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A multidisciplinary journal

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JOURNAL OF THE TEXAS TECH UNIVERSITY ETHICS CENTER

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A NOTE FROM THE EXECUTIVE EDITOR

Discovery is a process and activity that invigorates the spirit to help it seek remedies for complex challenges that influence the human condition. The Texas Tech University (TTU) Ethics Center, while attending the 8th Annual Academic Integrity and Responsible Conduct of Research Conference at the College of DuPage in Glen Ellyn, Illinois had an opportunity to listen to research presentations from regional thought leaders. In this edition of the multidisciplinary journal, opinion pieces from the conference are presented to give our readership a broader view of perspectives that relate to ethics and affirmative research conduct. Through the College of DuPage activities, numerous researchers presented at the conference introducing domestic and international topics that enlightened attendees. The included essays represent both presentation summaries from that conference and faculty submitted scholarship. The ultimate goal is that the assembled work may launch individual interest in supporting integrity in all work with a focus on ecological and STEM projects.

The TTU Ethics Center continues its guest to identify researchers from a cross-section of disciplines to facilitate multidisciplinary engagement in research and more effectively address present and future critical issues. To help researchers work outside of disciplinary silos is a function that, hopefully, this journal may serve as a vehicle to do. With internal and external constituents participating in seminars, workshops, and symposia, the Ethics Center pushes forward TTU's stated Ethical Principles: 1) Mutual Respect; 2) Cooperation and communication; 3) Creativity and Innovation; 4) Community Service and Leadership; 5) Pursuit of Excellence; 6) Public Accountability; and 7) Diversity as an underpinning to encourage positive conduct among researchers. By bringing together diverse disciplines in programs, students, staff, and faculty enter a community organized around ethical principles to enhance multidisciplinary research, academic integrity, and elevate professional conduct.

This edition of the journal nurtures the intellect as well as fostering action. The research defines the problem, while action represents a

commitment to do what can be done by the group or oneself to create manageable environmental conditions. As research in the journal points out, sustainable practices can be promoted to improve the human capacity to solve problems.

Ralph Ferguson, Managing Director, TTU Ethics Center

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8TH ANNUAL RESPONSIBLE CONDUCT OF RESEARCH AND ACADEMIC INTEGRITY CONFERENCE SUMMARY: COLLEGE OF DUPAGE

KEYNOTE: BOUNDLESS SPIRIT OF ETHICS

Dr. Ralph Ferguson, Director, Ethics Center and Fulbright Specialist, Texas Tech University

Presentation Description

Dr. Ferguson explores the impact of ethics agencies as a real-world value for self-management in personal, private, and public life. He discusses the importance of these activities on campuses to enrich the student preparedness when they exit the shelter of the institution.

Presentation Summary

Ethics promotes problem-solving within groups, and shows that organizations must do the least amount of harm in identifying solutions. Students graduate from universities with a limited peripheral view of hazards that they will face in humanitarian service or as STEM professionals. This indicates that a broader dialog about ethics on college campuses must interface with the pragmatism of workplace practices sooner rather than later in the education process within the learning community. Equipping students with advanced critical thinking and decision-making skills gives them the capacity to work across disciplines in the market targeted towards what is best for human wellbeing. Through external seminars in the learning community, students have available to them additional training to enrich their professional awareness. Their comprehension of social and human capital contributes to a foundation in ethics that promotes and encourages an examination of complex issues with long-term impacts on society.

There is no market incentive that relieves private and public organizations of their ethical responsibility to protect society. L.J. Hanifan (1916) in his seminal paper, *Social Cap Gateway*, used the term Social Capital that engages five elements in an effectively functioning society: 1) Trust; 2) Economics; 3) Reciprocity; 4) Cooperation; and 5) Market. As students transition into their professions, the greater clarity they have about these five functions, the less likely disruption may occur in decision-making. The vitality of exploring the boundless challenges of ethics with real-time events while in higher education enhances the development of thoughtful pragmatic leaders. An ethics center serves as a hub in the learning

community to reinforce values among students who will enter the competitive marketplace.

Growth in ethical awareness may establish heightened sensitivity about the importance of Human Capital which will benefit organizations and national interests. Gary Becker, an economist at the University of Chicago, popularized the term, Human Capital, which emphasizes the importance of the enhancement of value for individuals, employers, and the community. It is essential through education and training programs that ethics be pivotal in the instructional process. Divergence from ethical conduct can cause irreversible harm in the market economy. The variety of topics students discuss concerning complex issues prepares them to strengthen their resolve to draw conclusions that best serve the community. A key role of an ethics center is to provide seminars and programs that reiterate the four basic ethical principles:

- Utilitarianism: places the locus of right and wrong solely on outcomes; moves beyond one's own interest and considers the interests of others.
- Deontology: focuses on the rightness or wrongness of actions themselves vs. rightness or wrongness of the consequences of those actions.
- Casuistry: applied ethics and jurisprudence; characterized as a critique of principle or rule-based reasoning.
- Virtue: emphasizes the role of character and moral philosophy, rather than either doing one's duty or acting on orders.

With numerous disciplines intersecting in the decision-making process, it is important to stress that students graduate with critical thinking skills and a solid ethical foundation in order to become good stewards. Achievements within democratization are inseparable from affirmative ethical values.

FRAGILE TRUST

Dr. Ralph Ferguson, Lora L. Lopez, M.S., and Dr. Mary Murimi, Texas Tech University Ethics Center

Presentation Description

After a viewing of Samantha Grant's video: A Fragile Trust: Plagiarism, Power, and Jayson Blair at the New York Times, the presenters will discuss how plagiarism and ambition can lead to ethical violations. Attendees will participate in a game that simulates a real-life scenario in order to explore the impact of external pressures on ethical decision making in the school and workplace.

Presentation Summary

Presenters Dr. Ralph Ferguson, Lora L. Lopez, and Dr. Mary Muriumi, from Texas Tech University discussed how plagiarism and ambition can lead to ethical violations. Attendees viewed several short clips from Samantha Grant's video: A Fragile Trust: Plagiarism, Power, and Jayson Blair at the New York Times. Each clip of the film provided a brief insight into the story of Jayson Blair who plagiarized his stories as a reporter for the New York Times. In the film clips, Jayson Blair describes the external pressures that led him down the path of plagiarism, drug use, and self-destruction. Mr. Blair provided insight on how he was able to steal a portion of the same story from different sources which made it seem like his reporting was an original piece. He also describes how he was able to conduct interviews over the phone and asked for specific details about photos, furniture and the outside esthetics of the home. Mr. Blair was able to use this information to write his stories while never leaving his home. Throughout the video, he was able to describe all the practices that he used to manipulate the editors, fellow journalists, and more importantly, the New York Times.

Decisions on Deadline Description

DECISIONS ON DEADLINE is a fun and fast-paced journalism game where players are journalists running down stories in the fictional town of Southside, USA. Players work against the clock and under a strict budget to report on the daily dramas of this community, and figure out the Who, What, When, When, Where and Why for each edgy and entertaining story. All this while navigating a string of ethical dilemmas similar to the ones all journalists working in the digital age. (http://www.decisionsondeadline.com/)

Decisions on Deadline

Attendees were asked to break into groups and come to a group consensus in each scenario. They were given a time limit to work through the stories to earn promotions from Cub Reporter to International Correspondent. Each level allows the participants to make decisions based on their available budget, time limit, actions they could consider, news facts, and contact list. Each of the reporter levels requires input from the group participants. The Decisions on Deadline game provides an opportunity of the groups to make decisions based on their own personal ethical dilemmas.

Conclusion

This is a mock view of what may occur when individuals step-away from best practices. The story about Mr. Blair reminds students, staff, faculty, and other professionals that the consequence of plagiarism or misconduct may be unalterable.

ADDRESSING PLAGIARISM POLICY ROADBLOCKS

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Elyse Pelzer and Deanna Basco, Writing, Reading, Speech Assistance (WRSA) Specialist and WRSA Coach College of DuPage

Presentation Description

College of DuPage writing coaches discuss the many roadblocks involved when attempting to enforce plagiarism rules. Caught between protecting students' privacy and the college's Academic Code of Conduct, coaches often feel their hands are tied. A discussion intended to shine a light on the complex issue of avoiding plagiarism.

Presentation Summary

Presenters Elyse Pelzer and Deanna Basco, 11 and 9-year veteran tutors of College of DuPage (COD) Writing, Reading, Speech Assistance (WRSA), discussed the challenges preventing students from understanding, or perhaps taking seriously, plagiarism and the roadblocks that tutors face in enforcing plagiarism policies. Before beginning, attendees were given written scenarios regarding plagiarism issues seen in WRSA and asked to address how they would handle the situation in a five-minute free-write. Then, a short video of several WRSA tutors describing cases of plagiarism they have witnessed was shown, with examples seemingly both intended and unintended.

Following the video, the presenters explained that the term "plagiarism," or some variation of it, was mentioned 35 times on focus sheets prepared by tutors after appointments during the last two semesters. Conversely, official plagiarism violations filed with the Dean of Students' Office averaged 24 per year, over the last three years. Highlighted was how enrollment of 28,000 students each semester, according to COD's website, resulted in just 24 students violating plagiarism rules a year per Dean of Students' Office vs. 35 mentions over two semesters in WRSA, where students are divided into three categories for help: writing, reading and speech. This discrepancy leads to questioning whether students who plagiarize are able to slip through the cracks of following rules by not getting educated or caught, and, if so, can anything be done to prevent this from happening.

Three main factors led the discussion: COD's Academic Code of Conduct guidelines allow faculty to decide how to handle plagiarism violations, instructors' interpretations of standard citation rules can often be confusing to follow, and various comprehension levels and cultural differences all cause roadblocks for tutors working with students who have plagiarized.

Attendees were asked to consider what they would do if a student told them they were going to cheat on an exam, and then what they would do if a student said they were going to use information from an outside source without citing it. Questions were raised as to why there would be a difference in reactions, if one exists.

After this discussion, presenters resumed talking about the three main points, beginning with faculty discretion leading to fewer recorded plagiarism violations. COD's Code of Honesty states that after meeting with a student suspected of plagiarizing, "If it is determined the violation is unintended, the faculty may offer a chance to advance the student's learning and not impose a sanction." This means that one student could potentially get a hand slap, under the guise of a learning experience, multiple times throughout their college career. Can anything be done to keep this from happening?

The second point of faculty having the right to alter the rules of citation usage leading to confusion for the student was brought up. Deanna shared an extreme case of this involving a student who came into the writing center because he was confused by his instructor's version of self-plagiarizing, which resulted in a paper almost entirely in quotation marks being submitted. The student was warned that if he repeated quotes he had used in an earlier paper, including an interview with his father, that would be self-plagiarism and reason to fail the class.

Following this, it was pointed out that some assignments may require more challenging citations, leading to greater confusion. For example, Deanna attended a citation workshop presented by COD's library and asked how to avoid over-citing certain research papers, such as nursing students' research of diseases, which is confusing to the tutor and the student. After a pause, the presenter ironically recommended Deanna ask the Learning Commons WRSA for advice.

General roadblocks faced by tutors in WRSA were then discussed. First mentioned was the discomfort of addressing plagiarism suspicions without being too accusatory. After explaining the importance of citing and what plagiarism is, tutors are often unsure how much further to go. The second roadblock of cultural differences, such as viewing the use of another's work as a sign of respect, adds to difficulty in conveying the importance of citing sources. The third roadblock occurs while interacting with students with learning disabilities, as some assignments and requirements may be beyond a student's level of comprehension or abilities,

leading them to get extra "help." Elyse worked with such a student and saw how difficult it was to construct one complete sentence; one day, after weeks of working together, the student came in with perfectly constructed paragraphs. When questioned about the content, the student said his mother had "helped" him. When asked how, the student outwardly stated, "She wrote it," with no comprehension that this was not okay. Elyse explained that this could be considered plagiarism and printed the college's plagiarism policies for the student before he left. Unfortunately, the student never came back.

In the past, tutors were asked not to contact instructors, resulting in feelings of moral and ethical dilemma. However, this policy is currently being reviewed at COD's WRSA, and staff is debating how we might change to better serve the students in terms of how plagiarism is handled. The points discussed so far were reflected in the original scenarios handed out at the beginning of the presentation, and then attendees were asked how they responded.

The presenters then shared a newly proposed plagiarism policy created by the WRSA, based on 3-strikes. First strike, the tutor discusses plagiarism and how to avoid it, followed by a detailed focus sheet emailed to the WRSA Coordinator. Second strike, the Coordinator will contact the student who will then work with a tutor to review an online plagiarism module and complete a pre/post-test. If the student still plagiarizes, exhibiting a conscious pattern, the Coordinator will contact the student's instructor and the student will lose writing center privileges for the rest of the semester. To end, helpful WRSA resources available to faculty were reviewed.

CULTIVATING ACADEMIC INTEGRITY IN WRITING: THE ETHICAL USE OF MODELS AND TEMPLATES TO MENTOR STUDENT WRITERS

Patti Tylka, Senior Academic Coach, College of DuPage

Presentation Description

Providing students with templates and writing samples to communicate instructor expectations produces strong, ethical writers. After a discussion of the ethics of using mentor texts and templates, a writing coach will model their use; participants can experience their potential through demonstration, writing, and conversation.

Presentation Summary

As a high school junior and senior, Patti Tylka studied shorthand. This business course was recommended for female students who were expected to become secretaries in a time before technology gave us Dictaphones and, later, computers. Patti never used her shorthand skills for taking dictation in the business world, but she doesn't consider it a waste of time. During those two years, Patti listened (and transcribed) hundreds of business letters. She learned the language formats, the templates, used in business communication, and this helped her as she developed into a writer.

Most academic writing follows a pattern, but many of our students have not experienced that pattern. They don't have the background experience that would help them navigate academic writing; many of them arrive at college knowing only how to write a five-paragraph argument. An instructor who provides a writing template gives his students training wheels to help them get going; the templates provide a support that helps students gain balance, learn to steer, move forward, and gain confidence.

A template is a framework. Instructors can set up a template to match an assignment, providing a brain-friendly scaffold for student work. Like training wheels, a writing template provides parameters that allow the student to move forward. It lets the student build his essay following the expected framework of the discipline or assignment. Once the student finds success with the disciplinary writing style, the template is no longer needed, and, like training wheels, should be removed.

Several examples of templates were provided and discussed:

APA and MLA page formats

- Analytical essay outline
- Argumentative essay outline
- Compare or Contrast essay outline
- Expository Essay
- Persuasive essay outline
- Reflective essay outline
- Research paper outline
- CARS (Creating a Research Space) introduction
- CER (Claim, Evidence, Reasoning) paragraph
- MEL-Con (Main idea, evidence, link to topic, conclusion sentence) paragraph
- They Say/I Say (Graff, Gerald and Cathy Birkenstein. *They Say/I Say: The Moves That Matter in Academic Writing*. Norton, 2006.)

