are combined and is a reflection of the ingenuity of humans, as we seek to discover new ways to do things. It is sometimes described in textbooks as what society knows about how to produce things in an efficient manner: "society's understanding of the best ways to produce goods and services" in the words of best-selling textbook author Gregory Mankiw (252). Alternatively stated, the technological knowledge or technology that a society employs as it engages in the day-to-day tasks associated with generating goods and services for its members to consume can matter just as much as how many and what inputs the society has. The dhow can be used to provide a concrete example of how technological knowledge matters for a society. Its use of a triangular sail instead of a square sail represents an innovative type of sailing technology. As historian Abdul Sherif remarked, "with the development of appropriate tech-

ESSAYS – CONTINUED

nology and harnessing of the wind system, they [Swahili Coast people] could venture beyond to establish links with other communities across the ocean" (17).

Exploring Adam Smith's Arguments about the Division of Labor

A third interesting connection that can be made between the Swahili Coast and concepts taught in economics courses is a connection to the work of the eighteenth century economist and moral philosopher Adam Smith. One argument that Smith makes in *The Wealth of Nations* is that a nation's level of productivity is tied to the division of labor. The more a country's workers are able to specialize in specific tasks, the greater production is expected to be. This division of labor can unfold either by subdividing different tasks involved in the production of a single good so that different people are responsible for different tasks, as in a factory for example, or by organizing the economy's production so that people specialize in certain occupations so that some become farmers, others toolmakers, and others craftsmen, et cetera, rather than having a single person or family unit attempt to engage in the productions of all the items a household might need (Smith 12-13; bk.1, ch.1).

In discussing the division of labor, Smith argues that it faces natural limits based on the size of the market. He then proceeds to note how access to waterways implicitly expands the scope for commercial activity: "As by means of water carriage a more extensive market is opened to every sort of industry than what land carriage alone can afford it, so it is upon the sea coast….that industry of every kind naturally begins to … improve itself" (Smith 27; bk.1, ch.3). This characterization of the way in which access to the sea can promote the division of labor and enhance national productivity is captivating. And, as seen in our earlier discussion of navigation methods, the Swahili were a maritime society. The long-distance, cross-oceanic trade that they engaged in during ancient and medieval times therefore serves as an excellent example to use to illustrate Smith's points.

While this example does not represent a case in which students would necessarily learn more about the division of labor than they would otherwise by including a discussion of Swahili Civilization as part of the course unit, turning to the Swahili Coast for examples is still valuable due to its ability to open up a way for students to have discussions about Africa that are not focused on deprivation and blight.

Transaction Costs and Microeconomic Theory

Although not always taught or emphasized enough, it is widely known within the economics discipline that markets are not always autopoietic. Adam Smith talked about humans having an innate propensity to "truck, barter and exchange" (21; bk.1, ch.2). However, the idea that people can engage in exchange that is mutually beneficial hinges on the presence of an environment that is conducive to exchange. Exchanges that people might ordinarily desire to make could be precluded if certain barriers to trade cannot be surmounted. The existence of such potential barriers is encapsulated in the term "transaction costs." Contemporary economist Dani Rodrik explains that transaction costs exist whenever there are frictions that prevent exchanges from taking place, such as lack of a common language or lack of a commonly-accepted medium of exchange or lack of trust between the two parties who would like to trade (13-15). For markets to come into existence, one often needs social arrangements that support them by reducing transaction costs, says Rodrik. While Rodrik's primary interest lies in the way that government can support markets by providing a form of third party enforcement of contracts (to alleviate the trust problem), his text also mentions the possibility that the existence of a common belief system can have a similar effect (13-16). The Swahili Coast provides an intriguing example of this option and the way it facilitates trade. By the 13th century, the Islamic religion had wide influence on the eastern coast of Africa and throughout the Indian Ocean region according to scholars such as Maxon, and Horton and Middleton. The historian Norman Rothman argues that the prevalence of the Muslim religion along the coast meant that merchants could reasonably expect that Muslim rules regarding business practices would be adhered to wherever they went (80). Connecting Rothman's argument to Rodrik's ideas, one can conclude that the widespread reach of Islam undoubtedly made it easier to for people to negotiate transactions and thereby supported the growth of markets and trade in the region. From an economist's standpoint, this means the Swahili Coast provides a prime example of the principle of transaction costs and the way that a common belief system (religion) can overcome them by laying a foundation for trust between market participants

and reducing uncertainty about what to expect. This example shows how a discussion of religion and history can enrich discussions of a basic economic concept. In addition to Rothman's text, my students read chapters from historians Gosch and Stearn's book *Premodern Travel in World History* to learn about the Islamic caliphates of the 7th and 10th centuries. They read about how these rulers built roads in order to ensure that mail could travel to the capital, and how these roads—along with other protections put in place to help make sure people throughout the Muslim world could make their annual pilgrimages to Mecca--ended up creating travel routes that merchants could use. Clearly, the integration of information from a variety of different disciplines allows students to come away with a rich, complex, and more sophisticated understanding of transaction costs than they would obtain otherwise.

Connections to Other Concepts in Introductory Economics Courses

Yet another topic that can be addressed in economics courses by using the Swahili Coast as part of the analysis is the role of money in an economy. Findings from archaeological excavations suggest that the evolution of money and choices about the forms it took along the Swahili Coast are consistent with basic economic theory. The early Swahili used commodity money just as many societies of the past did, with items such as glass beads, shells, metal wire and sometimes cloth being used to conduct transactions. Around the 8th century, the first mint came into existence in the region and coins minted from precious metals such as copper and later silver and gold began to circulate as money after that point, although sometimes alongside the non-coin mediums of exchange (Pallaver 447). As is true even for currency today—British currency for example—Swahili Coast coins typically bore reference to a ruler somewhere on them. This would have been a sultan. Hence, coins of the Swahili Coast played the economic function that economists would expect them to perform, while also having the cultural-symbolic role that money often has in modern societies.

The above discussion of the findings of archaeologists shows that there is a place for both a discussion of the Swahili Coast and of archaeology in a money and banking course, or a unit on money in a macroeconomics course.

One last topic worth mentioning is the iron production and metalworking that occurred along the Swahili Coast. As the archaeological work of the University of Dar es Salaam's Felix Chami and Bertram Mapunda reveals, the Swahili were actively engaged in iron-working. Most students today wouldn't have any idea how to make iron; instead, cans and other steel products are something we take for granted today. Again, the point that can be made to students here is that ancient westerners were not the only ingenious people populating the earth centuries ago. Human ingenuity knows no bounds and no geographic boundaries. Africans were doing important and complex tasks like iron-working as far back as at least 1 AD (Chami 87). This is long before the "United States" of America even existed. American students ought to have an opportunity to learn this.

Having demonstrated that there are interesting things about the Swahili Coast that can be taught in economics courses, the next three sections connect the discussion of the value of studying the Swahili Coast and my enthusiasm for it to ideas about education from other scholars and to some wider discussions in the global intellectual community, including conversations about the benefits of interdisciplinarity in the classroom.

Scholarly Discourse on the Benefits of Interdisciplinarity

Many scholars have noted that academic disciplines have a long tradition of producing knowledge in isolation; and that US universities are configured in a way that typically has students taking courses in different departments without necessarily making connections across their courses and the academic disciplines they encounter when taking these courses. Weingart, Calhoun and Rhoten, and Doyle and Bozzone all offer such arguments. One big benefit from incorporating discussion of the Swahili Coast into an economics course is that it allows one to use history and archaeology to help students learn that economic principles of today apply in the past as well; and, in the process, they are learning something that economics students would not ordinarily learn. Specifically, students come to know that history and archaeology also provide ways of discovering information about economic activity, and that the tools of these disciplines, while often different from the empirical methodology that is emphasized in economics, also provide meaningful ways to gather empirical evidence about economic phenomenon. Additionally, the students uncover something about Africa that one would not

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ordinarily learn without an interdisciplinary approach because they are given an opportunity to discuss African societies in new contexts, rather than only seeing the continent featured in discussions of development problems.

Should undergraduates always be learning about the economy in isolation? Probably not. Doyle and Bozzone have noted "…the most enjoyable and reinforcing aspects of learning are seeing and experiencing the connections between different subject areas" (12). Integrating discussion of the Swahili Coast into an economics course can break the practice of transmitting knowledge to students through silos. Moreover, this interdisciplinary approach may contribute to students' development in unexpected ways. Kidron and Kali contend that "the ability to think and integrate knowledge across disciplines and to understand the relations between fields of knowledge" is one of the most critical skills that students can cultivate in courses with an interdisciplinary emphasis (qtd. in Henley and Cook 3).

Global Understanding

As colleges prepare students to enter into a world where people of different countries are connected in unprecedented ways, being able to interact with persons from other cultures in a respectful fashion seems increasingly important. Because understanding can help foster respect, there are likely to be benefits from teaching US students about Africa's accomplishments. It may be particularly beneficial to students who are majoring in economics, as these are individuals who are likely to find themselves in jobs that are connected to global commerce. It may also benefit non-majors simply by providing exposure to another culture in a way that isn't "ghettoized," if I can borrow a phrase from Hogan (189). Most US colleges and universities require students to take one or two non-western courses in order to fulfill the school's graduation requirements, and this is an important way to give students exposure to other cultures and to enhance their understanding of the world. I would argue that students might also benefit from seeing that you don't necessarily have to take a special course to learn about or talk about the non-west, however; conversations about Africa can be part of everyday conversations in their so-called "regular" courses too.

Traditional Critiques of Economics and How Mine is Different

I am not the first to offer a critique of the economics discipline. Many scholars, both within the discipline and outside it, have raised concerns about this field of study, particularly the profession as practiced in the United States, and particularly in terms of how it deals with questions of race. One of the biggest criticisms levied in this regard is that mainstream economics is to attached to the idea that racial discrimination cannot persist in a market context because competition should naturally eliminate it, an argument first proffered by Gary Becker in the late 1950s. As Darity et al. have argued in their critique of Becker's perspective, the empirical record seems at odds with the Beckerian view.