RESEARCH, INTEGRITY, AND SOCIAL COMMITMENT

Dr. Johnson Lawrence, Adjunct Faculty, Philosophy and Religion, College of DuPage

Session Description

The presenter argues that we have to do research on something which we are passionate about, something we truly believe in, with the intention to make a positive change or contribution to society. Noble intentions necessitate a noble path. Therefore, unethical intentions and practices have no place in research.

Presentation Summary

Introduction

Research is the reason for our progress, but it is neither value-free nor neutral. It can help us flourish or destroy life on this planet. For example, research in biological science and medicine can result in finding cures and vaccines to save lives as well as to develop biological weapons of mass destruction. Whether ethical relativists or objectivists, there is consensus among all people that researchers should abide by the ethical principles and norms governing their area. Researcher and research institutions may have their immediate and longtime goals, but do they have an ultimate goal of making a positive contribution to society? The answer depends on our understanding of humans as an atomic self or a relational self. This article attempts to show why we should avoid the extremes of collectivism and atomic self and affirms relational self, which is consistent with reason and human experience, and favors democracy and good society.

Moral Code in Research

Like other countries, the United States lacked proper regulation for research in the past. Negative experiences in different professional fields necessitated moral codes in diverse professional areas, especially in research. Atrocious medical research in concentration camps in Germany resulted in the Nuremberg Code. The horrific Tuskegee Syphilis Study (1932-1973) and similar clinical trials using prisoners and other vulnerable populations in the United States resulted in the Belmont Report of 1976, The Common Rule, and the Institutional Review Board in research institutions. Research is often a social and collaborative activity, and usually, society invests in

research. Therefore, there is unanimity today that researchers should not fabricate, falsify or misrepresent research data which can significantly harm others. However, people who advocate an atomic self deny any ultimate goal for research or social commitment; whereas those who believe in a relational self may affirm that the ultimate goal of research is to make a positive contribution to society. For those who are committed to work towards a good society, moral values and norms come from within, not simply an outside moral code to avoid legal problems. I agree with the sentiments of John Dewey, an American philosopher and educational theorist, who believed that education should be about more than preparation for lives of personal fulfillment and professional accomplishment. The ultimate rationale for education is to make democracy work and to create a good society.

Atomic Self and Ethics

John Locke (1632-1704), Ayn Rand (1905-1982), and Robert Nozick (1938-1982) are presented here as the representatives of an atomic self. Locke's political philosophy theory has huge economic and ethical implications. According to him, human beings are born with God-given rights – the right to life, liberty, and private property – which no one, including the state, can take away. Therefore, he proposed minimal government whose responsibility is to protect an individual's rights, especially the right to private property. Rand in her collection of essays, Virtues of Selfishness: A new concept of egoism (1964), argues for Rational Ethical Egoism. She asserted that self-interest or self-survival should be the motive behind all of our actions; as acting altruistically is the source of all evil. Unfortunately, she presents a false dilemma which the followers failed to recognize: either you work for your self-interest and self-survival or perform self-sacrificial service to others and destroy yourself. In real life, selfinterest and care for others are compatible. Great leaders like M.K. Gandhi have shown that it is through working for the common good that we fully realize ourselves. Nozick develops his political philosophy based on individual rights, especially that of private property. He affirms formal rights, especially equal opportunity for all. Nevertheless, he argues that it is immoral for the state to try to rectify natural inequalities of individuals such as physical or mental disabilities, sickness and so on. To tax the rich to pay for the less privileged in society is theft. In conclusion, philosophers who support the atomic self believe that society consists of self-sufficient and self-

governing individuals who live with their rights, especially private property. They are acting morally when they act for their own self-interest or self-survival.

Relational Self and Ethics

Those who believe in a relational self often give attention to the consequences of your actions to yourself and to the larger society in ethical decision making. For example, Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873) in their Utilitarian ethic consider good actions as those that bring "greatest happiness or good for the greatest number of people." Those actions which bring pain and suffering to oneself and others are bad. Jean-Paul Sartre (1905-1980), a French existentialist philosopher, in his work, Existentialism, writes, "We always ought to choose good because nothing can be good for us without being good for all." This total and deep responsibility creates anguish because of the concern, "Am I really the kind of man (sic) who has the right to act in such a way that humanity might guide itself by my action?" Sartre rightly asserts that our actions not only affect our immediate neighbors and our community, but ultimately humanity as such. Alasdair McIntyre (1929-), a virtue ethicist, in his work, After Virtue, emphasizes the inter-connectedness of our existence. He writes, "I am born with the past; and to try to cut myself off from that past, in the individualist mode, is to deform my present relationships." Again, "I can only answer the question 'What am I to do?' if I can answer the prior question of 'What story or stories do I find myself a part of?" Even though McIntyre is right in individuals' integral relationship to society, he failed to recognize that ultimately our stories are tied up with the story of humanity as such. Care and Feminist ethicists like Carol Gilligan (1936-) emphasizes the role of relationships, friendships, and care in human life, and their importance in ethical deliberations

Conclusion

Atomic self and the ethics of self-interest or self-survival, I think, are a distorted view of humans, as well as of morality. An ethic purely based on formal or negative rights concentrates power and wealth in a small minority, further deteriorates the quality of life for the vast majority of people, and is therefore, unsustainable. Collectivism, on the opposing side, is not an option. An ethic based on relational self is the only tenable position today. We are what we are today because

many people invested so much in us through their services. Our life becomes meaningful and finds realization through our contribution to the common good. Research is an important area of human activity, and commitment of the researcher to moral values and principles is going to determine the future of the world. Educational institutions have a responsibility to equip future researchers with moral values and commitment to work for a better world.

ACADEMIC INTEGRITY COMMITTEE RETROSPECTIVE

Jarret Dyer, Coordinator, Specialized Testing Services College of DuPage

Bob Hazard, Associate Professor, College of DuPage

Presentation Description

A review of the past two years of trials and successes experienced in developing a comprehensive Academic Integrity program at College of DuPage.

Presentation Summary

The last two years have seen great progress in the development of a comprehensive Academic Integrity Office at the College of DuPage. Currently housed in the Office of the Dean of Students, the Office of Integrity would be a new, self-governing office within Academic Affairs. The presentation consisted of a brief history, current status and future goals of the Office of Integrity at College of DuPage

Historical Background

In 2015, at the request of faculty, the Academic Integrity Committee was formed to evaluate the current academic integrity process at College of DuPage and make a recommendation to the Associate Vice President of Academic Affairs on the best course of action to transition the functionality of the academic dishonesty process from Student Services to Academic Affairs. During the course of the committee's work, several obstacles continued to impede progress, namely the constant transition of administrators overseeing the work of the committee. At the time of this presentation, the committee had reported to six administrators in three years. Most of the early work of the committee was taking the college policy and subsequent procedure and transitioning the procedure to fit under the new administrative structure. This included input from Faculty Senate, the College of DuPage Adjuncts Association (CODAA), the College of DuPage Faculty Association (CODFA), as well as various other impacted constituency groups.

In 2016, the committee formally changed its title to the Academic Integrity Transition Committee and began to focus on the process of evaluating the transition of the reporting of academic dishonesty to Academic Affairs. During that time, a side conversation spurred a number of faculty development sessions during faculty in-service activities. From this came the creation of a faculty resources page through the library, as well as a faculty recognition award for those

adhering to best practices in testing. Additionally, an informal poll of faculty suggested that reportable incidents of academic dishonesty could be as high as 3,000 per year, but that faculty failed to report them, as they no longer believed the system would sufficiently sanction students.

Throughout this time, the committee continued to work on the procedure through additional administrative changes, therefore impeding any forward progress. There were several positive side initiatives. The committee launched a slogan contest to encourage students to create a slogan for the academic honesty campaign. The students submitted multiple slogans and the committee selected one finalist and two runners up. These slogans were used on media to promote the college's involvement in a global ethics event on October 18, 2017 as well as throughout additional activities during the subsequent academic years.

During the final months leading up to the conference, with an impending seventh administrative transition and as the college faced additional restructuring as Student Services and Academic Affairs were realigning under the newly created Provost positon, it was decided to focus the energies of the committee from procedural alignment to project awareness. At that time, committee members met with the Dean of Students and her team to outline the early steps of the transition, understanding that funding had not been secured to complete the transition. Additionally, due to a lack of faculty reporting, the evidence was not available to make a clear, concise case to allocate the resources necessary to create an office of integrity on the COD campus. This, in many ways, was an artifact of the multiple directions the committee had taken through the myriad of administrative oversight. All that said, it is clear that more data was needed to support the claim that this office was necessary.

Current Status

The team has transitioned once again from the Academic Integrity Transition Committee into the Academic Integrity Implementation Committee. This is an exciting step towards finalizing the transition process and beginning to focus on the keep component of the committee's initial vision; to invigorate the dialogue and discourse of academic integrity and its benefits on our college campus. This has brought new vigor to the committee and several exciting events have happened as of late. Through the affiliation of the committee with the International Center of Academic Integrity (ICAI), a relationship was established with the European Network for Academic Integrity. From this, one of the co-chairs traveled to Izmir, Turkey on a Global

Education Grant through the COD Foundation to attend the 4th Annual Plagiarism Across Europe and Beyond Conference. In addition, the committee finalized the FY18 year by presenting here at the 8th Annual Responsible Conduct of Research and Academic Integrity Conference at College of DuPage.

Future

The committee is excited to continue to invigorate the campus community and is creating a multi-year strategic plan that includes increased involvement in campus activities. This academic year, the committee will be present at New Student Orientation, Faculty In-Service and the Student Life Fair during the fall. Additionally, a full week of professional development is planned around the October inservice, which happens to align with Global Ethics Week. Further, a screening of the international film, Bad Genius will take place during February as part of COD's Global Flicks Program. The committee will continue to participate in academic integrity discussions with the intent of raising expectations with faculty to produce the data needed supporting the creation of an office of academic integrity on campus.

CRAFTING ASSIGNMENTS THAT SCAFFOLD ACADEMIC INTEGRITY: MAKING PLAGIARISM DOWNRIGHT DIFFICULT

Patti Tylka, Senior Academic Coach, College of DuPage

Presentation Description

Using the workshop model, participants explore elements of assignment design that create a framework for students to successfully navigate the cognitive demands of research writing without plagiarizing. After analyzing an assignment, participants discuss revisions that implement design strategies presented in the workshop.

Presentation Summary

Many students are often woefully underprepared for college writing. Some of them have not read or written a paper requiring the integration of multiple research sources: they have not developed a system for researching, keeping track of sources, integrating a quotation or paraphrased information, organizing ideas, writing, or editing. These students who lack skills in planning a writing project are more likely to plagiarize.

Academic plagiarism can be classified into four main types: Some students, intentional plagiarizers, focused on the product (the grade) and not what they might learn through the reading and writing process, will attempt to purchase or "borrow" papers. Rarely, students unconsciously plagiarize; their studies have blurred the lines between what they have read and what is common knowledge. More often, students unintentionally plagiarize out of ignorance (lack of experience) and careless note taking and writing. Finally, some students who have good intentions at the beginning of the project run out of time at the end and become intentional plagiarizers; the paper is due and they don't have the time or energy to complete the project with fidelity, so they fabricate or incorrectly attribute sources.

Although it helps to understand the variety of plagiarizers that an instructor may encounter, more important are the ways that an instructor can prevent it.

 It's important for instructors to take class time to discuss academic integrity. It is not enough to post the school's policies and expect students to read it. Most won't. Students should understand that, through research and writing, they are participating in an academic conversation. They are building their authority and credibility as writers, their own

academic integrity. Although a conversation about "cheating" is not always an easy one, the instructor who takes the time to clarify his expectations signals that plagiarism is a serious offense. This discussion should include a definition of plagiarism (some students have an incomplete understanding of the term) and stipulate the difference between acceptable collaboration and plagiarism. Students should know how easy it is to recognize and prove plagiarism has occurred; this becomes clear when an instructor explains the process she uses to detect it and requires students to submit papers electronically. Intentional plagiarism is deterred by stories of how plagiarism was revealed and what happened to the student who submitted plagiarized work.

- 2. Instructors who create specific, original assignments make it more difficult for students to purchase or reuse others' work. Providing explicit research topics and precise assignment instructions help novice writers to successfully achieve the assignment goals without the temptation to plagiarize. And when students know the purpose of the assignment and how it connects to them, their attitudes about writing improve, and their motivation to complete the task accurately increases.
- 3. Instructors who require students to meet process targets not only provide support for their neophyte writers, but they also make it almost impossible for a student to use another's work. Asking students to submit a topic, a research question, a summary of early research, an annotated bibliography, an outline, and multiple drafts also allows the instructor to spotcheck and suggest fixes for errors before the final copy is completed. Although some students may have difficulty settling in on their topic early on, instructors who do not allow a late change of topic are less likely to receive a purchased or re-used assignment. Many instructors find a brief meeting with the student during the writing process helps to keep students honest and improves the final product.
- 4. When instructors require students to visit the school's writing center, they are enlisting a second set of eyes that help prevent plagiarism in the final copy. While working with students, writing coaches recognize unintentional plagiarism, identify it for the student, and suggest editing solutions. They model correct use of quotations,

paraphrases, summary, in-text citations and bibliographical citations. In addition, many writing centers offer webinars, video lessons, or in-class visits to assist in delicate aspects of academic writing such as integrating quotations, using signal phrases with paraphrased material, formatting in-text citations, and proofreading.

5. Finally, requiring students to write a reflective essay after the final paper has been submitted gives the student the opportunity to make connections between the process and the product. Students who have not done the work cannot write a metacognitive reflection of their research, writing process, and new learning.

CONDUCTING RESPONSIBLE AND ETHICAL ARCHAEOLOGICAL RESEARCH ON EASTER ISLAND: BUILDING DIACHRONIC AND LASTING RELATIONSHIPS WITH THE LOCAL RAPA NUI (EASTER ISLAND) COMMUNITY.

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Figure 1. a: Tree planting on Poike in 2014; b: AMD pollution clean—up in 2017; c: Manu Iri field trip to 'Anakena to clean—up AMD in 2017; d: Manu Iri field trip to a basalt quarrying site in Pu Tokitoki in 2016; e: Geoarchaeological documentation of a basalt mine on the southwest coast in 2014 (All photos courtesy of the RNGP).

Rapa Nui (RN) has been the focus of countless scientific studies, which have investigated the famous *ahu* (platform), *moai* (statue), *pukao* (topknot), and almost millennium—long Polynesian culture^{1–4}. Since 2001, I have had the honor and the responsibility to carry out ethical anthropological research on Easter Island⁵. This long–term relationship between the Rapa Nui community and myself has been actively fostered through the creation of social rapport,

bolstered by: 1) environmental activism; 2) educational outreach; and 3) academic research, presentation, and publication.

- 1) While RN faces many environmental problems, two of recent focus points include the island's deforestation and anthropogenic marine debris (AMD) pollution. To deal with the former, many initiatives have been conducted around the island, especially on Poike, where the islanders, multiple Chilean and local agencies, and even tourists have participated in tree planting campaigns (Figure 1a). This, in turn, has led to the reforestation of many parts of the island. To deal with the latter, multiple coastal clean-up efforts (Figure 1b) have focused on the collection and the removal of marine litter and waste that arrive to island's shores daily⁶⁻⁷. Most recently, I have identified and quantified some of the AMD arriving to RN8, providing a better understanding of the relationship between the South Pacific Gyre and microplastic pollution, how industrial fishing (both legal and illegal) is a major cause of open water and coastal contamination, and how the islanders themselves contribute to and are under health risk due to the complex AMD pollution problem.
- 2) Over the last 12 years, I have worked with two educational outreach programs: Terevaka Archaeological Outreach9-10 and Manu Iri Heritage Guardians¹¹⁻¹². I have also worked with the local RN Museum and Chilean Heritage Council (Figure 1c-d) to create and conduct archaeological summer camps and excursions for the island's youth¹³⁻¹⁴. Combined, these educational outreach efforts have produced classroom and field resources and curriculum which have been delivered to hundreds of local students; some of which, have gone on to earn college degrees in anthropology and archaeology. I have also worked with RN tourism agencies and guide associations to create anthropological workshops and field visits¹⁵⁻¹⁷. This experience lets me argue that the best way to establish diachronic relationships within the communities we work with, is by taking an interest in their children's education and enculturation. By showing an interest in the present, local communities realize that you are also interested and invested in their future.
- 3) The rapport that I have created through environmental activism and educational outreach has allowed me to become trusted by the local RN island community. In turn, this confidence, along with my 17 years of on–island experience, has helped me to be identified as an ethical and empirical researcher. As such, I have had the honor to conduct multiple types of anthropological research, including investigations about RN's famous monumental architecture (*moai* and *ahu*) and material culture^{18–23}. However, although *moai* and *ahu* have been under the research gaze of many international, Chilean,

and local academics, archaeological investigation of the island's many basalt (a type of volcanic stone) sources and artifacts, including their geological provenance and geochemistry, is practically invisible. Consequently, this lack of comprehensive geochemistry for basalt sources and artifacts has restricted the potential of prehistoric interaction studies. To fill this gap in the archaeological literature, the "Rapa Nui Geochemical Project (RNGP)" was established in 2013. Its main goals are: 1) to further recognize the ancient Rapanui as expert geological miners who developed multiple basalt artifact reduction sequences; 2) to identify patterns of prehistoric sociopolitical and economic interaction through the transfer of basaltic material; and 3) to empirically assess cultural interpretations put forward by the socioecological collapse narrative which speculates that Easter Island's prehistoric inhabitants knowingly participated in unsustainable cultural competition and megalithic development, leading to the island's reported ecocide and cultural downfall²⁴⁻²⁵. As such, the RNGP collaborated with more than 20 individuals from 15 institutions from around the globe to conduct field archaeology and geology (four campaigns from 2014–2017; Figure 1e), geoarchaeological and material culture documentation (SLR camera and drone photos/videos and artifactual 3D scanning), geochemical analyses including inductively coupled plasma-mass spectrometry to detect major and minor elements and isotopic data, and radiometric dating²⁶⁻³⁰. Results from five study areas reveal a diversity of operational sequences for basalt tool making which parallels the numerous sociopolitical and economic avenues used by the ancient Rapanui to acquire basalt for artifact creation. At least four pathways for the transfer of basalt were uncovered by the RNGP; they included, opportunistic, kin-based, elite redistribution, and communal means. Thus, the prehistoric sociopolitical and economic complexity and connectivity outlined in this study refutes cultural propositions put forward by the collapse narrative and establishes the common interaction and collaboration between mata (clans) that existed during RN's past, especially regarding the access to and use of culturally valuable stone such as basalt.

To end, the points of emphasis that I would like to raise are the following. First, the best way to become accepted in the groups in which we work with is to become active in community environmental and educational projects; many hands make heavy work light – it also builds rapport. Second, I argue that the best way to avoid academic dishonestly, is to create empirical research design where all data that is to be used for analysis, is collected by the project and its team members. While collaboration is crucial to all fields, academic empiricism gives us bricks to build new walls, not

plagiarized ones. Third, on an island like RN, one must understand the current sociopolitical environment and how this could affect research design, permit acquisition, research timing, publication, and presentation. Simply, before you write a research proposal, make sure you not only have the support of the local group you work with, but also, that your project is of interest and importance to who you work with.

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ETHICAL ISSUES IN OPIOID TREATMENT AGREEMENTS FOR PAIN CONTROL

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Abstract

Chronic pain is complicated by substantial psychological and functional impairment that can have a profound effect on quality of life. More than 75 million Americans suffer from chronic pain, and the number of these patients followed in primary care practices is rising (Adams et al., 2001; Gureje, 1998).

Opioid medications are known to be effective in relieving chronic pain and can improve mood and functional status as well (Turk, 2002). There is no question that competing public health concerns, i.e. the under-treatment of pain and the abuse of prescription drugs, present a major policy dilemma in the United States of America. The "War on Pain" stands at odds with the "War on Drugs" in America. On the one hand, the Institute of Medicine has called effective pain management a "moral imperative" and a "professional responsibility" while on the other hand the media and political environment highlights the dangers of addiction and diversion of opioid drugs to third parties (Institute of Medicine, 2011b). The balance struck between these two goals is often a policy of requiring opioid treatment agreements as standard practice (Fishman, 2010). Providers are cautious about prescribing opioids owing to concern about their addictive properties and side-effects, and concern about regulatory sanctions. As care of patients with chronic pain in the primary care setting increases, many physicians have come to rely on opioid treatment agreements (OTAs) to demonstrate their own professional compliance, causing numerous ethical quandaries (Texas Medical Board, July 2012). This paper will explore ways to approach patients

http://www.tmb.state.tx.us/rules/docs/Board_Rules_Eff ective_05_16_2012.pdf

¹ In Texas the Medical Board has adopted guidelines noting that "Treatment of chronic pain requires a reasonably detailed and documented plan to assure that the treatment is monitored. An explanation of the physician's rationale is especially required for cases in which treatment with scheduled drugs is difficult to relate to the patients' objective physical, radiographic, or laboratory findings." TMB Bulletin, July 2012: See Chapter 170 of the Texas Medical Board rules

in need of pain control with a more nuanced approach than is now common.

I. Opioid Crisis 3.0

Over 2 million Americans have a substance use disorder involving prescription pain relievers and over 590,000 are addicted to heroin (Center for Behavioral Health Statistics and Quality, 2016). Drug overdose has now become the leading cause of accidental death in the U.S. In 2015 alone, over 55,000 Americans died due to lethal overdose. The leading cause of the rise in drug overdose is opioid addiction. In 2015, over 20,000 Americans died from prescription opioid overdose and over 12,000 Americans died due to heroin overdose (Center for Disease Control, 2016). In 2012, over 250 million opioid prescriptions were written. To put that into perspective, that is enough to allow each adult living in the U.S. to have their own bottle of opioids (Center for Disease Control, 2014). The rise in the use of heroin is directly related to the misuse of prescription opiates, with 4 out of 5 heroin users admitting that they first started out abusing prescription pain relievers (Jones, 2013).

It may be tempting for some to perceive individuals suffering from addiction as morally weak; however, substance abuse disorder must be seen as a bio-psycho-socio-spiritual problem. Individuals have been demonstrated to be genetically predisposed to substance use disorders (Erwin, 2015). Drug addiction has been shown to reflect abnormal functioning of the neural circuitry that causes increased craving of substances and reduced impulse control (Eagleman, Correro, & Singh, 2010). Drug abuse leads to changes in the structure of the epigenome and eventually the brain. Literature suggests that social and economic inequalities lead to poor health outcomes (Cushing, Morello-Frosch, Wander, & Pastor, 2015). Disease progression has shown susceptibility to early influences in the environment, with epigenetic changes directing the early development of the individual (Jirtle & Skinner, 2007).

Effectively treating chronic pain and curtailing opiate dependence poses a great dilemma among physicians. As mentioned previously, among the methods which attempt to manage this dilemma are OTAs. OTAs are used often due to the belief that they may lead to a better adherence to opiate treatment regimens with less chance of abuse. However, minimal research exists to support this belief (Helft, Williams, & Bandy, 2014). Nor is there any evidence to suggest that OTAs increase treatment efficacy (Fishman, 2010). On the contrary,

OTAs pose a threat to the physician-patient relationship. Insistence on a contractual agreement may cause diminished patient motivation to comply with treatment plans (Goldberg & Rich, 2014). Furthermore, increased prosecution of physician mis-prescribing has caused physicians to look at patients suffering from pain with suspicion. Perhaps most damaging of all is that this attitude of avoidance is preventing physicians from accurately diagnosing and treating patients with chronic pain and substance use disorder (Dineen & Dubois, 2015).

Nearly 100 million Americans suffer from chronic pain (Institute of Medicine, 2011a). The causes of these painful conditions include: spinal trauma, spinal disc disease and low back pain, fibromyalgia, arthritis, various types of neuropathies, migraine headaches, surgical complications, cancer, etc. (Adams et al., 2001). Despite the large numbers of patients suffering from chronic pain, under treatment continues to be a problem. In one study conducted in the U.S., about 34% of advanced cancer patients continued to report pain a month after their visit to the physician (Weingart, Cleary, & Stuver, 2012). In another U.S. study, 51% of chronic non-cancer pain sufferers reported that they had little to no control over their pain (American Academy of Pain Medicine, 2006). One reason for undertreated pain may be due to physician attitudes towards patients suffering from chronic pain. Patients suffering from pain have reported that their physicians tended to avoid them, or minimized their pain (Upshur, Bacigalupe, & Luckmann, 2010). This culture of avoidance will undoubtedly damage the therapeutic alliance. In order to make long-lasting behavioral changes in patients and to effectively treat pain, a good physician-patient relationship is needed (Farin, Gramm, & Schmidt, 2013). It has been demonstrated that a strong therapeutic alliance is a predictor of successful treatment in patients with a history of substance use disorder (Meier, Barrowclough, & Donmall, 2005).

It is clear that there needs to be a balance to counter the current dilemma. However, a balanced approach will require a comprehensive assessment and an individualized approach (St. Marie & Arnstein, 2016). Although it seems easier to implement utilizing OTAs as standard policy for all patients receiving opiates, there is tremendous collateral damage to the physician-patient relationship.

The increasing attractiveness of OTAs is likely a response to increased federal regulations to counter the current opioid epidemic (American Academy of Pain Medicine, 2013; Federation of State Medical Boards

2013). The thought process behind OTAs may be to provide a way to "mitigate professional and legal liability" for physicians in the wake of increased prosecution (Arnold, Han, & Seltzer, 2006).

Given the growing research in the field of epigenetics, and certain individuals' genetic predisposition to drug abuse, we must ask if the addict is truly at fault. Since environmental factors are contributing to epigenetic changes, particularly those coming from a background of social and economic inequality, how much control does an individual possess over genetic predisposition to substance abuse?

II. History

In the past century, the U.S. has seen multiple cycles of opioid use and consequent regulations (Frakt, 2014; Haffajee, 2016). And to this day, the pendulum continues to swing.

Beginning in the late 1800's, when opioids were completely unregulated, physicians were known to prescribe opioids for all types of pain (Kolodny, 2015). Consequently, opioid dependence became a common problem. The response to rising opioid addiction was the 1906 Pure Drug and Food Act and the 1914 Harrison Anti-Narcotics Act. These regulations required physicians to physically write prescriptions for opiates, which were taxed, and also made it compulsory for physicians to keep records of the drugs they prescribed (Hohenstein, 2002; Weber, 2010).

Following this first cycle, in the 1950's, the U.S. saw a resurgence of opioid use and lethal overdoses. The response to this second cycle was Nixon's War on Drugs in the 1960's. This response made it difficult for providers to prescribe pain relievers for fear of diversion and prosecution (Drug Enforcement Administration, 2010). However, by 1969 a counter-crisis had occurred. Undertreated pain was recognized as a human right to avoid unnecessary suffering (Institute of Medicine, 2011a). The resulting increase in opioid prescriptions and concurrent benzodiazepines has caused economic concerns (Robinson, 2015).

In Texas the Intractable Pain Treatment Act (IPTA) was passed in 1989 (Hill, 1992; Thorpe, 1990). This Act attempted to protect physicians from the Texas Medical Board discipline in the case of physicians prescribing for intractable pain. In 1996 the IPTA was amended to allow physicians to prescribe pain medications to patients in pain despite having a history of substance abuse (Leichter, 2013). Proper documentation was required for these patients in particular. This

amendment tried addressing the growing concerns about undertreated pain due to physician reluctance, particularly cancer pain. This Act was in line with the War on Cancer and recognizing that Cancer Centers were engines of economic growth in Texas.

This brings us to contemporary times. The third cycle started around 2010, where the U.S. saw another resurgence of opioid use and lethal overdoses. The U.S. is now responding to the fear that those suffering from opioid addiction are dangerous (Appelbaum, 2013). In Texas, the IPTA was reinterpreted to allow prosecution of physicians who fail to make responsible efforts to avoid diversion to third parties. Similarly, other states have enacted laws that aim to prevent prescription drug abuse (National Conference of State Legislatures, 2016). Furthermore, the Federal DEA publicizes cases against doctors who violate federal law (Drug Enforcement Administration, 2016).

III. Historic Policy Shifts

The continuous cycles of policy shifts have created uncertainty for physicians and confusion for patients. The culture of avoidance may be a reflection of the uncertainty for physicians. The huge policy swings are driven by fear. Some of the fear may be justified. However, the fear needs to be balanced by rational thinking (Appelbaum, 2013). Fear and unpredictability have historically led to restrictions on liberty and the moral basis for informed consent. When patients are deemed a danger to themselves or to others, society is justified to restrict goods that would otherwise be seen as inappropriate. This is true of civil liberties, and explains why the Nixonian "War on drugs" worked to limit access, and why current stories of opioid addiction among middle class patients are widespread in the media (Frontline, 2018; NovusDetox, 2018; Times, 2016). Haffajee has suggested that ethical considerations of proportionality, minimal infringement, fairness, and public accountability are minimal requirements of any policy on OTA contracts. Reactions to fear will do little to promote reasoned discourse on this topic and should be replaced with a more balanced approach (Frakt, 2014; Haffajee, 2016).