My interest is clearly different from the above critiques of the economics discipline. It lies in pointing out that the discipline could give US students a better understanding of economic history and shine a spotlight on the prominent place that African cities along the Swahili Coast played in long-distance trade in premodern and early modern times in the process. Regrettably, in the United States, today's economics majors and other students in economics courses often come away with a sense that there's nothing before Adam Smith; and American students falsely conclude that if there is anything to be learned from ancient times, it is only going to come from Ancient Greece or Ancient Rome.

Conclusion

There are clearly many things that can be learned by studying the Swahili Coast. The fact that some of the issues that economics grapples with are timeless presents an opportunity to incorporate discussion of the region into economics courses and to show students that Africa has something to say about many of the issues and principles that concern economists. Making space to have conversations that stretch back in time, and conversations that reach across space or place and across disciplines by including both the empirical research and texts of many disciplines at once can go a long way toward engaging and enlightening the next generation of US students. Where can one put the likes of Sophocles in conversation with basic economic principles and the scholarship of Muslim travelers that has been unearthed by historians? Where can we use material objects or wall and cave drawings uncovered by archaeologists to enhance our

understanding of money, modes of travel and trade? How often does one have the opportunity to demonstrate the value of knowing about physics and navigation methods when studying economics? Integrating discussion of the Swahili Coast into economics courses is a promising way to show students how to make connections across the wide variety of courses that they may be taking in any given semester, and it also offers a chance to tackle misperceptions and misconceptions of Africa. It therefore seems an opportune moment to re-imagine the way we teach economics in the United States and to rethink Africa's place in the discipline.

Many Indian Ocean scholars view the ocean as a site where important exchanges have occurred. How appropriate, then, to use the Swahili Coast, which is situated on that ocean, as inspiration for traveling across disciplines in order to gain greater understanding. After all, the true value of a liberal arts education lies not just in being exposed to different academic disciplines, but also in figuring out how to put them together—to understand that the blending of knowledge from different disciplines is what truly makes one erudite.

Works Cited

Boston, Thomas D. "NEA Presidential Address: Sixteenth Century European Expansion and the Economic Decline of Africa." *Review of Black Political Economy*, vol. 20, no. 4, 1992, pp. 5-38.

Calhoun, Craig, and Diana Rhoten. "Integrating the Social Sciences: Theoretical Knowledge, Methodological Tools, and Practical Applications." *Oxford Handbook of Interdisciplinarity*, edited by Robert Frodeman et al., 1st ed., Oxford UP, 2010, pp.103-18.

Chami, Felix. "Early Ironworking Communities on the East African Coast." *East African Archaeology: Foragers, Potters, Smiths and Traders*, edited by Chapurukha Kusimba and Sibel Kusimba, U of Pennsylvania P, 2003, pp. 87-97.

Chittick, Neville. *Kilwa: An Islamic Trading City on the East African Coast*. British Institute of East Africa, 1974. 2 vols.

Darity, William, et al. "A Tour de Force in Understanding Intergroup Inequality: An Introduction to Stratification Economics." *Review of Black Political Economy*, vol. 42, no. 1, 2015, pp. 1-6.

Doyle, Mary Beth, and Donna Bozzone. "Multidisciplinary Teaching: Providing Undergraduates with the Skills to Integrate Knowledge and Tackle 'Big Questions.'" *IMPACT*, vol. 7, no. 1, Winter 2018, pp. 12-7, open.bu.edu/handle/2144/29602. Accessed 15 January 2022.

Elkiss, Terry. "Kilwa Kisiwani: The Rise of an East African City-State." *African Studies Review*, vol. 16, no. 1, 1973, pp. 119-30.

Gosch, Stephen, and Peter Stearns. *Premodern Travel in World History*. Routledge, 2008.

Henley, Elizabeth, and Susan Cook. "Lessons from Designing a Co-taught Interdisciplinary Course." *IMPACT,* vol. 7, no. 1, Winter 2018, pp. 22-7, open.bu.edu/handle/2144/29602. Accessed 15 January 2022.

Hershey, Megan, and Michael Artime. "Narratives of Africa in a Digital World." *PS: Political Science and Politics*, vol. 47, no. 3, July 2014, pp. 636-41.

Hogan, Patrick Colm. "Mo' Better Canons: What's Wrong and What's Right about Mandatory Diversity." *College English*, vol. 54, no. 2, 1992, pp. 182-92.

Horton, Mark, and John Middleton. *The Swahili: The Social Landscape of a Mercantile Society*. Blackwell Publishers, 2000.

Ibn Battuta. "A visit to Zelia, Mogadishu, Mombasa and Kilwa Kisiwani in 1331." *East African Coast: Select Documents*, edited by G.S.P. Freeman-Grenville, 1966, Oxford UP, pp. 27-32.

Kim, Hannah. "Images of Africa." *Journal of International Social Studies*, vol. 7, no. 1, 2017, pp. 34-54.

Klein, Julie. "Typologies of Interdisciplinarity: The Boundary Work of Definition." *Oxford Handbook of Interdisciplinarity*, edited by Robert Frodeman et al., 2nd ed., Oxford UP, 2017, pp. 21-34.

Lane, Paul, and Colin Breen. "The Eastern Africa Coastal Landscape." *The Swahili World*, edited by Stephanie Wynne-Jones and Audra LaViolette, Routledge, 2018, pp. 19-35.

Mankiw, Gregory. *Principles of Macroeconomics*. 5th ed., Cengage Learning, 2008.

Mapunda, Bertram. "Metals and Metalworking Along the Swahili Coast." *The Swahili World*, edited by Stephanie Wynne-Jones and Audra LaViolette, Routledge, 2018, pp. 306-18.

Maxon, Robert. *East Africa: An Introductory History*. 3rd ed., West Virginia UP, 2009.

ESSAYS – CONTINUED

McCarthy, Michael. *Dark Continent: Africa as Seen by Americans*. Greenwood Press, 1983.

Miller, Matthew. *Integrative Concepts and Interdisciplinary Work*. Harvard Project Zero, 2005, www.interdisciplinarystudiespz.org. Accessed 10 January 2022.

Nyerere, Julius. "The Declaration of Dar es Salaam." *Adult Learning: A Design for Action*, edited by Budd Hall and Roby Kidd, Pergamon Press, 1978, pp. 27-36.

Osunde, Egerton, and Josiah Tlou. "Persisting and Common Stereotypes in US Students' Knowledge of Africa." *Social Studies*, vol. 87, no. 3, 1996, pp. 119-24.

Pallaver, Karin. "Currencies of the Swahili World." *The Swahili World*, edited by Stephanie Wynne-Jones and Audra LaViolette, Routledge, pp. 447-57.

Rodrik, Dani. *The Globalization Paradox.* W.W. Norton, 2012.

Rothman, Norman. "Indian Ocean Trading Links: The Swahili Experience." *Comparative Civilizations Review*, vol. 46, no. 46, Spring 2002, pp. 79-90, scholarsarchive.byu.edu/ccr/vol46/iss46/6. Accessed 14 October 2020.

Sherif, Abdul. *Dhow Cultures of the Indian Ocean: Cosmopolitanism, Commerce and Islam*. Hurst and Company, 2010.

Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*, edited by Kathryn Sutherland, Oxford UP, 1993.

Sophocles. *The Theban Plays: King Oedipus, Oedipus at Colonus, Antigone*. Translated by E.F. Watling, Penguin, 1947.

Sutton, John. "The East African Coast: Researching its History and Archaeology." *The Swahili World*, edited by Stephanie Wynne-Jones and Audra LaViolette, Routledge, 2018, pp. 53-66.

Vassanji, M.G. *And Home Was Kariakoo: A Memoir of East Africa*. Anchor Canada, 2014.

Wa'Njogu, John. "Representation of Africa in the Western Media." *Media and Identity in Africa*, edited by Kimani Njungu and John Middleton, Edinburgh UP, 2009, pp. 76-83.

Walshaw, Sarah, and Jack Stoetzel. "Plant Use and the Creation of Anthropogenic Landscapes." *The Swahili World*, edited by Stephanie Wynne-Jones and Audra LaViolette, Routledge, 2018, pp. 350-62.

Weingart, Peter. "A Short History of Knowledge Formations." *Oxford Handbook of Interdisciplinarity*, edited by Robert Frodeman et al., Oxford UP, 2010, pp. 3-14.

Wolff, Ekkeher. "Perception: Between Ignorance, Half-knowledge and Distortion." *Language and Development in Africa: Perceptions, Ideologies and Challenges*, Cambridge UP, 2016, pp. 77-104.

Wynne-Jones, Stephanie, and Adria LaViolette. "The Swahili World." *The Swahili World*, edited by Stephanie Wynne-Jones and Audra LaViolette, Routledge, 2018, pp. 1-14.

Zhao, Bing, and Dashu Qin. "Links with China." *The Swahili World*, edited by Stephanie Wynne-Jones and Audra LaViolette, Routledge, 2018, pp. 430-44.

The Power of Storytelling to Facilitate Human Connection and Learning

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Introduction

"*What purpose does this class have in my life? How will this help me get a job? Why do we have to take this class?*" These questions arise on the first day of many semesters from students in first-year general education classes. These are serious questions that should underlie any course plan. As educators, we know the benefits to student learning of these required classes, but we also know that student learning does not happen without their buy-in. Not only do our classes need to be relevant, but they should also be valued by students and offer them some practical connection to what they already know. We developed a learning community comprised of three first-year general education classes to help students connect their classes to each other and see their learning as relevant in their lives.

Learning communities, or cohorts of first-semester students enrolled in interdisciplinary classes that connect through a common theme, offer students unique opportunities to make connections through conversation, writing, and academic study. Our learning community was interdisciplinary in nature in that it included courses across three different disciplines. In these cases, a common theme is often helpful because it demonstrates how different fields can take a different lens for various topics, providing a multi-faceted approach to student learning that explains how they are connected. With this in mind, three professors from Southern New Hampshire University (SNHU) formed an experience that we called, "Exploring Human Behavior and Motivation through Stories."