Our current response to the opioid crisis requires physicians to predict patient behavior. This is not only difficult to do, it asks the physician to assume responsibility for behavior of the patient, rather than her own prescribing behavior (Dineen & Dubois, 2015). The conflict of interests between predicting patient behavior and protecting one's own ability to practice medicine may result in physicians avoiding prescribing, or denying behavioral markers

indicating cause for concern (Upshur et al., 2010). The use of OTAs becomes a path to plausible deniability (Helft et al., 2014).

The use of OTAs interferes with the physician-patient relationship by substituting a contract for a conversation. And the damage to the therapeutic alliance undermines the long-term goal of the patient's health. Patients who do not understand the terms of the OTA may be coerced into signing a document in order to obtain needed pain control. Yet because predicting which patients are deceiving the physician regarding their intent, it may be the physician who is coerced into prescribing.

Looking at the history of opioid use in the U.S., it is apparent that the old way of looking at this problem has not worked in the area of opioid addiction. It is time to ask new questions.

IV New Questions

The goals of the new questions should not change. We must find a way to adequately control the pain of patients who need it, while minimizing addiction to prescription medications and diversion to the black market for drugs. We propose attention should be directed towards the ethical issues raised by the use of treatment agreements in the prescribing of opioids to patients.

 Pressures on the Physician-Patient Relationship: To reinforce the physician-patient relationship, reduce coercion, and bolster informed consent we need to ask: What would a personalized approach to opioid prescribing look like?

Goldberg, et al. have suggested that informed consent to the OTA should be required to include that the physician explain to the patient what is expected of her is order to safely engage in a trial of opioid analgesia (Goldberg & Rich, 2014). We will explore additional answers to this question in the next section.

2. Coercion and Informed Consent: Does the patient asked to sign an opioid treatment agreement adequately understand what the agreement means, or are they signing it in order to get the drugs?

There may be unlikely benefits and probable harms to a balancing approach that relies on opioid treatment agreements to ensure compliance with the prescribed pain medications. Patients are not aware of who will benefit from the OTA, with many believing the OTA is for the benefit of the physician. This indicates the need for

much more substantial education of patients prior to obtaining informed consent for the use of these instruments.

- 3. **Conflict of Interest:** To reduce the conflict of interests we should ask: Is the physician working below the standard of care in prescribing opioids?
 - a. Physicians face conflicts of interest and commitment in prescribing adequate pain control to patients.
 - b. Physicians have an obligation to place the interests of their patients first, including the balance of needed pain control and the potential for addiction.
 - However, the current legal environment encourages physicians to justify clinical decisions that are premised on predicting patient behavior.

The balance of the two pressures will predictably tend to push physicians to either under-prescribe pain medications, or require the use of an opioid treatment agreement in which the patient gives assurance they will not overuse or divert the medication. Current laws place the burden of lie detection on physicians who are labeled as "mis-prescribing" if they are duped into believing their patients (Dineen & Dubois, 2015). A more flexible standard of care analysis would require physicians to examine their own behavior, rather than the behavior of patients. This flexibility would put patients at the center of the balancing equation, rather than placing physicians in a conflicted position. However it could heighten the need for a particularized inquiry by regulatory agencies into the total facts of a case.

V. Possible Answers

Our research is one small piece of the larger puzzle, but it gives clues to the direction we need to move. We surveyed 55 patients who were prescribed opiates and/or diagnosed with opiate dependence in the outpatient psychiatry clinic at Texas Tech University Health Sciences Center in Lubbock, Texas (Erwin, Sharma, Baronia, Abdali, & Manning, 2016). We administered an anonymous 21-item survey asking patients about their previous experiences with OTAs, history of detoxification, overdose, rehabilitation programs, likeliness to divert medications, thoughts about communicating such information with federal agencies, etc. Our survey population included majority women 69.09% (n=38/55) with a mean age of 46.7 years and men

30.91% (n=17/55) with a mean age of 41.94 years. The majority identified ethnically Caucasian (75%), African-American (3%), Hispanic (18%) and multiracial or other (3%). The average length of time our patient population had been using opiate medication was 7.21 years. The data compared patient characteristics and reported behaviors.

Demographics of Participants and Providers in this Survey			
Gender	Male	31%	
	Female	69%	
Ethnicity	Caucasian	75%	
	Hispanic	18%	
	African American	3%	
	Multiracial	2%	
	Other	2%	
Prescribing Physician	Primary Care Physician	59%	
	Psychiatrist	4%	
	Other	37%	

Table 1

1. **Pressures on the Physician-Patient Relationship:** To reinforce the physician-patient relationship, reduce coercion, and bolster informed consent we need to ask: What would a personalized approach to opioid prescribing look like?

We found that those patients with a history of overdose/detoxification/rehabilitation (O/D/R) are 21 times as likely to divert medications to others as compared with those who have no history of O/D/R:

Who Diverts Opioids to Third Persons By History of Overdose/Detox/Rehab					
(O/D/R)					
	All	History of O/D/R	No Prior History		
Yes	12%	83%	7%		
No	88%	11%	89%		
	2270		5270		

	Chi-Square = 17.9434 p-value = 0.001				
Who Diverts Opioids to Third Persons By Gender					
	All	Male	Female		
Yes	12%	67%	33%		
No	88%	23%	77%		
	Chi-Square = 4.9076				
p-value = 0.047					

Table 2

2. **Coercion and Informed Consent:** Does the patient asked to sign an opioid treatment agreement adequately understand what the agreement means, or are they signing it in order to get the drugs?

Who Does the Opiate Treatment Agreement Information go to?		
Health Care Providers	22%	
Federal/State Reporting Agencies	4%	
Insurance	2%	
Employer	2%	
Don't Know	70%	
All of the Above	0%	

Table 3

Key findings from our study include:

- Patients are not aware of who will benefit from the OTA, with many believing the OTA is for the benefit of the physician.
- The least likely person to divert drugs to others is a woman with no history of O/D/R.
- Those with a history of O/D/R are much more likely to share or divert medications to others.
- Furthermore, exploring patient comments gave us some further insight into the patients' perspectives on OTAs. Some patient comments included:

- "Lack of some privacy"
- "If you have surgery and need something stronger you can't get it"
- "Prevents Emergency Room Doctors from Prescribing in Emergency"
- "Just makes me feel the Dr. thinks you are an addict"
- 3. **Conflict of Interest:** To reduce the conflict of interests we should ask: Is the physician working below the standard of care in prescribing opioids?

Our study also illustrated ways that laws in many states provide unhelpful incentives to avoid the difficult issues of between-patient differences in propensity to become addicted. In Texas the Medical Board has adopted guidelines noting that state: "Treatment of chronic pain requires a reasonably detailed and documented plan to assure that the treatment is monitored." Individual patients require personalized consideration and monitoring, yet OTAs have become an easy way to comply with the law. The use of OTAs seems to be used to provide coverage from the possibility of investigation by the Medical Board more than as an aid to patients.

To address this issue, the legal environment should recognize the conflicted position of physicians and rather than ask for documentation, ask for appropriate patient care.

VI. Conclusion

Rather than continue on the pendulum of restrictive and then permissive policies that do not work, we need to engage the evidence and best thinking around the topic of new ways to provide the pain relief that patients need while engaging those most likely to abuse opioids in alternative treatments including referral to therapy for drug abuse.

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THE IMPORTANCE OF MODELING ETHICAL PRACTICES IN MEDICINE

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Introduction

This issue of the Texas Tech University Ethics Journal introduces ethical issues encountered in the practice of medicine. We introduce the role of medical ethics with a focus on Sir William Osler and the continuing need for role models in medicine. Once described by a student as having "a vivid personality as well as the finest mind and character" (Bliss, 1999, p. 234), Osler could be described as the role model for all physicians (Berk, 1987). Medical students seek role models during their training first as medical students and continue this search as residents and practitioners. The Center for Ethics, Humanities & Spirituality at the School of Medicine was formed, in part, to encourage an appreciation of ethical conduct and the preservation of values that are the necessary foundation to earn the respect and admiration reserved for those we call role models.

This paper will explore the reasons why role models are important in this time when our nation's healthcare system is both fragile and more necessary than ever. Healthcare has been at the epicenter of changes in society as we have seen social relationships change, economic conditions become more bifurcated, and opportunities expand for some, but not all of our population. It may seem that role models are a vestige of an idealized past, but to the those who look, it is clear that role models still inspire us from within our own communities. As ethical leaders of medicine emerge to meet today's challenging conditions, this journal will provide a home for exploration of how best to meet our common interests thoughtfully and with compassion for those who depend on medicine at their most vulnerable point.

Role models are particularly important in the lives of physicians in training, and remain so throughout the early years of the physician's career. The ethical aspirations of medicine are not tied to the political

winds of change. Although medicine is influenced by larger social and political values, it has its own norms and traditions (Gawande, 2016). For physicians, therefore, it is important to be aware of the unique place of medical ethics within our profession as well as our nation. We are stronger when we understand one another, listen, and learn from one another. Role models are powerful teachers precisely because they teach us who we are, and show us who we could become.

Role models differ from mentors because while a mentor has in mind the mentee's growth and development (Souba, 2000), a role model is not necessarily involved in an affected person's daily life. Role models may have a profound effect on the individual through example or influence (Wright, Kern, Kolodner, Howard, & Brancati, 1997). Medical students perceive individuals as role models because of their personal and professional behaviors and attributes (Benbassat, 2014). Students who witness unethical behavior readily recognize this. Because we teach the importance of ethical conduct, students who witness bad behavior may become confused (Feudtner, Christakis, & Christakis, 1994). This suggests the affirmation of institutional commitment to ethical norms is equal in importance to the teaching of ethics. There is clearly a need for open conversation about the values of compassion, dignity, and reason in the practice of patient care.

Early role models in medicine demonstrate the room for growth within the profession, and within the student. The ancient anatomist Galen (c. 130 - 200) was seen as nearly sacred, and students were told only to memorize his physiology, including the three chambered heart. Human knowledge was largely unchanged until Vessalius (1514 – 1564) and da Vinci (1452-1519) provided illustrations of the correct anatomy which resulted in a shift in thinking about both physiology and the place of students in forming their own impressions (Debus, 1978). The new way of looking at the human body brought with it a new respect for the power of reason and observation demonstrated by the new role models. Although the older ideas of human anatomy were replaced, the tradition that provided a foundation for a further advance of knowledge was newly esteemed (Kearney, 1971). The legacy of seeing for oneself did not diminish the need for role models, rather it inculcated a newfound appreciation for the value of reason as a humanistic appreciation of human capacity for transformation (Isaacson, 2017). From the

Renaissance onward, the meaning of a role model was not to constrain the student, but to liberate them to use their own talents to serve others.

Why do we need role models?

Medical students need role models as a living example for what it means to be a healer. Recent studies demonstrate that medical students continue to look for specific, "ideal" qualities in physician role models (Koh et al., 2015). Skeptics in the world of business have noted that role models are increasingly difficult to identify (Sonnenberg, 2017) while pointing out a universal need for someone to lead us by example. In every practical walk of life, we have a longing for guides to point the way past the pot-holes that threaten to stall our careers and the dreams we had when we first embarked on this journey through educational training. For that reason alone, we need to be on the lookout for role models in our own lives who we can look to for guidance. Even if the role models we find around us are imperfect, they point the way to the person we hope to be and can become over years of commitment to integrity in our own walk.

David Brooks has written about how we develop character through the emulation of those we admire. He states that he was at first "not sure I could follow the road to character, but I wanted at least to know what the road looks like and how other people have trodden it" (Brooks, 2015). Looking to role models is a future oriented process that asks us to imagine what kinds of persons we want to become. As such, when we look for a role model, we are looking for someone who can point out the signposts on the road to an anticipated future. Role models inspire us to push ourselves to do better in the future, even if we have failed to live up to our current aspirations. Role models do not have to be perfect, and they are sometimes even more compelling when we perceive the struggles they faced and dealt with in their own lives. We learn about role models not from emails or blogs or teaching in a classroom, but by lived experience and watching them set an example of caring and diligence in the midst of frustration or thwarted goals.

We learn from role models through stories. The men and women who teach us the ways of being in the world and what it means to be wise use experiences to teach us what is important on the road to our destination (Doukas et al., 2015). One could quote the Serenity Prayer – "God grant me the serenity to accept what I cannot change, the

courage to change what I can, and the wisdom to know the difference." But it is not until one learns of Betty Ford's struggle with alcoholism and ultimately her entrance to rehab to overcome her addiction, can one realize what this prayer means to the patients who live at the Betty Ford Center as they recite this prayer as a group every morning. Role models are not memorized words or slogans, they are ordinary people who teach us the real truths about who we are today, who we have been in the past, and who we might aspire to be in the future (Nussbaum, 2016). They teach through stories, because wisdom cannot be memorized, it can only be learned through experience.

For physicians in training, role models serve as a counter-balance to the many pressures and challenges of practicing medicine in the twenty-first century (Hafferty, 2006). Students enter the profession of medicine with a desire to help their fellow humans to recover health and promote human flourishing. Yet the practice of medicine takes place in a complex organizational structure with hierarchical relationships that must be navigated for the good of the patient, and the protection of one's career (Doukas et al., 2015). Scientific and clinical information requires good judgment, and even the most celebrated role model in medicine. Sir William Osler recalled in his own role model in Sir Thomas Browne one whose "subtle influences give stability to character and help give a sane outlook on the complex problems of life... whose thoughts become his thoughts and whose ways become his ways" (Osler, 2001b). Although the pressures of today's medicine are different than in Osler's time, the need for role models is just as urgent so that we may keep ever in front of us the struggles and triumphs, the pain of human failing and the spirit of keeping calm in the midst of tribulations.

Role models in medicine provide a vision of possible future selves and ways to practice medicine true to the values we hold important. Sometimes it takes a senior colleague or professor to see the vision of what one could become in their professional career. One of the most endearing traits of Osler was his ability to see the potential in his colleagues and students. He took the time from his busy schedule to write personal letters of recommendation for younger physicians, like John Finney, who would later prove out Osler's vision of success built on good judgment (Stone, 2016). Students today need the same type of vision to imagine the sort of positive role they may play in their

chosen work. Role models provide the vision both by example and, sometimes, by their willingness to support others in word and deed.

An ethical and socially responsible commitment to humanistic practice in the model of the men and women who have inspired us, is more important than it has ever been. The technology that we now have, including gene editing, artificial intelligence harbor the potential for both great advances and great disparities in the future of human life. We cannot afford to repeat the mistakes of hubris and the unreflective adulation of technology without remembering that the humanities and the sciences, "twin berries on one stem" (Osler, 2001a), are both needed in the practice of medicine. The humanities are a guide to how to be in the world. As Dr. John P. McGovern said "[i]t is important not to forget that the messages of Osler are truly messages of life with practical insight about daily living and human potential that reach beyond the healthcare professional to all whom venture to turn these pages" (McGovern, 2001). Role models are important because they give practical insight into how to be fully human and truly authentic.