The concept for our learning community grew from an initial discussion of discipline commonalities between Justina Oliveira, Associate Professor of Psychology, and Jeanne Hughes, Associate Professor of English. Through a comparison of course outcomes in *Introduction to Psychology* and *College Composition I*, we saw an opportunity to focus on human motivation through storytelling as a connecting theme that would help students access the learning objectives and think critically about others through their stories. We partnered with Crystal Bickford, Associate Professor of English, who taught the *First-Year Seminar*, a course that offers a critical lens on diversity, equity, and inclusion through the sharing of stories. Both *College Composition I* and *First-Year Seminar* are General Education requirements for all students, and it is the necessity of those courses that students often challenge. *Introduction to Psychology*, a general education elective, offered an opportunity to delve deeply into people's stories and think about their motivation.

Storytelling is a way that people can relate to each other, and stories have long been used as a way to get people thinking about viewpoints beyond their own as well as to express our experiences to others. In *Minds Made for Stories*, Newkirk (2014) discussed how humans are naturally drawn to storytelling, which makes it a logical medium for making connections. The way we tell our stories is as important as the stories themselves (Newkirk, 2014), so as we planned this learning community, we thought specifically about different modalities of storytelling. The learning community included a variety of readings that represented alternative voices. Building on those stories, out-of-classroom experiences were emphasized, including service learning, a field trip to hear immigrants tell their stories, and a visit from a Vietnam veteran. Therefore, storytelling went beyond solely reading and writing within the three courses. Our goal for this learning community was for students to value their learning through their own journeys of moving beyond initial impressions and taking the time to understand other people more deeply by listening to their stories.

Effectiveness of Stories

Storytelling is certainly pervasive across history and culture, and many educators of a diversity of age groups utilize this technique to great effect. Historically, the use of storytelling was to pass along knowledge and values. For this reason, some current organizations utilize storytelling by encouraging long-time employees who are leaving the organization to pass on the important knowledge they acquired to newer employees (Wijetunge, 2012). The prevalence of productions around storytelling such as *Suitcase Stories* (https://iine.org/suitcase-stories), which empowers immigrants to share their stories on stage, and the existence of associations of storytellers such as the National Association of Black Storytellers,

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Inc., are both evidence that though the avenues of storytelling may change, people are resolute in its power. Storytelling is often embedded within courses as well; at times, it is used in a purposeful and consistent manner, but often in piecemeal fashion. According to Woodhouse (2011), the purpose for "storytelling is to 'humanize' the process of learning by appealing to the students' imagination" (p. 212). The objective for our learning community was to demonstrate the power of storytelling in university-level courses and promote the goal of including more storytelling in our classrooms.

Student engagement as an outcome is the focus of much pedagogical research at the university level. Kahn (1990) explained work engagement to be driven by three factors: meaningfulness, safety, and availability of resources. Storytelling aims at creating all three of these factors within the classroom environment such that is activates meaning in course content for students, promotes a sense of community which aligns to a safe environment for sharing and taking risks, and allows students to want to invest their available resources of cognitive effort and attention towards the content at hand. Tews, Jackson, Ramsay, and Michel (2014) conceptualized "fun" in the classroom by the categories of fun activities and fun delivery. The latter is instructor-focused and includes storytelling, creative examples, and humor. Their study with an undergraduate sample found that fun delivery significantly positively impacted student engagement. In a change management course, Jabri and Pounder (2001) found that narratives or storytelling on the topic of change and management development provided students with a deep understanding of the real impacts of change on employees because such story-based learning creates multi-faceted and more critical analyses of these concepts and theories through the awareness of both the self and others' perspectives.

Crafting a *strategic* use of stories in a course, however, can be as tricky as crafting the story itself. According to Brittenham, McLaughlin, and Mick (2017), "students can find themselves performing a high-wire act of engagement and resistance as they explore and invent the meanings of stories while responding to the conventions and expectations of an assignment" (p. 112). In this manner, management professors may want to partner with English and literature professors to understand their careful development of building stories into courses. For instance, Newkirk (2014) contended that narrative is a preferred way of learning because students want explanations and patterns. Students make sense of the world and those around them through stories (Christiansen, 2016; Newkirk, 2014). It is through the sharing of personal stories that many learning benefits can be derived. Storytelling requires active listening. The more actively a student listens, the deeper the bond created (Gargiulo, 2005). Students can use stories as a way not only to connect with information, but also to recall it later. When a person tells a story, the audience can hear the personal interest and energy in the topic (Newkirk, 2012). Stories elicit student attention, giving them something to remember, reconsider, and reconnect with long after the story is shared.

Not only do stories help students learn, but they also help students connect with others. Gargiulo (2005) stated, "The quickest path between yourself and another person is a story" (p. 21). Stories allow students to share experiences and consider other perspectives. Connections can be made through associations (Gargiulo, 2005). Understanding can be cultivated even when there is disagreement. "Listening to stories encourages us to reflect on our similarities, appreciate other perspectives, and negotiate our differences" (Gargiulo, 2005, p. 26). Incorporating this preferred way of learning facilitates access to concepts, deep learning of ideas, and connecting with and understanding of others. This seemed to us the ideal foundation for our interdisciplinary learning community. We anticipated being able to assess effectiveness of our courses through observation, but we also chose to collect both quantitative and qualitative research during both semesters of the learning community to see what else we might discover. We measured our students' cross-cultural competence levels at the beginning of the semester and at the end of the semester, and we also collected students' written feedback to determine if there were significant changes in this important skill.

Our Learning Community

Our learning community consisted of three first-year, first-semester courses: *College Composition I*, *Introduction to Psychology*, and *First-Year Seminar*. When planning this community based on storytelling, we focused not only on our individual classes, but also on the related experiences we could provide for students during the semester. Our plan included explicit connection between materials and learning outcomes in our courses, service-learning opportunities, guest speak-

ers, and a field trip. The original idea was to run this learning community for one semester, but after seeing positive trends in the first semester, we continued it the following year and have plans to keep going.

Interdisciplinary Focus

To begin our learning community, we met to discuss each of our classes. Our university has a university-wide fixed curriculum for *First-Year Seminar*, so the three of us reviewed the readings and the planned lessons for the semester. Readings focused on white privilege, color blindness, sexism, transsexuality, and class structure. We discussed how the readings connected to our course theme of discovering human motivation through storytelling, and we considered how additional readings could affect student experience. We each read the books that would be taught in our learning community, so we would have insight to discuss points made by students in any of the classes. To get students thinking about human motivation with an interdisciplinary focus in relation to storytelling, we chose books that allowed us to make connections across and between the disciplines of psychology and English.

In *Introduction to Psychology*, students read Viktor Frankl's book *Man's Search for Meaning*, in which he discussed both his horrific experiences as a prisoner in multiple WWII concentration camps and explained the genesis of his beautifully articulated creation of a new therapy style based on existentialism and finding meaning in one's life. Students spent two different class days engaging in a book discussion about their reactions and take-aways from this book, which resulted in many powerful conversations between students. In *College Composition I*, students read *The Other Wes Moore* by Wes Moore and *The 57 Bus* by Dashka Slater. The Moore book prompted discussion about opportunities, lack of opportunities, and life choices. By following the stories of both men with the same name, students could see the lasting effects of decisions and ponder where different choices could have been made. The Slater book offered insight into gender and sexual identities, and the story also inspired questions about the juvenile-justice system. In this book, a young African American teen chooses to follow his friends and light another teen's skirt on fire because the teen in the skirt looked male, and the other teens reacted poorly to viewing someone who confused them. By following this story, the students were able to learn about not only the resilience and forgiveness exhibited by the victim of the fire, but also the disparate treatment of young, lower socio-economic level teens in the justice system. All of these non-fiction books gave students time to reflect on others' lives and why they make the choices they do.

Community building was an essential part of this learning community. We had to build community inside each class and across our learning community. In *College Composition I*, students began the semester by writing and sharing their own stories. This was an important place to start because it gave us a chance to work on community building and respecting others' perspectives. In *First-Year Seminar*, students were asked to write personal journals, often answering prompts that connected their lives to the readings and videos discussed in class. It gave students the chance to think through ideas before sharing thoughts in class. While in *Introduction to Psychology*, students had growing numbers of opportunities to share pieces of their stories. The early storytelling components were low-stakes such as goal-setting activities (both short and long-term) and sharing what they were comfortable discussing regarding their own learning tendencies and views on various intelligence theories.

These community-building activities in each class blossomed into community building for the learning community through service-learning. Classroom learning provided a foundation for thinking, discussing, and reflecting about others' stories. Alongside that, students participated in service-learning activities and took a field trip to listen to immigrants telling their stories, towards the goal of perspective taking and to build cross-cultural awareness and competence. Service-learning opportunities must be coordinated with class objectives (Bringle & Hatcher, 1999), so the choices we made were deliberate based on the goal of our learning community. These activities gave students different ways to consider the stories of diverse others and again, were included in order to allow for growth in cross-cultural competence. Our first service-learning activity was done as a group. All of the students in the learning community and the three teachers met to work together making blankets for children living in poverty. It began with a discussion of what poverty is, so students could learn what poverty percentages actually represent. The poverty conversation was brought close to home when students learned the percentages of poverty in the city of our campus; the amount of poverty was surprising to many. The

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blanket-making activity gave some students the opportunity to be the experts as they showed other students and their teachers how to make the blankets. That activity filled with collaboration and lots of laughter helped to forge a community working together to learn.

Service-learning opened up this community to what was beyond our classrooms. Students were not only learning about the experiences of others, they also learned they could work to affect those experiences. Some students, inspired by the poverty discussion, went on to assist the local food bank in a food drive. There were several other service opportunities students could choose during the semester including partnering with the local police to provide a safe trick-or-treat event for local children, working with the Special Olympics Young Athletes program (https://www.sonh.org/about-sonh/), creating birthday boxes for children in foster care, and celebrating birthdays in local nursing homes. Each opportunity allowed students to interact with others different than they are and learn more about their stories while connecting those experiences with the content they were learning in the learning community courses.

The collaboration between classes continued with a field trip to see *Suitcase Stories*, a presentation of stories written and told by immigrants. Before leaving on the field trip, students were introduced to *Suitcase Stories* in *Introduction to Psychology*. Planning for the field trip crossed all three classes as we discussed it ahead of time and got all field-trip permission slips completed in time for our adventure. *Suitcase Stories* includes approximately five people telling their powerful stories. We heard about people fighting to go to school, rushing through war-stricken streets to find safety, spousal abuse, harrowing journeys to escape countries under siege, and long hours of work at low-paying jobs to get ahead. Speakers were open, honest, and genuine as they shared their stories. The students were left to think about the experiences of the speakers and how this impacted them. When students returned to class, they wrote in *College Composition I* about their reflections, which were shared with all teachers. One student explained his reactions to this experience:

> *This learning community helped my ability to listen and learn about other people's stories. I really enjoyed the trip to the Suitcase Stories, because it gave me a different perspective onto life. These people had such awful struggles, but they were able to move past them and talk about them in front of live audiences.*

Additionally, we hosted a guest speaker in the *College Composition I* class with all learning community teachers invited to be part of the class. A Vietnam veteran came to tell his stories to the students. To keep our focus on sharing stories, we began with all students writing a "Where I'm From" poem where they could share part of their personal stories before our guest shared his very emotional ones. After they shared their stories with our visitor, he shared his own. Students reacted positively to his visit. One student described it in the following way:

> *I would like to say thank you for coming in and being open with us about your experiences. There are stories people tell that give one an idea of war, but really it does not go beyond that. Your story was not only beautifully written and powerful, but brought us as listeners to your side in those days to watch on as bystanders experiencing both the beauty of the Vietnamese countryside and the devastation of gunfire, landmines, and the tragedies of war.*

This one event showed the power of sharing stories and allowed students to connect deeply with a stranger after that person was willing to be transparent about his own traumatic experiences.

Students could see the connection between the classes and began discussing all three classes together. They made comparisons among the readings, which were meant to represent different cultures and beliefs, some of which directly related to the students in the class. One student mentioned that the Slater book was the first book that contained a character like she is, which is a powerful statement that shows the importance of diverse characters in literature read in classrooms. Students commented on the power of choices after reading the Wes Moore book, which also caused them to make connections to the hardships described in the Frankl book. When they read about a teen making a bad choice to harm another in *The 57 Bus*, they could relate it to deliberate actions, bystander behavior, and unconscious bias they learned about in *First-Year Seminar*. What they were learning in *Introduction to Psychology*—topics ranging from motiva-

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tion, mental health struggles, learning and intelligence theories, all the way to developmental psychology in children and the power of the situation in regards to social psychology—allowed students an initial lens of hearing others' stories in a psychological context.

Having the opportunity to participate in multiple classes working toward the same goal allowed students to flourish. In *College Composition I*, students went from writing their own stories to writing the stories of others. They could interview someone in the community or research a person of interest, but their focus had to be on telling that person's story. The switch from their perspective to someone else's perspective complemented our focus on understanding other people's stories and lived experiences. An important part of the composition class that extended across the learning community was the frequent opportunity for reflection. Students were asked throughout the semester to take time to think about what was happening in class; how they were affected by the stories; their thoughts about visitors, service learning, and our field trip; and if they felt knowing a person's story changed the way they saw that person. Making reflection a priority gave students practice in making connections and allowed them to think about all the learning community activities and the idea of storytelling.

A bit after mid-term, *First-Year Seminar* journals were returned in preparation towards constructing digital stories, where students were asked to review their thoughts and create personal videos that combined still photography, video, music, and personal narration that explained who they were. These digital stories, shared at the conclusion of the term, were powerful testaments to how they saw themselves within a broader context. Some of them focused on only one aspect of their lives (e.g., their sexuality, socio-economic status, citizenship, etc.) while others told their life stories (e.g., growing up in another country, the journey to becoming a first-generation college student, surviving abuse, etc.). It was challenging for students to have their personal stories so public; however, most trusted in the compassion of their instructor and classmates. These compelling digital stories represent the power of the learning community. Had the stories been required in isolation of this single class, they likely would not have been as honest and vulnerable. Having support from multiple faculty members, being asked to grapple with personal topics across all three courses, and learning to trust their peers emphasized the level they were willing to share.

During the third month of the semester, students crafted a uniquely formatted research paper in *Introduction to Psychology* where they were asked to combine a brief literature review they conducted on existing research about a psychological topic they wanted to learn more about and their own personal experiences (or their family's) related to that topic. Only the professor read these papers. By the end of the semester, most students chose to select a psychological disorder that had personally impacted them in that they had been diagnosed with it or a loved one had. This was impressive to see, and it occurred during both semesters we taught this learning community. Their comfort level in choosing to share this verbally in front of a class of more than twenty peers is a testament to the community we built over the semester, based not only on the power and value of storytelling but the ability to listen and respect one another's differences while seeming to increase their empathy and understanding of others. Participation in a learning community and consistently working with the same students in multiple classes each week helped students build trust in each other, which led to very open discussions and questions from their peers after each presentation. After learning so many stories from different perspectives in all three classes, students were supportive and interested in others' stories and seemed to value each individual's experiences, which was our goal for this learning community.

Students relied on the comfort of the community to build their own strengths in each of the classes. They came to class, had lively discussions, and freely discussed ideas from all three of the classes in any single class. This was positive evidence of the effectiveness of this interdisciplinary learning community, but we did not stop with our observations. We also looked at the data we collected to see what we could find. We began first with the quantitative data we collected, and then we looked at the qualitative data.

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Quantitative Data

Sample and Procedure

We collected data on cross-cultural competence scores both in the beginning and the end of the semester for both sections of the learning community (fall of 2018 and 2019). Participation was voluntary. Students selected a randomly generated ID number to connect their Time 1 (beginning of the semester) and Time 2 (end of the semester) data to ensure anonymity while being able to measure their change in scores across the semester. This study had IRB approval from our university, and the survey was conducted online through Qualtrics. A total of 47 students completed the Time 1 survey and 13 students also completed the survey at Time 2. This is a small number, but it is certainly a starting point towards understanding how an interdisciplinary learning community based on storytelling themes may impact students' experiences in the courses.

Measures

Cross-cultural competence: All participants completed a cross-cultural competence measure consisting of eight items on a 7-point Likert-type scale anchored with 1 = strongly disagree to 7 = strongly agree, which includes questions about students' cultural awareness, sensitivity, and effectiveness in building relationships with those from different cultures. These items have been adapted from Sucher and Cheung's (2015) scale.

Demographic items: Demographic questions about the participants' prior volunteering experience (e.g., have they done service-learning before) and biological sex were included in the study to determine if these predicted cross-cultural competence levels (though they did not). No other demographic questions were included to protect the anonymity of the participants. This was important because they were students within our courses, and we did not want any risk of identification.

Results

Remember, it was our intention to create an experience that students would find relevant. We were also interested to discover the effect of so many discussions of human motivation and what was learned from stories. We learned through student reflections that this community provided skills development related to cross-cultural competence as indicated by our quantitative findings explained below. Furthermore, this storytelling-themed learning community seemed to be connected to students' perceptions that they valued their learning experiences in these courses and that they offered them an opportunity to reflect on what they learned through others' stories, as demonstrated by our qualitative data (discussed later).

Of the initial 47 students who responded to the Time 1 survey, about 28% answered that they had done service learning as part of another course before, including any in high school, while 72% said they had not. Thirty percent of these students self-identified as male and 70% as female. Results of a paired samples *t*-test indicated students had significantly higher levels of cross-cultural competence at the end of the semester ($M = 6.03$, $SD = .71$) compared to the beginning ($M = 5.48$, $SD = .65$) overall, as expected, $t(13) = -2.83$, $p < .05$, 95% CI [-.97, -.13], $d = .81$. Cross-cultural competence was measured on a 7-point Likert scale with higher numbers indicating more competence. Though this is a very small sample size, the effect is quite large ($d = .81$), suggesting students did gain cross-cultural competence throughout the semester. Of course, we do not know for sure if this is due to our efforts in the learning community or due to other experiences these students had in their first semester of college. However, the goal is for development in cross-cultural competence to lead to higher levels of empathy and understanding within students, and eventually, to increase their civic engagement within their communities in the future.

Qualitative Data

Through the frequent reflections written by students, we were able to collect information and see some patterns in their responses. Students wrote about the relevance of the courses to their learning and lives. They reveal empathy and understanding of others after learning about their diverse stories and experiences. They also discussed how the interdisciplinary

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learning community offered them a comfortable learning environment that helped them transition into undergraduate studies. The representative quotes below from the individual reflections written by members of the learning community reveal their ideas about each of these concepts:

Relevance to students

"I believe learning through storytelling helped my reading and writing skills. Learning things about stories in this course helped me to relate stories to real life. Knowing how to analyze a story can help with reading and writing skills. Learning how to do that in this class and my other two classes I believe it helped me to better understand a lot of things about society and myself."

"Through the majority of these stories I was able to hear different voices, and different writing styles depending on the author. The learning community was able to create a similar theme throughout the classes and this made learning much more interesting. The ideas that were shared in kept (sic) in another class could then be used to express different ideas or arguments in another class."

"The community being about storytelling was exactly what I needed for my career as an author. Through Psychology, I learned how my characters may act or react and why they do so. I also learned about different disorders and characteristics a person may have and the background the character must have in order to make sense of who they are now."

Empathy, Understanding, Action

"In the learning community it definitely affected my thinking the most I would say, as I would always think before acting in a situation with my community. I did not want to make any trouble intentionally or unintentionally. This helped me be more aware of certain situations and made me think ahead, and I believe this to have helped me for the future, and it was an overall good experience to have."