Who are the role models for medicine?

We have not lost our admiration for traditions and traditional role models in medicine. Some remarkable men and women stand out as enduring the test of time. We will look at three such historical figures in Hippocrates, Paracelsus, Elizabeth Blackwell, and then turn our focus to the way in which a fourth, Sir William Osler, helped to define what practice should be, and how practitioners can seek a balance in a life in medicine. Finally, I will bring the art of being a role model up to date with two contemporary role models in medicine: Dr. John P. McGovern, and Dr. Steven Berk.

Reaching back in time, it is difficult to comprehend the ways that Hippocrates or Paracelsus have shaped medicine as we know it today. Hippocrates (460 – 377 B.C.) secularized the human body in a way that allowed us to study the nature of man as a corporeal body, comprised of matter, and susceptible to human understanding. The doctrine of the four humors expressed a comprehensive theory of medicine and disease that incorporated ethics, physics, and observation. Paracelsus (1493-1541), influenced by Renaissance humanism, re-enchanted the human body as imbued with divine nature. Influenced by Renaissance humanism, Paracelsus challenged the theory of four humors and the medical authorities who blindly

followed it (Paracelsus, 1949). His influence is felt in the search for evidence to support or refute theories handed down for a thousand years. Later physicians, most notably Vesalius and Harvey, would take the critical reasoning of humanism and begin to measure physical properties. Yet it was the master teacher Leonardo DaVinci who most fully embodied the spirit of science and the humanities through a willingness to see for himself, and to challenge the orthodox wisdom of the powerful rulers of his time. DaVinci is truly the role model for the next 450 years. The beginnings of scientific medicine, married to humanistic appreciation of the whole person was thus born and later re-born in the birth of bioethics (Jonsen, 1998). Although humanism lay dormant in medicine, it was not forgotten as we shall see in the stories of later role models.

Elizabeth Blackwell is a role model for generations of women in medicine as much for her writing and encouragement of others as for her place in history as the first woman to graduate from a medical school in the United States. Blackwell was refused a recommendation for medical education by the male physicians she asked for letters. She eventually paid for private instruction in anatomy and applied to several medical schools. She gained admission to the Geneva Medical School in New York state, where she obtained a medical degree in 1849. Upon graduation she was unable to find a job in any institution, so she started a dispensary of her own. In 1857 she opened the New York Infirmary for Women and Children, then moved to England in 1869 to further the cause of women physicians in London (Blackwell, 1890). Blackwell not only fought to have her own career, she helped her younger sister obtain a place in medicine and opened the door to innumerable women who followed. Like Osler, Blackwell has earned a place in the Medical Role Model Hall of Fame, if such a thing exists. Blackwell could have been content to engross herself in her hard-won career. Yet she reached out to other women in order to encourage them and to break down barriers of culture and prejudice. It is a very modern trait to want to reach one's own potential, but it is extraordinary for her to have not only overcome her own barriers, but to have helped other women to do the same. In many ways Elizabeth Blackwell set up a possible future where women and men could participate in the practice of medicine as full partners.

Sir William Osler's treatment of the women attending Johns Hopkins Medical School in the years from 1893 to 1905 could be both infuriating and appreciated, by turns. Osler had spoken out about the

right of women to enter medicine in 1891 but said he would not encourage a daughter to go into medicine. Osler could be funny, friendly, paternal, beguiling, and incomprehensible especially to the women in his classes. Gertrude Stein, who eventually chose to leave medical school for other callings, was given a low passing grade by Osler. She was failed by the faculty in the subjects of obstetrics, laryngology and rhinology, ophthalmology and otology, and dermatology. In truth, Osler could have failed her but chose the kindness of letting her make her own decision to leave. Osler was at once an excellent physician and a humanistic example of caring for his students. "It was Osler, you know, and his behavior cannot be predicted" said a colleague (Bliss, 1999, p. 235). Osler left a legacy of caring and honest appraisal of any situation. He lived his advice to students: "Be careful when you get into practice to cultivate equally well your hearts and your heads" (Osler, 1899). As for women in the profession, Osler had changed his mind by 1907, and talked about the future of women in medicine at London's Royal Free Hospital (Bliss, 1999, p. 354). He recognized the future of medicine would have to adapt to women, just as women would need to adapt to the realities of medical practice.

Osler is quoted throughout the halls of medicine, sometimes juxtaposed against corporate slogans for "better medicine through technology." Osler counseled the physician to look more deeply than the latest fads. Abraham Nussbaum has written about this incongruity, noting how "speakers come around to hospitals and medical schools when the preliminary results are promising, but we never hear from them after their hopes are dashed in follow-up trials." At talks about the newest technology it is not uncommon to find a poster extolling humanism in the background. Nussbaum writes, "One of them caught my eye. Attributed to Sir William Osler, it read, 'The value of experience is not in seeing much, but in seeing wisely" (Nussbaum, 2016, p. 14). Today Osler could be, by comparison to the newest drugs, a boring subject of conversation. It is possible to brush off Osler's teachings by noting that contemporary ethical issues in medicine escape Osler's direct teachings. Yet the lessons he taught about cultivating inner wisdom as well as technical skills remains an inspiration to medical students one hundred years after his death. Few role models in history can say the same. To understand Osler's enduring relevance, one needs only to listen to his words quoting Goethe, "a talent forms itself in silence" (Osler, 2001c, p. 14), or Horace, "Happy the man - and happy he alone, he who can

call today his own" (Osler, 2001c, p. 15), and the Lord's Prayer – "you need no other" (Osler, 2001c, p. 16). Osler was widely read in the humanities and disciplined in his approach to work. He modeled his advice to apply your head as well as you heart to wisdom.

Contemporary role models can seem elusive, yet they are all around us. It is often difficult to identify them. This difficulty stems from two sources. First, the most admirable are often the most humble and least self-promoting in a world that rewards self-promotion. And second, in a media rich world of ad campaigns and a 24-hour news cycle, our attention is constantly being diverted to the splashy ad or the hottest scandal. The important thing may be as Osler counseled, to see wisely past the noise and to focus on the importance and deep meaning of a life well lived. I want to introduce the reader to two such contemporary role models in medicine.

Dr. Steven Berk, the Dean of the Texas Tech University School of Medicine has been a role model to countless of our medical students. Each year Dr. Berk invites every member of the incoming class of medical students to engage in a conversation about humanism in medicine during the first week of medical school. Dr. Berk has written extensively about Osler, citing his influence on medical education and training of young physicians. Through Dr. Berk we can see the influence of role models and how Osler has inspired physicians who themselves became role models to a new generation. Such was the hope of his first biographer, Harvey Cushing who hoped "something of Osler's spirit may be conveyed to those of a generation that has not known him" (Cushing, 1982). Dr. Berk has written extensively about the remarks and advice Osler provided his students (Berk, 1987, 1989). A new generation of students has written about Dr. Berk (Foreman, 2015) and his beneficent influence upon his development as a compassionate physician. That the legacy of humanistic medicine passes from Osler, to Berk, and on to Dr. Foreman is a testament to the staying power of role models in medicine.

Dr. John P. McGovern is one of the most influential medical role models in the twentieth century. Dr. John P. McGovern founded the American Osler Society and provided a great deal of funding to assure the vision of humanistic medicine would live on to a new generation. Dr. McGovern attended medical school at Duke University School of Medicine under then Dean Wilburt Davison. Dr. Davison trained with Osler at Oxford. "To understand John P.

McGovern is to know Davison and Osler" (Boutwell, 2014, p. 42). So strong was the bond in the Osler/Davison/McGovern friendship that the names are forever linked through a common vision of medicine as a fully humanistic and patient-centered venture. Dr. McGovern was an excellent physician who balanced his devotion to medicine with an appreciation of the pressures faced by physicians to bend away from Paracelsus' admonition that "Where there is no love there is no art" (McGovern, 1988, p. 7). McGovern followed Osler in his practice of incorporating the humanities into the art of medicine as a way to nurture that love of fellow human beings, pointing out that Osler genuinely cared for his patients. The same has been said of Dr. McGovern many times over (Leake et al., 1981). But McGovern also had extraordinary business acumen, eventually building a foundation that has benefited thousands of medical students, and many times more patients who have received care from compassionate physicians trained in the lessons of medical humanities and ethics. In many ways Dr. McGovern, more than any single person save his wife Katherine G. McGovern, kept alive the Oslerian traditions through his generosity and deep understanding of the ways in which medicine is a human endeavor, and not merely technical. The McGovern Foundation today funds the Medical Humanities Certificate Program at Texas Tech University Health Sciences Center School of Medicine. The values of humanistic medicine live on in our medical graduates.

Medical schools around the country incorporate the Medical Humanities into the curriculum as recognition of the need to develop the doctor's heart as well as mind. Students learn to read literature alongside biochemistry, and practice listening with their hearts as well as their minds (Erwin, 2013). During their first summer of medical school our students encounter physician role models like Paul Kalanithi who wrote about the meaning of career achievement and simultaneously searching for ultimate meaning in life and death at the age of 38. Kalanithi wrote When Breath Becomes Air as he was dying from inoperable cancer. His lessons are those of a contemporary role model: after winning the highest awards in medicine, his last words were to his daughter, his wife. "Money, status, all the vanities the preacher of Ecclesiastes described hold so little interest: a chasing after wind, indeed" (Kalanithi, 2016, p. 198). Achievement in the world of career means nothing without the human connection to our fellow travelers on this journey of life.

Role models are a connection to others

We celebrate empathy as a value in our physicians because when we are ill, we want to be understood in our most vulnerable time as still fully human – a patient, not a customer (Mol, 2008). Empathy is positively correlated to pro-social behavior relating to the struggles of others, volunteer work, and donation to charity (Wilhelm & Bekkers, 2010). It may not come as a surprise that empathy in the larger society has been in decline since 1970, perhaps as a response to the larger social changes that have occurred (Brooks, 2015, pp. 240-260). Sara Konrath has documented that from 1970 to 2009 college students are 40 percent less likely to understand what another person is feeling (Konrath, O'Brien, & Hsing, 2011). Unsurprisingly, social isolation has been identified as a major risk factor for illness and even death (Cacioppo, Capitanio, & Cacioppos, 2014). Role models remind us that connection to others is the foundation of a life well lived, both in our professional achievements and in our personal lives. More importantly, role models connect us to the past and to the future through the lived experience of friendship.

When Dr. Berk speaks with the incoming medical students, he does more than preach about the virtues of caring for patients. He opens his life experiences to sharing and conversation. Students question him, and his answers are both humorous and honest when he discusses what it is like to be held at gunpoint by an ex-convict for eight hours. He relates his lived experience as a doctor caring for others as he describes how he was able to make a human connection with his assailant. And he relates these experiences to his knowledge of Osler and the value of Oslerian equanimity on the most challenging day in his life. Students are invited to share a part of Dr. Berk's life, and he connects with them on a human level as well as a professional one.

Role models are a connection to ourselves

The role models who inspire us teach us something important about ourselves and our role in the world. David Brooks calls this the duality of the world of achievement and the world of internal self knowledge. Leo Tolstoy captured this idea in his novel *The Death of Ivan Illych*. The main character is a lawyer and judge who is suddenly facing his death at age 45 when he realizes that his loveless marriage and desolate inner life are in stark contrast to his successful career in which he performed his duty admirably. That duty was to do what those with the power to grant him career advancement and financial

reward deemed it proper for him to do. Yet as he lay dying he felt as though he were falling downward with no family, not even his wife, to care about his demise. Illych takes the compassion of a servant boy as the last morsel of kindness available to him and realizes the rich inner life that he failed to develop during the rapid ascent in his career (Tolstoy, 2004).

Dr. John P. McGovern knew better than anyone that taking care of ourselves is critical to taking care of patients. Dr. McGovern understood that a rich inner life nourishes the meaning of the day's work in caring for others. Although he was a successful businessman, he was first a doctor, and a husband, and someone who understood that giving to others enriched his own life. Today it is impossible to drive through the Houston Medical Center without noticing his name on multiple buildings. His gifts to the Texas Tech University Health Sciences Center might be unnamed, but they are not forgotten by our students who know by his example the value of knowing yourself, and understanding what is truly important in the practice of medicine.

Conclusion

Role models remind us of who we are and who we can be. They give us an aspirational goal in a time when our language has become demoralized and talk of common good has become replaced with a focus on individual achievement. In suffering, we talk about a desire for "closure" and moving on in the world of achievement, while the past teaches us to find meaning in our shared experiences and connection to others. From Hippocrates to Paracelsus we learned the balance of secular medicine must be balanced with spiritual purpose. From Elizabeth Blackwell we learn the balancing influence of women in medicine. Role models like Osler teach us that service to the world of science and medicine must be balanced with the humanities, like twin berries on a single stem. Role models connect our inner and outer lives and remind us that we stop serving other people at the peril of losing our own personal balance and connections that sustain our spirit.

The medical humanities offer insights into the ways that role models can provide a way for doctors in training to define who they want to be as professional healers. A full examination of medical ethics includes reflection on those who came before us, and the lessons they pass along on the journey. As Dr. John P. McGovern noted, the

lessons are really about more than our professional life, they are about our whole life and how to flourish in our careers as well as in our personal lives. Without these lessons from history and the moral imagination, we become unable to distinguish the better path towards those things that give meaning to the events in our life.

In this paper, we have argued that Sir William Osler and other role models are still relevant to today's world because of the timeless grounding in the classic humanities and the openness to change that they foster. In this year's incoming class of medical students at Texas Tech, women are equally represented with men. The inclusion of women as role models is thus a necessary complement to inspire our students. Elizabeth Blackwell was our first female medical school graduate, but many women have followed and made their own mark on medicine. Dean Berk has been a supporter of women in medicine, and has elevated women to positions of leadership within the school. These role models inspire and lead by example, incorporating ethical leadership with excellence in scientific knowledge to serve our patients. Our students and our patients deserve no less.

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UNDOCUMENTED IMMIGRATION TO THE UNITED STATES, EXPLAINED

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To explain why or how international migration occurs and why immigrants decide, or perhaps are forced, to migrate without legal documentation is a very complex issue. It takes me an entire semester to explain to my students the complexities associated with how and why undocumented immigration to the U.S. exists. Here, I explain just that, why people migrate without legal documents to the United States. Basically, it is because they have no other choice. While the U.S. maintains a huge demand for cheap labor and unskilled occupations, U.S. immigration laws don't provide an avenue for these undocumented immigrants, the majority from Mexico and Central America, to do it the right way, so they end up with no other choice but to do it clandestinely. Today we have a broken immigration system. Almost 11 million undocumented immigrants are scattered all over the U.S. and are deeply discriminated against, working under extreme, exploitative conditions and living in fear of deportation.