"The service learning projects…helped me to understand there are many stories that end up or start differently, maybe worse, than others. This helped me want to give back to the community."

"The learning community also gave me more insight to the outside world by bringing in real examples of everyday struggles. It was really neat to hear other people's stories because no one has the same story. I learned a lot about other people and what they go through a day-to-day basis."

"The biggest effect this had on me was its ability to affect my thinking. Hearing stories from different people and getting perspectives outside of my own allowed for my [sic] to feel and understand the reasons of others."

"My favorable memory was attending Suitcase Stories and especially listening to the story of a woman immigrating to the United States from her homeland and working hard in order to be in top position at her workplace as it reminded me a lot of my mother. The learning community has affected the way I read and write by discovering ways to speak about other's life perspectives. The learning community has changed my way of thinking by realizing that many successful individuals wouldnt [sic] be where they are today if it werent [sic] for the struggles they had gone through and the dedication it took to overcome it in order to succeed in life."

Comfort with interdisciplinary, collaborative learning environment

"*I feel more comfortable in classes with my learning community than in a class where I barely know anyone. This has affected my participation. As I am more comfortable in my learning community classes, I feel more comfortable participating. I have been able to reach out to others in my learning community with any questions I have for an assignment."*

"When participating in the learning community and learning others' stories, I genuinely feel as though it was much easier to participate in this community. This is because we all knew each other, and it was much easier to have conversation where we could all contribute without feeling judged or uncomfortable. Usually, we share our work with the class so I

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feel that I can read, write, and say how I feel because of how comfortable we are. I believe a majority of us learn better because of the comfort and friends we have made as well and that it makes us more willing to learn and listen. Versus, in other classes I do not feel this at all. It is more difficult to have conversation and makes participating much more difficult because I feel more judged and on edge with students I do not know as well. The learning community is a good idea because it gives students the chance to make better friends [,] which will have a positive impact on the class as a whole."

We used stories as the connection to bring three different courses and forty-seven students over two years together with an interdisciplinary focus to encourage students to think differently about how they see their classes, learning, others, and themselves.

Conclusion

Interdisciplinary learning communities are high-impact practices that help to connect students to their school community. Our goal when creating this learning community was to create courses students valued for their own learning and lives, to give students a sense of belonging on campus, and most importantly, to move beyond the school community to help students learn about others by listening to their stories. Going beyond the surface and really understanding the multi-faceted nature of people as well as how they develop and act changed the way the students looked at others and viewed social issues. Participation in learning communities has a positive effect on cross-cultural competence (Soria & Johnson, 2017), and our students illustrated this in multiple ways. They connected with storytellers both in and out of the classroom, viewed stories they read with a new lens of wanting to learn about others' experiences, and acted on their interdisciplinary learning about others by participating in service projects in the community.

At the end of this learning community, students discussed their connection to our university community as well as to environments to which they were exposed through the readings, activities, field trips, and service learning. Stories played an integral role in their learning, sharing, and reflecting, which helped them connect to others. The students valued their learning, and they value people and their stories, as one of those students explains:

> *"I like the theme of learning human motivation through storytelling of the learning community. I still remember a quote from TED Talk video we watched in English class: stories matter. Everyone has different stories and that is what makes everybody unique. Understanding people starts at understanding their stories."*—Student

Works Cited

Bringle, R.G., & Hatcher, J.H. (1999). Reflection in service learning: Making meaning of experience. *Educational Horizons, 77*(4), 179-185.

Brittenham, R., McLaughlin, E., & Mick, C.S. (2018). Outliving the ghosts: Storytelling and community engagement through classroom practice. *Pedagogy, 18*(1), 109–130.

Christiansen, R. (2016). *Story as rhetorical: We can't escape story no matter how hard we try.* OpenEnglish@slcc. Retrieved from https://openenglishatslcc.pressbooks.com/chapter/story-as-rhetorical-we-cant-escape-story-no-matter-how-hard-we-try/

Frankl, V. (1946). *Man's search for meaning*. Beacon Press.

Gargiulo, T.L. (2005). *The strategic use of stories in organizational communication and learning*. Armonk, N.Y.: Routledge.

Jabri, M., & Pounder, J.S. (2001). The management of change: A narrative perspective on management development. Journal of Management Development, 20(8), 682–691. Jager, et al. (2017). Digital storytelling in research: A systematic review. *The Qualitative Report, 22*(10), 2458-2582.

Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33(4), 692–724.

Moore, W. (2011). *The other Wes Moore: One name, two fates*. One World.

Newkirk, T. (2012). How we really comprehend nonfiction. *Educational Leadership, 69*(6), 28.

ESSAYS — CONTINUED

Newkirk, T. (2014). *Minds made for stories.* Portsmouth, New Hampshire: Heinemann.
Slater, D. (2017). The 57 bus. Farrar Straus Giroux.
Soria, K. & Johnson, M. (2017). High-impact educational practices and the development of college students' pluralistic outcomes. *College Student Affairs Journal, 35*(2), 100-116.
Sucher, W., & Cheung, C. (2015). *Cross-Cultural Competency Scale.* doi: http://dx.doi.org/10.1037/t47472-000
Tews, M.J., Jackson, K., Ramsay, C., & Michel, J.W. (2015). Fun in the college classroom: Examining its nature and relationship with student engagement. *College Teaching, 63*(1), 16–26.
Wijetunge, P. (2012). Organizational storytelling as a method of tacit knowledge transfer: Case study from a Sri Lankan university. *The International and Information Library Review, 44*(4), 212-223, doi: 10.1080/10572317.2012.10762934
Woodhouse, H. (2011). Storytelling in university education: Emotion, teachable moments, and the value of life. *Journal of Educational Thought, 45*(3), 211–238.

ESSAYS — CONTINUED

Using Biglan's and Holland's Classifications to Understand Similarities and Differences Between Disciplines in Multidisciplinary/Interdisciplinary Education

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The disciplinary classification scheme of Biglan (1973) and Holland's hexagon of occupational interests and personality characteristics (1985) have been important conceptual frameworks for describing disciplines and occupations. Although the classifications were products of the twentieth century, both are still being used (Donnay et al., 2005; Simpson, 2017), and they are relevant for understanding collaborations between disciplines in multidisciplinary and/or interdisciplinary education. Differences between collaborators in multidisciplinary education can lead both to synergistic encounters and productive conflicts. Nevertheless, students may have little empathy for collaborators from different professions (Fleischmann & Huchison, 2012). Also, the differences between disciplines can be significant: "Disciplinary collaborators have to address the basic differences between themselves in terms of concepts, research questions, their perspectives upon those questions, their epistemology, methods, skills, language, and culture" (Collin, 2009, p. 107). One way in which members of disciplines differ is their profile of vocational interests. The idea of vocational interests, disseminated by John Holland in his RIASEC system over several decades (1985), is associated with there being different foci, self-concepts, and values among members of different occupations. There are six types of vocational interests in Holland's typology: realistic, investigative, artistic, social, enterprising, and conventional. Disciplines can also differ along Biglan's hard/soft, life/nonlife, and applied/pure dimensions (1973). For example, engineering, an applied discipline, has characteristics not shared by pure disciplines. In the present study, we used the two classification schemes to analyze disciplinary collaborations in education, and we also measured the correlation between the classification systems to determine the relationship between them. Differences in vocational interests and Biglan class membership suggest that members of disciplinary groups may have lots to learn from one another when they collaborate. The two classification schemes and their relationships provide helpful frameworks for understanding disciplinary similarities and differences.

Hollands Theory of the Six Vocational Personality Types

For this study, the framework of the Strong Interest Inventory (SII) was used. The SII measures general occupational themes, which correspond to Holland's six vocational personality types: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC). An individual's vocational personality types may be matched not only to occupations, but also learning environments, family environments, leisure activities, and living environments (Donnay et al., 2005). Holland stated that a person's interests and competencies "create a particular personal disposition that leads him or her to think, perceive, and act in special ways" (1985, p. 2). Table 1 summarizes the six personality types, showing some of the differences between them.

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Table 1
Summary of the Six Personality Types

	Focus	Values/Self-Concept	Occupations
Realistic	Fixing, building, repairing; heavy and precision machinery and tools	Emotionally stable, shy, traditional	Engineer, Radiologic technologist
Investigative	Solving problems; scientific work; research	Analytical, independent, creative	Physician, Psychologist, Physicist
Artistic	Arts, music, writing	Independent, free-spirited, complicated	Fine artist, technical writer, architect
Social	Teaching, helping, leading discussions	Ethical, kind, cheerful	Elementary school teacher, social worker, nurse (LPN)
Enterprising	Selling, managing, political maneuvering	Competitive, sociable, attracted to money, possessions, and power	Marketing executive, store manager, buyer
Conventional	Organization, data management, record keeping	Conscientious, accurate, careful	Banker, Certified Public Accountant, Actuary

The Strong Interest Inventory was revised in 2012, but the reference data for this study (described in the methods section below) were available from the 2004 and 1994 manuals (Donnay et al., 2005; Harmon et al., 1994). The older 1994 manual provided data about occupations unavailable in the 2004 manual, which only provided data for college majors.

Biglan's Classification of Disciplines

Biglan classified disciplines along three dimensions as hard/soft, applied/pure, and life/non-life (1973). Examples of hard disciplines would be the sciences and soft, the arts and social sciences. An example of an applied discipline is engineering, and a pure is physics. An example of a life discipline is biology and non-life is English. Becher and Trowler described the classes in Biglan's initial classification, explaining several differences between the disciplinary groups (2001). In general, hard-pure (pure sciences) disciplines tend to be concerned with universals, are value-free, and have consensual standards. Soft-pure disciplines (humanities) are concerned with particulars, are value-laden, and lack consensus. Hard-applied disciplines (technologies) are pragmatic and purposive, applying heuristic approaches. Soft-applied disciplines (applied social science) are utilitarian, concerned with enhancing professional practice, and use case studies. The Biglan classification scheme was used to characterize disciplinary interrelationships in STEAM education in a recent issue of IMPACT (Williamson & Panigabutra-Roberts, 2021).

Before turning to relationships between Biglan's and Holland's classifications, we use the classifications to analyze similarities and differences between disciplines in three educational collaborations.

Engineering and Business

Engineering and business disciplines often collaborate in integrated design courses or capstone courses in which engineering students solve a problem from industry. In the Holland classification scheme, engineers have investigative and realistic vocational interests and business occupations have enterprising interests, which may be combined with conventional or other interests. Engineers would be expected to be shy and independent, whereas business students would be expected to be sociable and interested in leading or persuading others. One would expect the two disciplines to be complementary as well as sometimes producing conflicts. An illustration of the complementary nature of the relationship

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is that engineers need to learn communication and writing skills, and the integrated design classes give them a chance to learn these skills more familiar to business students (Fleischmann & Huchison, 2012).

In Biglan's scheme, engineering students belong to hard applied nonlife disciplines whereas business students belong to soft applied nonlife disciplines. Thus, while they share two dimensions, hard disciplines deal more with universals and have a quantitative focus, whereas soft disciplines deal more with particulars and case studies.

Art and Nursing

Nurses often have social and investigative interests and artists have artistic interests. One would expect nurses to be interested in helping others and artists to be interested in expression and creativity. While the two disciplines might seem to have conflicting aims, art can complement nursing, for example, when art therapists provide patients with distraction from pain or help decorate hospitals to make them less stressful for patients and staff (Sonke et al., 2017). Similarly nursing students can benefit from the awareness of different disciplines, art being just one example.

In Biglan's scheme, art students belong to soft, pure, nonlife disciplines, whereas nursing students belong to soft, applied, life disciplines. Pure disciplines do not have a practical purpose as applied disciplines do, and nonlife disciplines do not primarily emphasize working with people or other living things.

Computer Scientists and Education or Healthcare

The field of social robotics (Feil-Seifer & Matarić, 2005) is an intersection of computer science or robotics engineering with education or healthcare, often involving the application of robots in schools or geriatric facilities. The robots carry out functions that teachers or aides or therapists typically do. Some populations, such as autistic individuals or individuals with dementia may be comfortable working with social robots. This field poses a challenge for computer science students or robotics engineering students in that they must learn about a whole new domain, and allows members of the healthcare or education domains to benefit from the helpful skills of more technical students. Computer scientists and engineers have investigative and realistic interests, whereas educators and healthcare aides have social interests. This poses opportunities for cooperation and conflict in that people with investigative and realistic interests tend to be shy and independent whereas those with social interests are cheerful and interested in helping and teaching.

Computer science students and robotic engineering students belong to hard, applied, nonlife disciplines, and healthcare students and education students belong to soft, applied, life disciplines. Thus, both are applied disciplines and have a practical emphasis. However, the disciplines differ in the other dimensions, suggesting very different emphases.

Exploring the relationship between the Biglan and Holland Classifications

Knowing the Biglan disciplinary classes and the Holland occupational interest types of the disciplines involved in the cases above gave me a framework for identifying characteristics of collaborating disciplines (both similarities and differences). After seeing this potential for using Biglan's and Holland's classifications to analyze collaborations in multidisciplinary education, I also was curious about how the classifications were related to one another. I decided to answer the following research question: What is the correlation between Holland's vocational interest types and Biglan's hard/soft, applied/pure, and life/non-life dimensions?

Methods

Strong Interest Inventory reference values (standard scores) for people in occupations (Harmon et al., 1994) and majors (Donnay et al., 2005) for Realistic, Investigative, Artistic, Social, Enterprising, and Conventional scales were used. These scores were the average scores for reference occupations (e.g., physicist-male). The Strong interest data points were selected based on a list of disciplines classified in the Biglan scheme. Although Biglan was able to place a number of disciplines along three axes in his original work (1973), we used a larger set of disciplines classified by Drees (1982).

Overall, 107 data points for occupations and majors were coded as hard/soft, life/non-life, and applied/pure. Correlations between the Biglan classes and the Strong interest scales were calculated using SPSS, so that the strength of association could be determined.

Results

Table 2
Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
Realistic	107	39.20	62.00	49.3140	5.35067
Investigative	107	41.40	62.00	51.5617	5.62049
Artistic	107	41.00	62.00	50.9757	4.68204
Social	107	41.60	62.00	50.8551	4.58132
Enterprising	107	41.00	61.00	49.0215	4.11227
Conventional	107	40.00	63.00	49.3813	4.14643

Table 3
Correlations Between the Holland Vocational Interest Types and the Biglan classes (hard-soft (hs); life-non-life (ln); applied-pure (ap)). Correlations significant at the level $p < 0.05$ are in bold.

	hs	ln	ap
Realistic	**-.392**	-.163	-.166
	.000	.098	.093
Investigative	**-.631**	-.140	.161
	.000	.157	.103
Artistic	**.297**	.077	**.445**
	.002	.436	.000
Social	**.472**	**-.473**	-.173
	.000	.000	.079
Enterprising	**.443**	-.042	**-.486**
	.000	.670	.000
Conventional	-.025	-.002	**-.502**
	.797	.986	.000

Discussion

The correlations show how Biglan's and Holland's classifications inform one another. For example, if one knew a discipline was associated with Realistic vocational interest, one would predict that it was more likely to be a hard discipline than soft since there is a moderate negative correlation between Realistic and the hard/soft dimension. (Investigative disciplines are even more strongly correlated negatively with the hard/soft dimension.) By contrast, artistic disciplines are moderately positively correlated with the hard/soft dimension, and social and enterprising disciplines, more strongly so. As soft disciplines, they have different methods and epistemologies than hard ones. Thus, beyond knowing that individ-

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uals with Social interest are cheerful and people oriented in contrast to individuals with Realistic personality types, one could also infer that Social disciplines were more likely to be soft disciplines and Realistic disciplines were more likely to be hard disciplines. This provides additional information beyond that conveyed by the Holland or SII definitions. Similarly, one would thus expect members of hard disciplines to be less social and tenderminded than members of soft disciplines, when one considers what vocational types are associated with them (e.g. Realistic and Investigative versus Artistic, Social, and Enterprising). The life-nonlife dimension was associated negatively with Social vocational interests. This is not surprising since individuals with Social interests enjoy interacting with people (who are living) in order to help or teach them. The applied-pure dimension was associated positively with artistic and negatively with enterprising and conventional. While this is not a surprising finding it conveys information beyond the Holland vocational interest type descriptions. For example, expressive creativity is associated with pure disciplines, even in hard sciences like physics. Psychology, too, a pure discipline, is associated with expressive and creative artistic interests. By contrast, applied disciplines tend to be profit-oriented like business (enterprising) or systematic and organized (conventional).

Conclusion

All in all, Biglan's disciplinary classification and Holland's typology of vocational interests allow one to posit differences and similarities between collaborating disciplines in multidisciplinary education. The classification schemes' characterization of individuals in disciplines (Holland) or classes of disciplines (Biglan) can give insight into ways in which members of collaborating disciplines may complement or conflict with one another. Some implications for multidisciplinary education are that students may benefit from the different viewpoints and knowledge of students or instructors from other disciplines, and/or that they could fail to understand one another in certain ways. For example, this could be important in the context of student teamwork or in instructional design by members of different disciplines.

In addition, since Holland's and Biglan's classifications have many moderate and strong correlations, knowing one attribute (Holland type or Biglan class) allows one to infer additional characteristics from the significantly correlated classes from the other classification scheme. Collaborators can thus construct richer portraits of the perhaps unfamiliar disciplines represented in their teams.

Works Cited

Becher, T., & Trowler, P. (2001). *Academic tribes and territories: Intellectual enquiry and the culture of disciplines* (2nd ed.). Society for Research into Higher Education & Open University Press.

Biglan, A. (1973). The characteristics of subject matter in different academic areas. *Journal of Applied Psychology*, *57*(3), 195-203.

Collin, A. (2009). Multidisciplinary, interdisciplinary, and transdisciplinary collaboration: Implications for vocational psychology. *International Journal for Educational and Vocational Guidance*, *9*(2), 101-110. https://psycnet.apa.org/record/2009-10948-005

Donnay, D. A. C., Morris, M. L., Schaubhut, N. A., & Thompson, R. C. (2005). *Strong interest inventory manual: Research, development, and strategies for interpretation* (Rev. ed.). CPP.

Drees, L. A. (1982). *The Biglan model: An augmentation* [Doctoral dissertation, University of Nebraska].

Feil-Seifer, D., & Matarić, M. J. (2005). *Defining socially assistive robotics,* IEEE 9th International Conference on Rehabilitation Robotics,

Fleischmann, K., & Huchison, C. (2012). Creative exchange: An evolving model of multidisciplinary collaboration. *Journal of Learning Design*, *5*(1), 23-31.

Harmon, L. W., Hansen, J.-I. C., Borgen, F. H., & Hammer, A.L. (1994). *Strong Interest Inventory: Applications and Technical Guide : Form T317 of the Strong Vocational Interest Blanks*. Palo Alto, CA.

Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Prentice-Hall.

Simpson, A. (2017). The surprising persistence of Biglan's classification scheme. *Studies in Higher Education*, *42*(8), 1520-1531. https://doi.org/10.1080/03075079.2015.1111323

Sonke, J., Pesata, V., Lee, J. B., & Graham-Pole, J. (2017). Nurse perceptions of artists as collaborators in interprofes-

sional care teams. *Healthcare (Basel)*, *5*(3). https://doi.org/10.3390/healthcare5030050

Williamson, J. M., & Panigabutra-Roberts, A. (2021). An analysis of STEAM disciplinary interrelationships described in abstracts of higher education articles. *IMPACT: Journal of the Center for Interdisciplinary Teaching & Learning*. https://sites.bu.edu/impact/previous-issues/impact-winter-2021/an-analysis-of-steam-disciplinary-interrelationships/

BOOK REVIEWS

Book Review: French, Howard W. *Born in Blackness: Africa, Africans, and the Making of the Modern World, 1471 to the Second World War*. New York, Liveright Publishing Corporation, 2021.