First, it is important to understand that since the beginning of life on earth, all living things have survived through migration. For example, birds and wales migrate every year thousands of miles for survival. In the same way, human beings migrate looking for places to settle and find water, food, jobs and other means to survive. Migration is a natural phenomenon. Therefore, if people can survive in their places of origin, they would prefer to stay in their birthplace with all their family members and friends with whom they grew up. People decide to migrate for survival after things at home become very difficult with little employment, scarce food, or danger from natural disasters, wars or famines. Therefore, we need to think about international migration as a natural social process that exists for living things to survive on earth.

According to the Pew Research Center, as of 2016 the estimated number of undocumented immigrants in the U.S. reached almost 11 million. Out of these eleven million, about half are from Mexico and almost another two million are from Central America. Therefore, about three quarters (or 78%) of the 11 million are from Mexico and Central America. Very interestingly the number of unauthorized immigrants in the U.S. has been declining in the last decade (see

figure 1). Still, about one in four immigrants lack legal documentation (Pew Research Center, 2018).

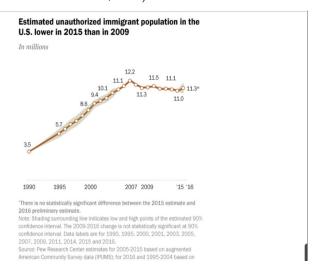


Figure 1

Well, then the question becomes, why is this the case? Why do we have such a large population of undocumented immigrants in the U.S.? Do immigrants not want to apply for legalization or can they not afford the paperwork? Perhaps these supposed lawbreakers and criminals just don't care or want to apply for legal status. Oftentimes, we hear people say, "why don't they come the legal way like my ancestors did and stand in the back of the line?" I would say that most of these perceptions about why people are undocumented are wrong. Due to lack of information, some believe that immigrants would rather risk their lives crossing harsh desert than apply and get legal documents. Why would they rather be exploited and live in the U.S. in the shadows with the risk of being deported and separated from their family members, if they could really apply to become "legal"?

This is a country of immigration and most of the people who live in the U.S. are either immigrants or descendants of immigrants (Foner, 2000). So why do we have so many undocumented immigrants living in the U.S.? According to a recent NPR (2017) interview by Robert Siegel with political scientist Norman Ornstein, the host cited our last three U.S. Presidents claiming that there is a serious problem with the immigration system in the U.S. For example, former President George

W. Bush once said, "the laws governing the immigration system aren't working." Former President Barack Obama once said, "Our immigration system is broken." Even our current President Donald Trump has claimed that "We have a dysfunctional immigration system." Therefore, Siegel concludes that there is a real problem with the immigration system in the U.S. What do these presidents really mean when they say our immigration system is broken and dysfunctional? In order to understand better how our immigration system is broken, it is important to first understand a little about the history of immigration laws and European migration at the turn of the twentieth century.

European Immigration

How did these ancestors enter the United States the "right way" through standing at the back of the line? The truth is that immigration laws were more lenient at the turn of the 20th century. At the time, most European immigrants came by ships and once they arrived at Ellis Island, all they had to do was go through and pass the inspection to be welcomed into the U.S. (Foner, 2000). Most of them had a rough trip traveling in third-class cabins in vessels like the Titanic, but the good thing about that was that once they arrived at Ellis Island, as many as 99 percent were welcomed by the U.S. At the time, Europeans had to demonstrate that they didn't have a broken limb, that they were not prostitutes, polygamists, or that they were not sick with a contagious disease, as well as that they were not illiterate or insane. Only one percent of the 25 million who arrived at Ellis Island between 1880 and World War II were excluded and sent back to Europe by the U.S. immigration service (American Immigration Council, 2016). Upon admittance to the U.S., they qualified for legalization and received a green card in a manner quicker than most immigrants would today. Once they entered the country and had all their documentation correct, they then were able to also work legally and didn't have to worry at all about their immigration status (Flores-Yeffal, 2013). In fact, Flores-Yeffal (2013) argues that as a result of being legal in the U.S., Europeans were more easily assimilated into the U.S. mainstream society. Perhaps present-day undocumented immigrants have a more difficult time assimilating not because of their own faults, but because they are not considered full members of society by Americans, causing them to live as members of "Migration-Trust Networks".

Of course, European migrants such as Jewish, Italian, and Polish immigrants, experienced racial discrimination and exploitative conditions at work, but later they experienced a racial metamorphosis and became white. Nowadays most people don't differentiate European immigrants and we are less likely to discriminate against Jewish, Italian and Polish immigrants They also relied on social networks or what Flores-Yeffal (2013) calls, Migration-Trust Networks, and settled in communities with other migrants from the same places of origin in Europe, and created small communities in the U.S., such as little Italies (Harney & Scarpaci, 1981). In 1921 and 1924 was when the U.S. decided to implement immigration policy limiting Eastern and Southern European immigration, while extending more visas to those who migrated from western and northern European countries. The U.S. at the time wanted more educated migrants, not peasants to migrate to the U.S. (Alperin & Batalova, 2018). As a result of this, European migration ceased. Then, World War II caused a shortage of labor in the U.S. due the number of Americans who had gone to war. Therefore, the U.S. implemented the Bracero Program.

The Bracero Program

The Bracero program began in 1942 to allow Mexican workers the ability to legally work in the U.S. mostly in agriculture (Bracero History Archive, n.d.). The program lasted 22 years until 1964. During those twenty-two years, five million braceros came to the U.S. to work in agriculture (Mize & Swords, 2010). The braceros were inspected upon arrival, but their inspection was different from that of those Europeans who entered Ellis Island. They were naked and sprayed with DDT. I interviewed a few braceros in Mexico and they told me they had to wait in the North of Mexico, in Sonora, to be recruited in harsh conditions in the cold and sleeping outside for days. Once they entered the U.S., they continued to live and work under very harsh conditions. They had to pay for their housing, food, and transportation to the fields to work long hours under the sun. By the time they received their checks, most of their money was gone. One bracero told me, "we had no money left by the time we got paid, we didn't even have enough money to return to Mexico."

The Immigration Act of 1965

The year after the Bracero Program ended, the U.S. Immigration Act of 1965 was implemented. As a result of the civil rights movement during the time, this law repealed all the national origin quotas. For example, Asians could migrate to the U.S. once again (the Chinese

Exclusion Act of 1882 had banned the Chinese and the law was renewed several times throughout the years). In addition, the Immigration Act of 1965 implemented the Family Reunification Program so immigrants could re-unite with their immediate family members (Massey et al., 2002).

For the first time with the 1965 Act, there were restrictions on the number of visas for the Western Hemisphere. With this new law allowing only 200,000 visas per year from the entire hemisphere, those who wanted to migrate legally from Latin America and Mexico to the U.S. were severely affected and limited. In the wake of the Bracero Program ending and limitations on the number of visas for legal migration, the era of undocumented immigration began (Durand, Massey & Capoferro, 2005).

Neoclassical Economics and the Push and Pull

Even though the demand for cheap labor in the U.S. continued, the demise of the Bracero Program and the implementation of the Immigration Act of 1965 made legal immigration for people with lower skills from Mexico nearly impossible. Neoclassical economics theory at the macro level states that every time there is a demand for something, that demand acts as a magnet (a pull) and so a supply is needed to maintain an equilibrium. Therefore, if there is a demand for labor, there will be a supply of workers who will be attracted to fill those jobs (Massey et al., 1993). The most important reason I would say that our presidents have said that our immigration system is dysfunctional and that it is broken, it is because our laws are not allowing for a supply of labor to be available to fulfill the demand for cheap labor that exists in the U.S.

The problem was due to the fact that the only options for low skilled migrants to migrate legally to the U.S. through employment options became almost non-existent as only 10,000 visas per year are given to unskilled workers, while most of the visas (130,000) per year are given to workers with a lot of skills such as those with extraordinary abilities. According to the Pew Research Center, about half of the workers in the agricultural sector in the U.S. are undocumented workers, making undocumented immigrants very important to the U.S. economy (Goodman, 2014). As a result, we must consider that our current demand for cheap and unskilled labor in the U.S. is not being satisfied as a result of immigration laws, therefore, immigrants must migrate undocumented to satisfy these needs.

The last time we had an amnesty program which allowed for the legalization of immigrants who were undocumented after 1964 was in 1986 though the Immigration Reform and Control Act of 1986 (IRCA).

The Immigration Reform and Control Act of 1986

According to Flores-Yeffal (2013), approximately 3.5 million undocumented immigrants who were residing in the U.S. in 1986 obtained legalization through IRCA. The majority who received legalization were from Mexico (2.4 million). At the time legislators were thinking that undocumented immigration to the U.S. was going to stop if they did three things, 1) legalized undocumented immigrants. who were already in the U.S., 2) increased border enforcement (militarizing the border) so migrants could no longer cross clandestinely to the U.S. and, 3) implemented employer sanctions in order to stop the demand for cheap labor in the U.S. It is important to mention here that the employer sanctions law was implemented, but it was never fully enforced (only a few companies have been fined throughout the years). This situation kept the demand for cheap labor alive, attracting workers to migrate to the U.S. without legal documentation in order to satisfy such demand. Interestingly, in our minds, we always believe that those who are breaking the law are the undocumented immigrants, but we never think that the American employers are indeed the lawbreakers, violating the employer sanctions law implemented by IRCA. The fact is that our laws don't allow for the huge demand for cheap labor to be satisfied while the U.S. government doesn't do anything to stop that demand.

However, the United States did increase the militarization of the border after the IRCA. Beginning in 1993, the U.S. militarized the border by implementing blockades. This action added more border patrol agents and more technology to the parts of the U.S.-Mexico border through which undocumented immigrants crossed more easily before IRCA (Massey et al., 2002). As a result, undocumented immigrants attracted by labor demands started attempting to cross through harsher terrain and die in the process. On average, about 400 undocumented immigrant deaths have been recorded every year since 1993 (Massey et al., 2002) turning into more than 6,000 deaths by 2008 (Flores-Yeffal, 2013). This in turn created a more permanent undocumented immigrant population who got trapped in the U.S. What used to be a revolving door in the past (as undocumented immigrants used to enter the U.S. and return home and then come

again with ease), became a more permanent settlement. Figure 2 is a graph of the Mexican Migration Project data showing how as undocumented immigrants risked their lives more and more through time, they then decided to stay more permanently in the U.S. as the probability of return decreased considerably through time (Massey, Durand & Malone 2002).



Figure 2

The North American Free Trade Agreement

In order to understand how undocumented immigration also increased, it is important to discuss the North American Free Trade Agreement signed by President Clinton in 1994. Through this trade agreement, Mexico became a developing country, opening its doors to the free market economy and free trade (the free movement of goods and investors across borders) beside two more powerful countries, the U.S. and Canada. The three countries eliminated or reduced their tariffs considerably with each other. Also, American companies began to freely operate in Mexico. For the first few years of the implementation of NAFTA, many were displaced from their jobs in Mexico as American goods began to be sold in Mexico and American companies moved in. Mexican workers in Mexico in the cities with stable well-paying jobs lost their livelihoods as these factories and companies were not able to compete with American made goods

coming into Mexico being sold for cheaper prices (Hernández-León, 2004). Those in the agricultural sector in rural areas in Mexico also struggled. For example, farmers were not able to compete with the American corn which was being sold for cheaper prices and of better quality. Farmers in the U.S. receive subsidies from the government, but that's not the case for Mexican farmers. Unable to compete and suffering from large debt, a lot of farmers who had been farming for generations had to leave for the U.S. Since there are no unemployment or welfare benefits available to those in Mexico and Central American countries when they lose their jobs, people without food are left on their own. This lack of a safety net forces them to emigrate for survival (Hernández-León, 2004; Massey et al., 2002). Therefore, undocumented rural and urban emigration from Mexico increased after the NAFTA agreement, and also it was then more difficult to cross the border clandestinely given the militarization of the border due to IRCA. Smuggler fees also increased as shown in Figure 3, while the magnet of cheap labor demand continued with the employer sanctions in the US never being enforced. Additionally, the number of undocumented immigrants in the U.S. increased as the revolving door stopped, and they had to stay permanently in the U.S. (Massey et al., 2002).

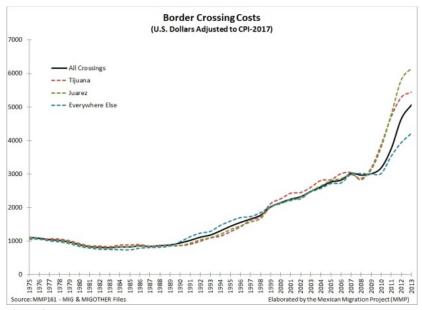


Figure 3

Getting a Green Card

Immigrants first must become permanent residents (U.S. Citizenship and Immigration Services, n.d.) for a period between three to five years in order to qualify for applying for U.S. citizenship. In order to become a permanent resident and be allowed to live and work legally in the U.S., international migrants first must qualify for a green card. After getting a green card or permanent residency, in order to apply for full U.S. citizenship, immigrants must demonstrate that they have lived in the U.S. as Permanent Residents for a period of time (between 3 to 5 years). They also must show they have been good citizens, paid taxes, have good credit, have not lived off of government aid, have a clear criminal record, etc. They must demonstrate knowledge of English and knowledge about U.S. history and the composition of the three branches of the government, etc. Clearly, immigrants go through a long process to become U.S. citizens, but it all begins by getting a green card or Permanent Resident card. Without getting a Permanent Residency card, the immigrant will be undocumented unless they can obtain temporary status or a special work permit, such as DACA (Deferred Action for Childhood Arrivals) or T.P.S. (Temporary Permanent Status). DACA does not grant permanent status; rather, it only provides a two-year work permit and protects holders from deportation, but the immigrants continue to live in legal limbo while they renew temporary status every two years, risking the possibility of losing status and becoming undocumented at any moment. The only way they can be more secure about their legal status is if they become a legal permanent resident (or obtain a green card) (Menjivar 2006: Gonzales, 2016).

If one visits the U.S. Citizenship and Immigration Services' (USCIS) webpage (https://www.uscis.gov/greencard) and looks at the options for immigrants to get a green card, one will notice that there are several categories to which immigrants can apply to migrate legally to the U.S. as Permanent Residents. Those categories are through family, employment, special immigrant, refugee or asylee, human trafficking of crime victims, victims of abuse, or other categories. Another category would be the lottery system, but the lottery system doesn't include any of the countries in Central America or Mexico. In the following paragraphs, I will explain how each of these categories pertain to the availability of visas for Mexican and Central American undocumented immigrants in the U.S.