By John W. Mackey, Boston University

"Students of *Heart of Darkness* will often tell you," the late Nigerian novelist and critic Chinua Achebe once explained, "that Conrad is concerned not so much with Africa as with the deterioration of one European mind caused by solitude and sickness." Achebe found such defenses of Joseph Conrad's iconic 1899 novella, a tale of barbaric European colonialism in Africa, wholly inadequate. In understandable frustration, Achebe asked, "Can nobody see the preposterous and perverse arrogance in thus reducing Africa to the role of props for the break-up of one petty European mind?" (Achebe, 257). This sharp critique of a canonical work, especially one that was widely considered to be a literary reproach of the colonizer, was met with a variety of reactions, many of them defensive. But Achebe's central point is difficult to deny. Conrad's Congo was a place outside history, never fully human; it was a dark stage to be acted upon by Europeans at their peril. It is fair to say that Achebe's criticism significantly changed the way *Heart of Darkness* is read.

What Achebe did for our understanding of Conrad, Howard French's latest book can do for our understanding of modern history. Modernity has been almost solely written about, taught, and celebrated as a singularly western affair. Africa, when not ignored, appears as an afterthought, an obstacle, or at most a passive arena for European conquest. Like *Heart of Darkness*, such narratives present an Africa that lies outside the dynamism of history and the richness of human experience and agency. *Born in Blackness: Africa, Africans, and the Making of the Modern World, 1471 to the Second World War*, the fifth book from historian and Columbia Journalism Professor Howard French, is a welcome and thoroughly engaging corrective to this misreading of modernity. French's book argues that the historical moment when Europe began to surpass in wealth and power the civilizations of Asia and the Islamic world was "not founded upon any innate or permanent European characteristics," but rather "to a degree that remains unrecognized, it was built on the foundation of Europe's economic and political relations with Africa" (3–4). It is a substantial claim, to say the least, but one that French demonstrates convincingly in this brilliantly researched and written work. Africa and Africans, French argues, not only played a role in the making of the modern world, but an indispensable role at that.

French makes his case perhaps most compellingly in his chapters devoted to a thorough reframing of the Age of Discovery. In Chapter 5, "Rethinking Exploration," French explains the ways in which standard accounts of the period present Africa as merely a geographic obstacle to be overcome by Europeans en route to Asian spice markets farther east. Thus, as French puts it, "once the Cape of Good Hope is reached by Bartolomeu Dias, in 1488, Africa drastically recedes from the narrative or disappears altogether" (39). This story, as French forcefully points out, is all horribly mistold. The most important spark that lit the fire of exploration and discovery, which led to the creation of the modern Atlantic world, French argues, was Mansā Mūsā's journey across North Africa during his pilgrimage to Mecca. The Emperor of Mali and quite possibly the richest person who ever lived, Mansā Mūsā made major international news when he entered Cairo with an entourage of sixty thousand people, countless horses and camels, royal banners, and more gold than the world had ever seen (some estimates, French reports, suggest as much as eighteen tons). Indeed, he passed out so much gold in the form of gifts and patronage on his tour that he caused the price of the precious metal to plummet (The events of the pilgrimage are detailed Chapter 2, "Black King, Golden Scepter.").

Word of Mansā Mūsā's extravagant wealth reached Europe, and thus the motives for the European Age of Discovery were in place. Over the ensuing decades, Europeans correctly assumed that a land of vast riches in the form of gold lay somewhere in Africa. A series of broadly circulated maps were then produced that tempted would-be explorers with depictions of an African King who ruled over a spectacular kingdom of gold. The most famous of these, the 1375 *mappa mundi* known as the Catalan Atlas, depicts a crowned Mansā Mūsā seated on a throne, holding a golden orb and scepter. And in the early fifteenth century, the Europeans came. French points out that nearly the entire first century of Portuguese exploration was focused almost solely on Africa. This story, along with much else contained in the first six chapters of French's book (Part I), provide a much-needed corrective to familiar, dominant narratives of exploration and discovery.

BOOK REVIEWS — CONTINUED

Born in Blackness is much more than a revision of exploration narratives, however. Contained within its thirty-eight chapters is a wide range of subjects relating to the role of Africa and Africans in the creation of what we know as the modern world. Among those subjects is the crucial role of the Caribbean in the development of both Europe and North America. The rise of sugar plantations made profitable by slave labor in Barbados is not exactly an untold story, nor is the Haitian Revolution. But French makes a convincing case that each was much more important and influential than standard narratives of modern history suggest. The labor, the ideas, and the politics of African peoples deserve, but seldom receive, the kind of historical recognition that French's book provides. In impressive fashion, French chronicles the varied and crucial historical contributions of Africans without avoiding or obscuring the brutality of slavery, the slave trade, and European colonialism.

Reading Howard French's *Born in Blackness* is a rewarding experience on many levels. His eloquent writing style somehow manages to convey both mastery and humility at the same time. He fills gaps in our understanding of familiar narratives. He invites us, with good reason, to rethink our entire understanding of modernity. And, like Achebe before him, he insists that we see Africa in its fullness, Africans as fully human actors who make history and who significantly shaped the modern world. And lest we think such contributions are no longer necessary, that our understanding of history is no longer misleadingly Eurocentric: as of the writing of this review, the online *Encyclopedia Britannica* entry for the nineteenth-century Scottish explorer and missionary David Livingstone contains a section heading titled "Opening the interior." It is as if central Africa were "closed" until a European came to open it, as if the massive waterfall *Mosi-oa-Tunya* did not exist until Livingstone, as *Britannica* unironically puts it, "with typical patriotism named Victoria Falls after his queen." And toward the end of the entry, we are told that, "in spite of his paternalism and Victorian prejudices," Livingstone "believed wholeheartedly in the African's ability to advance into the modern world." I strongly suggest that the editors of Britannica read *Born in Blackness*.

Works Cited

Achebe, Chinua. "An Image of Africa: Racism in Conrad's *Heart of Darkness*." *Heart of Darkness*, by Joseph Conrad, edited by Robert Kimbrough, Third Edition, Norton Critical Edition, W.W. Norton, 1988, pp. 251–262.

Shepperson, George Albert. "David Livingstone." *Britannica*, 2022. https://www.britannica.com/biography/David-Livingstone. Accessed 24 May, 2022.

BOOK REVIEWS – CONTINUED

Soderberg, Laura. *Vicious Infants: Dangerous Childhoods in Antebellum U.S. Literature*. Amherst and Boston: University of Massachusetts Press, 2021. 200 pp. ISBN (paperback): 978-1-62534-588-2.

Marlis Schweitzer, York University (Toronto).

Vicious Infants is a tremendous book, a significant scholarly achievement that should be read by anyone looking to deepen their understanding of the historical inequities that shape contemporary life in the United States. Organized into four chapters, with an introduction and conclusion, it skillfully challenges existing scholarship by identifying underexamined categories of antebellum childhood and asking why these categories have slipped from view. Reading literary and non-literary texts together, it offers a nuanced, interdisciplinary analysis of the institutional alignments that facilitated and sustained the exclusion of *certain kinds* of children from national belonging.

To date, most studies of antebellum childhood have focused on the sentimentalist formation of the "innocent child," a category that purposefully excluded children who existed outside the normative confines of whiteness, gender-conformity, affluence, or able-bodied-ness. While recognizing the innocent child as a powerful category, *Vicious Infants* "pushes against any singular type of antebellum childhood, to which one is either admired or refused," and instead advocates for "a broader vocabulary of multiple childhoods that each have their own relationship to civic and family life" (4). This vocabulary includes the indentured or bound child, the incorrigible child or juvenile delinquent, and the prodigious child, categories of childhood that threatened to destabilize the social fabric and thus required careful management. In attending to these multiple childhoods, *Vicious Infants* traces the social discourses that systematically named them as aberrant, vicious, or antisocial, and unworthy of membership in American society (4).

Soderberg exhibits great facility in reading across literary and non-literary texts, revealing how the narratives of childhood that arose in the antebellum era circulated within and across periodicals, newspapers, novels, institutional documents, prison records, and medical journals. The category of the "incorrigible delinquent," for example, first emerged in the written observations of officials working in juvenile prisons, but in time cohered into "an interpretative framework for narrative the social body and those who fall outside it" (14). Soderberg resists privileging one kind of text over another yet remains attentive to key distinctions in form and aim—most notably the emphasis on multiplicity/group identity in institutional writing compared with literature's focus on individual subjectivity. In so doing, Soderberg demonstrates that the creation of multiple categories of dangerous or vicious childhood was a collective endeavour, pursued by multiple authors in the aims of defining *which* children would be welcomed into the nation when they attained adulthood.

In chapter 1, "Bound Children: Sidestepping the Social Contract in Apprenticeship Literature," Soderberg examines the figure of the indentured child, pairing William Apess's autobiography, *A Son of the Forest* (1829) with Harriet Wilson's semi-autobiographical novel, *Our Nig* (1859). In both texts, an impoverished child enters a contractual relationship with a white family, consenting (at least in legal terms) to a period of indenture in exchange for food and shelter. Soderberg traces the way both texts subvert the conventions of the *bildungsroman* and reveal the heavy physical toll exacted on those compelled to accept an indentured life. Whereas most coming-of-age narratives conclude with a subject's arrival of adulthood marked by a willingness to accept the terms of the social contract and thereby assert individual freedom, the Black girl (Frado) and Indigenous boy (William) who appear in Wilson's and Apess's texts remain in their communities because they have no viable alternatives. "For Wilson and Apess," Soderberg writes, "participation in a community might mean nothing more than that someone was born into it and that they rely on it for survival, but it does not imply approval or even acceptance" (47). Both authors reject the promise of conformity, assimilation, and reconciliation that attend to most *bildungsroman* and instead offer ambiguous endings that invite readers to reflect on alternative possibilities.

In chapter 2, "The Incorrigible Child: Juvenile Delinquency and the Fearful Rise of the Child Self," Soderberg turns from the indentured child to the "incorrigible child," an individual beyond reform or redemption, who emerged in the 1820s and 1830s as waves of poor, immigrant children arrived in northeastern cities seeking employment in factories and other industrialized workplaces. As Soderberg writes, "The development of the social category of the criminal child required a

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reworking of both labels, reconciling the guilt attached to the former with the innocence attached to the other" (52). This reworking occurred across the pages of parenting manuals and the records kept by the staff at New York City juvenile prisons; whereas parenting manuals advised caregivers on how to wield authority and enforce good behavior in children without resorting to excessive physical punishment, the institutional reports document the limits of authority when dealing with those who exhibit no capacity for reform. In this way, ideas of delinquency became fused with the bodies of poor and immigrant children, marking them as inappropriate subjects for socialization and thereby justifying their exclusion from the national community (50).

Soderberg's third chapter, "Prodigious Births: Black Infancy, Antebellum Medicine, and the Racialization of Heredity," takes up nineteenth-century medical discourse about Black infants as articulated in medical journals, short stories, novels, and biography. Reading across multiple texts, Soderberg details how the concept of the "prodigy" not only worked to deny Black infants kinship ties by placing them apart from genealogy, but also positioned African American populations as disconnected and unstable (84). Simultaneously monster and miracle, the figure of prodigy is estranged from all others by virtue of her unique qualities; her singularity erases the body that bore her as well as the bodies of all descendants, denying her past and future by implying that her existence is nothing but an accident. The category of "the prodigy" thus served the needs of white supremacy in the antebellum era by "pathologiz[ing] remarkable lives as flukes or oddities" (108), without family, community, or nation.

Soderberg continues to examine white anxieties about Black babies and birth rates in the final chapter, "Too Many Children: U.S. Malthusianism, Harriet Beecher Stowe, and Novel-Ending Births." Through a comparison of Stowe's famous depiction of white innocence in *Uncle Tom's Cabin* with her more complicated treatment of white girlhood in *Dred* (1856), Soderberg identifies shifts in the author's thinking about reproduction and population control and her engagement with the conventions of the reform novel: "Whereas Little Eva dies for the cause of freedom, the white girls of *Dred* perpetuate the violence around them by their very birth" (123). For Soderberg, this change in perspective offers evidence of Stowe's engagement with Malthusian thought, which circulated broadly at this time. Rather than uphold the optimism of the marriage plot, which concludes with the birth or expectation of children and the promise of a better future, Stowe uses *Dred* to issue a dystopian warning about the risks of overpopulation and the entanglement of white girlhood with Black suffering: As Soderberg concludes, "the white children of *Dred* are part of the problem and no source of relief" (146).

It is difficult within the constraints of a book review to give a full account of the sophisticated arguments and insightful readings that make *Vicious Infants* such a scholarly achievement. This book should engage readers in multiple fields of study, including but not limited to childhood studies, gender studies, critical race, c19 cultural history, English, cultural studies, and American Studies. It is a brilliant example of the kind of scholarship that is urgently needed today.

BOOK REVIEWS – CONTINUED

Zamsky, Robert L., *Orphic Bend: Music and Innovative Poetics*. Tuscaloosa: Uni of Alabama Press, 2021. viii + 216pp. ISBN (paperback) 978-0-8173-6014-6

By Rob Turner, University of Exeter

“I would play Orpheus for you again,” Robert Duncan once wrote to Denise Levertov, “recall the arrow or song / to the trembling daylight / from which it sprang.” The shade of the doomed mythic inventor of lyric verse runs through twentieth century American poetry, with echoes of tragic love, loss, and lament. In this compelling and often surprising monograph, Robert L. Zamsky takes up the shifting legacy of the myth, pursuing its “Orphic bend” (a phrase he borrows from Nathaniel Mackey) through the work of five major twentieth-century US poets: Charles Bernstein, Robert Creeley, John Taggart, Tracie Morris, and Mackey himself.

In his opening pages, Zamsky lays out the familiar story of Orpheus and Eurydice, before narrating its early evolution from a fragment attributed to Ibycus (6th century BC) through to Ovid and Virgil. At first, the critic seems to be settling into a belated reply to Walter Strauss’s influential study *Descent and Return: The Orphic Theme in Modern Literature* (1971), until he pauses to note that the three poets at the core of his book—Creeley, Taggart, Morris—are not, in fact, making use of the Orpheus myth at all. In their writings, he admits, “the relationship to Orpheus is simply not an explicit one. None of them, to my knowledge, describes his or her work in relation to the Orphic tradition” (6). It becomes clear that *Orphic Bend* is less about direct responses to the myth, and more the thicket of lyrical metaphors that emerge from its details, ranging from the poet’s backward glance to the later dismemberment of his corpse.

As indicated by the book’s subtitle, the most important of these tropes is Orpheus’s song itself: an ancient reminder of the vexed relationship between music and poetry. Zamsky’s study takes up the question of the musicality of post-war American verse, writing in the wake of Joseph M. Conte’s *Unending Design: The Form of Postmodern Poetry* (1991), and sharing lines of inquiry with the more recent work of Susan Stewart. At first, the critic’s specific musical context is opera, a famously orphic spectacle: Zamsky touches on the origins of this form, and considers Ezra Pound’s rarely-heard *Le Testament de Villon* (1923), before turning to Charles Bernstein and Brian Ferneyhough’s *Shadowtime* (2004).

Focusing on the dramatic suicide of Walter Benjamin at the climax of Bernstein’s libretto, Zamsky reads *Shadowtime* as capturing “not only a significant moment in human history but also the logical conclusion of the humanism of that history” (39), a grand argument that rests on his repeated claim that “for the humanist thinkers of the Renaissance, the narrative of Orpheus represented the possibilities and the challenges of syncretic logic” (18). It’s an intriguing reading, positing an Orphic loop in early modern thought, although its historic basis feels a little ungrounded: it’s supported only by a nod to Peter Kivy’s work, and Zamsky avoids citing any of the Renaissance humanists he has in mind.

In any case, opera is soon put to one side: from the second chapter onwards, American music dominates Zamsky’s soundtrack. Indeed, it is often jazz, more than the Orpheus myth, that seems to be his primary concern: the gorgeous graphic score that appears on the dust jacket was composed by the trumpeter (and first-generation member of the AACM) Wadada Leo Smith. This turn to specifically Black sonics feels increasingly central to the book, hinting at a set of urgent questions underpinning its account of the relationship between poetry and music in America across the last half century.

“Struggling to find his voice as a young poet, Creeley found not just inspiration but a model in jazz” (48), Zamsky writes towards the start of his second chapter. And yet, this is swiftly qualified by Creeley’s claim that his work is not “jazzy, or about jazz—rather, it’s trying to use a rhythmic base much as jazz of this time would” (49). There is a tension here, and it creeps into the following section, too, as John Taggart discusses his decision to make “a grid from the sheet music for [Ornette Coleman’s] ‘Lonely Woman’” to build his own verse. “Not ‘jazz poems’,” Taggart insists, “they would have to start from and go away from jazz” (70). Across these central chapters, Zamsky shows us a pair of white poets who are torn between claiming and refusing an association with Black music, insisting on framing their borrowings as somehow abstract rather than stylistic.

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For now, Zamsky steers clear of the lurking question of race and appropriation; instead, he dives into Creeley and Taggart's texts. His close readings are often excellent, as when he pauses to weigh the phrasing in Creeley's 'A Song' (1957): "the slipperiness of 'which' troubles the line, which reads as much like a question as it does a statement. [...] 'you' could be equated with an unknown addressee, the murmur, the grace, or even the eponymous 'song' of the poem as a whole" (52). This mode of sustained attention is often striking, and Zamsky can send you rushing back to a poem with renewed interest and understanding.

The same precision and care can be seen in the discussion of Tracie Morris's recorded performances in the fourth chapter, as whole pages are dedicated to describing intricate sonic effects. Where the question of race was largely dodged in prior chapters, the relationship between Blackness and linguistic performativity becomes explicit here, with Zamsky making use of Fred Moten's work, alongside Morris's own research into the language philosophy of J.L. Austin. The argument is nuanced and often persuasive, but there are moments where the "Orphic" framework risks getting in the way. The chapter title "Eurydice Takes the Mic" (Zamsky's phrase, not Morris's) seems an unhelpful projection of the trope onto the female writer. And, given the fact that there is no mention of Orpheus's doomed wife in Morris's work, the description of her undertaking a "Eurydicean drive for performative justice" (118) seems misjudged, as does the puzzling suggestion that her writing is "no less derivative of [Gertrude] Stein than Eurydice is of Orpheus" (114).

As *Orphic Bend* draws to a close, we turn at last to Nathaniel Mackey, the source of the book's title. Zamsky's excellent 2006 article on music in the poet's early verse is revised and expanded, here, with the addition of carefully argued material on the braided songs in *Splay Anthem*. It's a pity that the publication schedule precludes any analysis of the monolithic jazz meditations in the *Double Trio* box set, but Zamsky writes well on the way that Mackey's lines respond to the innovations of Black musicians, from Don Cherry to Cecil Taylor. The granular readings that are one of the book's consistent strengths are given a surprisingly metrical emphasis in these pages, as the critic hunts for amphimacers and spondaic substitutions in this syncopated free verse.

In his brief conclusion, Zamsky turns to some of the more explicit treatments of Orpheus in 20th-century US poetry, touching on the work of Robert Duncan, Jack Spicer, and John Ashbery. Pointing out that "part of Orpheus's myth is that after the loss of Eurydice, he foregoes the love of women and substitutes for it homosexual love" (164), these closing pages hint in passing at a queer counter-tradition, an intriguing reworking of an otherwise heteronormative marriage story. This is just one of the many areas for compelling future research suggested by Zamsky's thoughtful book. Returning to the founding myth of lyric, *Orphic Bend* offers a number of ways of rethinking the interplay between music and meaning in contemporary poetry.

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