Family reunification

Mexican migrants, for example, have difficulty getting a green card through the family reunification category due to huge backlogs of applications because of per country ceilings, causing the wait to be fifteen years or longer. In Figure 4, one can see how those who applied for a green card in 1993 (depending on the family reunification category such as if they are the spouses or children of lawful permanent residents, the parents of a permanent resident, or brothers or sisters of a permanent resident, etc.) had to wait almost 20 years to get their green cards (Batara, 2013). All the other preference categories have similar dates as shown in Figure 4. Therefore, if you are from Mexico and you apply via family reunification it will take from 15 to 20 years to become a legal permanent resident in the U.S..

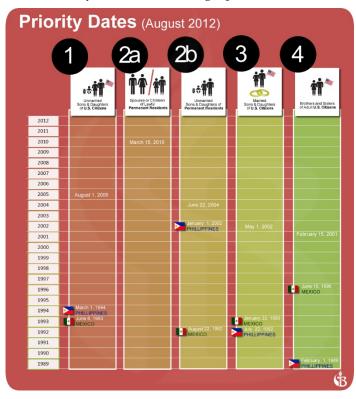


Figure 4: Waiting times for those who apply for a green card via the family reunification categories by country of origin as in 2012. Source: (Holpuch, 2017).

The fastest route to legalization for immigrants before 1996 was to marry a U.S. citizen. Unfortunately, after the implementation of

IIRIRA (The Illegal Immigration Reform and Immigrant Responsibility Act of 1996), that is no longer the case. Being undocumented in the U.S. is a civil offense (not criminal), but IIRIRA established that if an immigrant is deported from the U.S. and enters a second time without inspection, they are now criminal offenders. IIRIRA also now made it a felony for immigrants to use made-up social security numbers or fake documents for employment. Therefore, after 1996, those who re-enter the country and those who had used false documents to work are being incarcerated with long term penalties (Golash-Boza, 2015). In addition, and more importantly, IIRIRA implemented two types of immigration bars. The first bar makes immigrants who enter the U.S. without inspection or presenting documentation at a port of entry, who had been in the U.S. for less than six months, leave the U.S. for three or more years before being able to apply for a green card. If the immigrant entered the country again, without inspection, and had been in the U.S. for more than six months, then that immigrant had to leave the U.S. and perhaps go back to their own country for at least ten years before being able to apply for a green card (IIRIRA, 1996). Even if undocumented immigrants are married to U.S. citizens, they are not able to apply for legalization unless they leave the country for 10 years. It is important to note that most of these undocumented immigrants have already been living in the U.S. for many years, so it would be very difficult for them to leave their families, lives, and accomplishments behind.

Through Employment

Again, U.S. immigration law only offers green cards mostly to those immigrants with extraordinary abilities and to professionals. Table 1 describes all the employment-based categories preferred. Out of the 140,000 visas per year, the first preference is given to those immigrants with extraordinary abilities or 28.6%. Then the second preference is given to those with advanced degrees (another 28.6%). The third preference is given to those who, again, have very high skills, (another 28.6%), but as we can see, the visas for unskilled workers are only limited to 10,000 per year (Argueta, 2016). The rest of the visas are given to special immigrants and to investors. During the last few decades, we have had at least 400,000 undocumented immigrants arriving into the U.S. each year to satisfy the demand for unskilled labor (Massey et al. 2002), while our laws have only been awarding 10,000 visas per year to satisfy that demand. There are also temporary visas, such as the H2A and H2B visas, but the number of

visas is very low, something like 66,000 per year (Holpuch, 2017). Those visas are usually gone during the first day they are available as there are so many employers who need the workers. A report from the Pew Research Center (Passel & Cohn, 2016) shows that most of the undocumented migrants are of very young working ages, they state,

Fully 91% of unauthorized immigrant men ages 18 to 64 were working or looking for work in 2014, compared with 79% of U.S.-born men of similar age and 84% of lawful immigrants of similar age.

Therefore, this is an active, young, available working-age population which is greater than the native or lawful population in the U.S. In addition, the same report states that,

By occupation, unauthorized immigrants held a higher share of U.S. farming jobs (26%) in 2014 than would be expected given their share of the workforce. They also held a disproportionate share of construction jobs (15%). By contrast, unauthorized immigrants held a lower share of maintenance, management, professional, sales and office support jobs than their share of the workforce overall.

The report claims that undocumented immigrants currently in the labor force constitute five percent of the population in the U.S. From the interviews I have made on my own and from the report from the Human Rights Commission (Inter-American Commission on Human *Rights*, 2016), I have found that a lot of these immigrants work under exploitative conditions, with no health insurance, no vacations, no retirement plans, no overtime pay, some of them are not paid even the minimum wage. Many are expected to work very long hours under harsh conditions like being inside refrigerators without the right equipment, cooking in very hot kitchens at restaurants, being in the sun for too many hours, etc. Even worse, an injury can cause them to be fired without compensation or money for health care. Basically, these undocumented immigrants are working the jobs that "Americans don't want to do." So why would undocumented immigrants risk their lives to come to the U.S. and work under exploitative conditions if they could just do it "the right way"? The answer is that under the current immigration laws, there is no line to get to the back of; there is no way that most of the eleven million undocumented immigrants would qualify to become legal residents in the U.S. If these undocumented immigrants had the chance to come "the legal way," they would have done so! It is not because they

don't have the money to do so, as they pay very high fees to coyotes and smugglers (see Figure 3). Salvadoran migrants pay from \$10,000 to \$15,000 dollars in smuggling fees. Why would they risk their lives traveling thousands of miles, or enter the country inside of a trailer and risk suffocation and death, if they could apply for a legal visa to begin with? Why would they walk for more than five days without food and water in the desert, risking their lives if they could do it the right way? In the past few days of writing this essay a little girl, Jakelin Caal Maquin, from Guatemala, a member of the caravan and only seven years of age, died attempting to cross to the U.S. to ask for asylum with her father (Heidbrink & Stalz, 2018).

Category Employment-Based Preference Immigrants		Numerical limit Worldwide Level 140,000
2 nd preference— "advanced degree"	Members of the professions holding advanced degrees or persons of exceptional abilities in the sciences, art, or business	28.6% of worldwide limit (40,040) plus unused $1^{\rm sx}$ preference
3 rd preference— "professional, skilled, and unskilled"	Skilled shortage workers with at least two years training or experience; professionals with baccalaureate degrees and unskilled shortage workers.	28.6% of worldwide limit (40,040) plus unused $1^{\rm sc}$ or $2^{\rm nd}$ preference; unskilled workers limited to 10,000
4 th preference— "special immigrants"	"Special immigrants," including ministers of religion, religious workers other than ministers, certain employees of the U.S. government abroad, and others	7.1% of worldwide limit (9,940); religious workers limited to 5,000
th preference— mmigrant vestors"	Immigrant investors who invest at least \$1 million (amount may vary in rural areas or areas of high unemployment) in a new commercial enterprise that will create at least 10 new jobs	7.1% of worldwide limit (9,940); 3,000 <i>minimum</i> reserved for investors in rural or high unemployment areas

Table 1 Source: (Argueta, 2016)

Refugees and Asylum Seekers

Historically, Central American migration to the U.S. began in the early 1900s, but it was very small for most of the twentieth century. Migration from Central America considerably increased during the 1980's as the U.S. allied with the opposition in Central America during the civil wars in Nicaragua and in El Salvador (Flores-Yeffal & Pren, 2018). These Central American migrants escaping violence during the civil wars could have qualified for asylum, but with the

U.S. providing weapons and funding to the opposition, asylum status was never provided to these immigrants fleeing the war. Instead, the U.S. has awarded them T.P.S. (Temporary Permanent Status), which allows them to work without legal residency and the status must be renewed every two years (Menjívar, 2006). Currently, there are more than 200,000 Salvadoran immigrants whose temporary status has been recently cancelled by the Trump Administration (Flores-Yeffal & Pren 2018). Therefore, historically the U.S. has discriminated against Central Americans and has refused to award them legal residency through seeking asylum status as a result of escaping the civil wars in that region.

There are thousands of migrants currently running away from violence in Mexico and Central American countries, such as Honduras, El Salvador, Guatemala. This can be seen with the migrant caravan (All Things Considered, November 22, 2018) arriving at the border during the past few days. I have personally interviewed these immigrants and they argue that they are running to save their lives from gang-related violence and poverty. Some immigrants explained to me that they never wanted to emigrate at all, but their stable jobs in their home countries were no match for the extortion from gangs. They would be told that if they didn't pay a monthly fee, that they will be killed. Some tried to pay the monthly fee and later realized that if they missed one payment, then the gang members would kill at least one family member. Most of them didn't report these incidents to the police as they also don't trust their governments due to high levels of corruption. When these Central American migrants come to the U.S. and ask for asylum, they don't have the correct paperwork to prove that their lives had been in danger. Also, Mexicans are running for their lives due to the war on drugs in Mexico, but the chances that their cases will be approved in the U.S. are very slim. Only 3 percent of the asylum applications were approved for Salvadoran immigrants in 2017 (Flores-Yeffal & Pren, 2018).

According to the Statistical Yearbook of DHS, (*U.S. Department of Homeland Security*, 2017) the majority of refugee visas were given to Cubans in 2017. However, recently on national TV we can see how Central American immigrants asking for asylum status are being portrayed as criminals that won't be allowed entry into the U.S. The Trump administration has gone so far as to send 5,000 troops to the border to stop their entry. When some asylum seekers with children tried to enter the border through Tijuana, they were received and attacked with tear gas (Domonoske & Gonzales, 2018). Around half

of undocumented immigrants arrive in the U.S. usually with a sixmonth tourist visa presented at a port of entry and then overstay their visa after. The problem also is that if they try to apply for a tourist visa from their home country, the majority can't as they must provide proof that they have a stable job, a stable place of residency, and a lot of money in the bank (Flores-Yeffal, 2013). Most people who live in poverty in their home country do not qualify for a tourist visa. Also, these tourist visas only allow immigrants to visit the U.S., and they are not allowed to work in the U.S.

Conclusion

In conclusion, while European immigrants who were also mostly unskilled became legal in the U.S. relatively easier by just entering through Ellis Island, today's immigrants from Central America and Mexico have a lot tougher time being able to become legal immigrants or to apply for a green card. After the Bracero Program and after the implementation of the Immigration Act of 1965, the Undocumented Era began for migrants from Mexico and Central America. To make it worse, NAFTA and the civil wars in Central America displaced more people who had to migrate internationally searching for survival during the 80s and 90s. The militarization of the border as a result of IRCA resulted in more deaths and a more permanent settlement of undocumented immigrants in the U.S.

As we can see, the U.S. immigration system is surrounded by a lot of complexities. I have concentrated my efforts on explaining why undocumented workers are here without documentation and why our immigration system is broken. Basically, our laws do not allow immigrants from Central America and Mexico (in particular) to migrate legally to the U.S. People cannot follow laws when there are no clear and reasonable options to follow them in the first place. Even though the demand for cheap labor continues and employer sanctions from IRCA have not been enforced, our immigration laws don't allow a path for unskilled workers to come to the U.S. legally. If our ancestors were trying to come to the U.S. today in the right way, would they have been able to do it? Most of us wouldn't be here today if that was the case.

Ethically, it is important to stop our fear and take a moment to investigate why the situation of undocumented migration is so critical today without making uninformed judgments. We also need to understand that migration is a natural process of people's existence. It is true that people are supposed to follow the laws, but we also

must take responsibility for people who escape their countries from civil wars as a result of U.S. intervention, and of people being displaced from their lifetime jobs due to our free trade agreements with those nations. We need to consider how our immigration laws cause the deaths of immigrants at the border and how our immigration laws do not match our labor needs.

We also need to see immigrants as human beings instead of as lawbreakers. In fact, several research studies have demonstrated that the presence of recent immigrants reduces crime in the U.S. instead of increasing it (Sampson, 2008; Romero, 2014; Flagg, 2018). Immigrants risking their lives and walking more than three thousand miles (in the migrant caravan) so they can feed and save the lives of their families is a heroic and natural act of survival. Imagine if you were in that situation, what would you have done in order to save the lives of you and your family members?

More ethically, we need to think of the fact that when people migrate, they begin a new life, and they have families, lifetime jobs with coworkers, friends and they also become consumers of other American businesses, pay property and sales taxes, and become an essential part of the American economy and of American's businesses and governments who also become dependent on them (Holpuch, 2017). For example, undocumented youth, or Dreamers, arrived in the U.S. as children with undocumented parents and grew up as American, became American students, are usually fluent in English and have assimilated to American society to the point where they know little to nothing about their home countries. President Trump's order to abolish DACA puts these talented undocumented youths' lives in limbo and they are now forced to live every day without knowing what their futures hold. This is damaging their mental health, when they could be fully successful and productive citizens and help the U.S. economy grow by paying taxes and bringing their talent into the table (Gonzales, 2016). Rather than attempting to repair a broken immigration system, at the time of this essay, legislators were wasting time shutting down the government to fund a border wall between Mexico and the U.S. I hope that in this essay it has been already demonstrated that a wall won't fix anything, on the contrary, it will exacerbate the undocumented immigration problem in the U.S. We need to appreciate the dignity of these undocumented immigrants and respect their efforts, as the only thing they are doing is being attracted by the magnet of the demand for cheap labor in the U.S. while at the same time, they are being denied the chance to enter the

country legally as a result of the broken immigration system in the United States.

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RESPONDING TO GLOBAL WARMING: ADAPTATION AND TRANSFORMATIONAL CHANGE

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The Problem

The inadequacy of global efforts to reduce emissions of gases that accumulate in the atmosphere and result in global warming has led to greater attention to coping with a warmer world. While the capacity to adjust in various ways to higher global average temperatures might imply less urgency to reducing emissions, adaptation is also costly. Thus, questions of equity and responsibility arise. As a global problem, climate change faces the challenges of formulating and implementing legal, ethical, and normative obligations. The system of sovereign states assumes that governments will attend first to their own interests. If economic growth requires burning more than a country's share of fossil fuels, so be it. No world government exists to prevent that, and a government that fails to maximize its own country's economic status risks popular disapproval and lost international standing. Since Machiavelli, the difficulties of acting on ethical principles in international politics has been well understood. Coping with the effects of climate change means addressing difficult challenges of externalities. The beneficiaries of activities that produce greenhouse gas (GHG) emissions do not have to pay all the costs. Small farmers in regions facing permanent drought due to global warming hardly contribute to the problem at all, but they might pay with their homes and livelihoods. Lacking an authority able to force compensation for externalities, the perpetrator can refuse to pay, leaving all the costs on those suffering the ill effects of global climate change. Reducing GHG emissions (mitigation) is falling short, leading to efforts to adjust (adaptation) which are costly, raising questions of equity and responsibility. The ethical issues are immensely difficult to solve in the institutional context of an anarchic state system that enables the imposition of externalities on others. The problem worsens as temperatures rise.

The Current Situation

The main responses to climate change include mitigation, adaptation, and geoengineering. Mitigation encompasses such measures as reduced use of fossil fuels, changed agricultural practices, and maintaining forests. Adaptation refers to adjustments to cope with

present and anticipated effects of climate change. Adaptation spans a wide spectrum, from minor adjustments to systemic transformations. Geoengineering is the attempt to apply technological fixes, to withdraw GHG from the atmosphere or manage solar radiation. These technologies are as yet unproven, not deployed, and could have unforeseen negative consequences.

The central question in international climate negotiations since adoption of the UN Framework Convention on Climate Change (UNFCCC) in 1992 has been mitigation. Until the Paris conference on climate in 2015, the generally accepted objective was to hold the temperature rise below 2°C compared to the pre-industrial era. At Paris, the member states participating in the negotiations agreed that 1.5°C should be the target, presumably avoiding climate change that, even at 2°C, would damage vulnerable areas. In December 2018, the parties to the UNFCCC met in Poland to consider how well the Paris agreement was performing at reducing GHG emissions. The news was not good. A reporter notes, "Looked at collectively, countries would need to increase their commitments fivefold to keep temperature rise below 1.5°C, according to the report. They would need to increase their commitments three-fold to keep them below 2°C. Scientists say crossing either threshold could unleash a slew of irreversible consequences." 1 Yet, despite progress on some fronts, the necessary "ratcheting up" of commitments to GHG reductions does not appear to be happening. Instead, the United States, embracing climate science denial,² announced its intention to withdraw from the Paris pact and has taken regulatory steps to weaken U.S. commitments to reduce emissions.³ The administration rejected the Poland conference's declaration that climate change could have

¹ Justin Worland (2018) "The U.S. Isn't the Only Major Country Not Meeting Its Climate Goals," *TIME* November 27, http://time.com/5463519/climate-change-united-nations-report/, accessed December 10, 2018.

² John Timmer (2015) "Senate staff reshuffle: Climate denial is everywhere," *Ars technica* (January 13) http://arstechnica.com/science/2015/01/senate-staff-reshuffle-climate-denial-is-everywhere/, accessed December 10, 2018.

³ Carol Davenport and Lisa Friedman (2018) "How Trump Is Ensuring That Greenhouse Gas Emissions Will Rise," *New York Times* (November 26) <a href="https://www.nytimes.com/2018/11/26/climate/trump-greenhouse-gas-emissions.html?rref=collection%2Fsectioncollection%2Fclimate&action=click&contentCollection=climate®ion=stream&module=stream_unit&version=latest&contentPlacement=16&pgtype=sectionfront, accessed December 10, 2018.

dangerous effects on human society. U.S. policy could derail the Paris accord entirely, as other countries decide the absence of the world's second-largest GHG emitter after China renders the agreement futile. Brazil, for its part, has changed course on climate policy toward higher emissions with the election of right-wing Jair Bolsonaro. Other countries, while not formally rejecting the climate science or international agreements, have set emissions targets too weak to make much difference. In all, the prospects for mitigation are not bright.

Indeed, it may be too late to achieve the 1.5°C goal without massive deployment of technology to remove GHG from the atmosphere. Even staying below 2°C likely requires rapid transformation of the global energy system, along with reversing deforestation and less reliance on livestock for food. Yet, the stronger commitments to reduce emissions are not likely to be forthcoming, while GHG emissions are instead increasing. Even with the Paris agreement, current commitments would likely lead to 3.5°C increase at the end of this century. If Paris is abandoned altogether, temperature rise of 4.0°C or more is possible. The world has been hotter before, but

⁴ David Nakamura and Darryl Fears (2018) "Trump administration resists global climate efforts at home and overseas," *Washington Post* (December 9) https://www.washingtonpost.com/politics/trump-administration-resists-global-climate-efforts-at-home-overseas/2018/12/09/b94a9ef0-fa41-11e8-863c-9e2f864d47e7 story.html?utm_term=.d5141cc8171c, accessed December 10, 2018.

⁵ Somini Sengupta (2018) "U.S.-China Friction Threatens to Undercut the Fight Against Climate Change," *New York Times* (December 7) https://www.nytimes.com/2018/12/07/climate/us-china-climate-change.html, accessed December 10, 2018.

⁶ Marina Lopes (2018) "Activists feared Brazil's Bolsonaro would accelerate Amazon deforestation. Now they think it's already happening," Washington Post, (December 7) <a href="https://www.washingtonpost.com/world/2018/12/07/activists-feared-brazils-bolsonaro-would-accelerate-amazon-deforestation-now-they-think-its-already-happening/?utm_term=.0ba874b1b71e, accessed December 10, 2018.

⁷ Chelsea Harvey (2018) "CO2 Emissions Reached an All-Time High in 2018," *Scientific American* (December 6) https://www.scientificamerican.com/article/co2-emissions-reached-an-all-time-high-in-2018/, accessed December 10, 2018.

⁸ Betts A, Collins M, Hemming DL, Jones CD, Lowe JA and Sanderson, MG (2011) When could global warming reach 4°C? Phil Trans R Soc A: 369: 67–84. Available at http://rsta.royalsocietypublishing. org/content/369/1934/67.

never has the global average temperature changed this quickly, and never has human civilization existed in a world that much warmer.

The Fourth National Climate Assessment, a product of numerous U.S. agencies, found that the United States is already experiencing the consequences of rising global temperatures, and the negative effects are likely to be much greater in the future. A key message of the report is: "Climate change creates new risks and exacerbates existing vulnerabilities in communities across the United States, presenting growing challenges to human health and safety, quality of life, and the rate of economic growth." Likewise, the Intergovernmental Panel on Climate Change (IPCC) states that high GHG emissions will lead to considerable disruption and damage, falling heavily on the people and communities least able to respond effectively: "Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems." ¹⁰

Of course, the degree of impact rises with global average temperature increases. As Jamieson notes, at higher temperatures, "familiar comforts, places, and ways of life will disappear on a timescale of years or decades." ¹¹ Further, tipping points might exist, albeit at unknown exact temperatures. If so, then the climate could abruptly shift into a new state, with no going back. ¹² Planetary feedback loops could begin to raise temperatures independently of additional GHG emissions, at which point nothing humans do will make a significant difference; the planet will continue warming even were human-source GHG emissions reduced to net zero. Whether linear or abrupt

⁹ USGCRP (2018) *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II: Report-in-Brief* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, p. 12.

¹⁰ IPCC, Climate Change 2014 Synthesis Report: Summary for Policy Makers, p. 8.

¹¹ Dale Jamieson (2014) Reason in a Dark Time: why the struggle against climate change failed and what it means for our future (New York: Oxford University Press) p. 1.

¹² Dave Levitan (2013) "Quick-Change Planet: Do Global Climate Tipping Points Exist?" Scientific American (March 25) https://www.scientificamerican.com/article/doglobal-tipping-points-exist/, accessed December 10, 2018.

change occurs, impacts on the climate, the global ecosystem, and human interests will rise with temperatures.

Not a few climate scientists and other concerned observers assert that 4°C increase in global average temperature would spell the end of civilization. The "business-as-usual" scenario suggests that 4°C temperature increase will occur by 2100, so civilization-breaking climate change is a plausible outcome. Nor would temperature rise stop there. If the planet warmed to its previous high temperature, global average temperature would be about 14°C above preindustrial, at which point much of the world would be unfit for human habitation. 13 James Lovelock claims that "We are in a fool's climate . . . and before this century is over, billions of us will die and the few breeding pairs of people that survive will be in the arctic region where the climate remains tolerable." 14 While Lovelock may go too far, few informed observers believe that a 4°C warmer world will be anything but a "tough new planet" 15 that is inhospitable to industrial, technological, consumerist society as we know it, or indeed any civilization that has thrived during the Holocene.

The inadequacy of mitigation and the short time available to make the sweeping changes needed to hold temperature down to a tolerable level explain the increasing attention to adaptation. The prospect of climate catastrophe and the fading hopes for mitigation lead to a search for ways to live in a warmer world. However, entrenched interests and ways of life could prevent an effective response. The survival of civilization could require contemplating transformations of institutions, culture, norms, and practices that constitute a way of life. The most fundamental questions of the future of society are at stake.

The IPCC's Assessment Reports offer a guide to what adaptation means under varying circumstances. The IPCC surveys pertinent literature, summarizing the general findings of research on a given aspect of climate change, and drawing conclusions as to what the literature suggests for future climate patterns, effects on the global

¹³ Sherwood SC and Huber M (2010) "An adaptability limit to climate change due to heat stress," PNAS 107(21): 9552-9555.

¹⁴ James Lovelock (2006) The Revenge of Gaia (New York: Basic Books).

 $^{^{15}}$ Bill McKibben (2010) Eaarth: making a life on a tough new planet (New York: Times Books).

ecosystem, and possible policy options. The final reports undergo an extensive review process. The authors tend to avoid drama, so an IPCC report can be taken as a cautious statement of the problem, perhaps overly cautious. ¹⁶ Even so, these observations and conclusions reflecting the broad consensus of the scientific community suggest that adaptation can call for sweeping change to institutions and ways of life.

Importantly, "adaptation involves change, in response to environmental conditions, which maintains, preserves, or enhances viability of the system of interest." Only humans are capable of identifying a system of interest, and usually they will identify systems of interest to themselves because a given system affects human wellbeing. Adaptation to climate change is not just any change of infrastructure, behavior, values, or institutions in response to rising temperatures. Rather, adaptation to climate change is about serving human purposes by preserving, maintaining or enhancing a system of interest to human beings. In the IPCC's work, the guiding principle is sustainable development. Thus, the system of interest would be the set of institutions, practices, beliefs, and behaviors that tend toward that goal, and adaptation would be adjustments made to preserve the requisites of sustainable development.

The most recent IPCC Assessment Report, AR5, identifies several forms of response to climate change, each corresponding roughly to the amount of temperature rise. They are incremental adaptation, transformational adaptation, and transformational change. Incremental adaptation entails taking actions that aim "to maintain the essence and integrity of the existing technological, institutional, governance, and value systems." ¹⁸ Incremental adaptation is about "adjustments" such as growing different crops, planting earlier or later in the season, and improving irrigation systems. It can include strengthening infrastructure, re-zoning, and altering building codes.

¹⁶ David Spratt and Ian Dunlop (2018) What Lies Beneath: The Underestimation of Existential Climate Risk (Melbourne: National Centre for Climate Restoration), pp. 10-13.

¹⁷ John Smithers and Barry Smit, (1997) "Human Adaptation to Climatic Variability and Change," Global Environmental Change 7(2): pp. 129-146, reprinted in The Earthscan Reader on Adaptation to Climate Change, E. Lisa F. Schipper, and Ian Burton, eds., (London and New York: Earthscan, 2009).

¹⁸ AR 5, Chapter 14, p. 839.

Holding temperature rise below the 2°C level would likely be required for incremental adaptation to suffice, although this will vary by region and locale. The question is when impacts become so severe that incremental adaptation will no longer protect the "system of interest."

Transformational adaptation increases the amount of adjustment. It calls for changes of "fundamental attributes of systems in response to actual or expected climate and its effects, often at a scale and ambition greater than incremental activities." ¹⁹ Rather than switch to another crop, a farming region might go from field crops to livestock. People might migrate as employment opportunities decline in heavily impacted areas. Ideas about the relationship between humans and nature can change.

Transformational change seeks to challenge "the systems and structures, economic and social relations, and beliefs and behaviors that contribute to climate change and social vulnerability." ²⁰ Specifically, if "current development pathways" produce climate risk and vulnerability, then "transformation of wider political, economic, and social systems may be necessary." ²¹ The IPCC is not insensible to the implications of this view: "Transformational change can threaten vested interests, or prioritize the interests of some over the well-being of others, and it is never a neutral process." ²² Although the uneven effects of climate change mean that transformational change "will need to be a key component in nearly all alternative climate-resilient pathways," if temperatures were to rise +4°C or more, "sustainability will become significantly more difficult to achieve," and the boundaries of climate resilience will have been exceeded. ²³

The normative framework for climate change policy offers resources for formulating responses to climate change at all three levels: incremental and transformational adaptation, and transformational change. What is that framework and how does it bear on adaptation? Is it adequate to meet the challenge of extreme climate disruption looming on the policy horizon?

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²⁰ AR5, Chapter 20, pp. 1121-1122.

²¹ Ibid.

²² Ibid, p. 1122.

²³ Ibid, p. 1123.

Principles in International Law and Policy

What normative principles pertinent to adaptation have entered the international dialogue on climate change? First, the UN Framework Convention on Climate Change (1992) specifically notes the obligation to future generations, mentioned in Article 3 on "Principles." ²⁴ The basis for protecting the climate system for the benefit of present and future generations of humankind is equity.

The implications of this principle for adaptation and transformation are profound. Although some adaptation is reactive to experienced impacts of climate change, anticipatory planning and implementation of adaptation measures is also a major part. Adaptation planning that looks forward decades or longer will involve the interests and well-being of future generations. Failing to take appropriate measures now could harm future generations. Already, the definition of sustainable development is that it serves the needs of the current generation while protecting the interests of generations to come. ²⁵ Fulfilling this obligation regarding climate change requires anticipating the probable effects of climate change on people and places and taking action to reduce the impact, especially on the most vulnerable, for which anticipatory adaptation is essential.

Second, the UNFCCC acknowledges "common but differentiated responsibilities and respective capabilities." This principle recognizes both that everyone bears some responsibility for addressing the climate challenge, and that some countries lack the means to address climate change while also alleviating poverty and lack of development. Countries that have benefited from past emissions and thus achieved high levels of development bear a greater obligation to reduce their GHG emissions and to help other countries finance and implement measures to protect the climate system.

The main reason adaptation has risen on the global agenda is that the world has failed to mitigate GHG emissions. Developed countries are largely responsible for the accumulation of GHG in the atmosphere. Although China and India have joined the first rank of GHG emitters, their per capita emissions remain relatively low, and their historic contribution is small compared to the earlier industrializers.

²⁴ United Nations Framework Convention on Climate Change (1992), https://unfccc.int/resource/docs/convkp/conveng.pdf.

²⁵ United Nations, "What We Do: Promote Sustainable Development," http://www.un.org/en/sections/what-we-do/promote-sustainable-development/.

Meanwhile, due to climate patterns and geography, the greatest impacts of climate change will fall on poor, developing countries with limited capacity to adapt to the tough new planet. Thus, they can make a legitimate claim on resources to reduce the damage to their countries resulting from the historic accumulation of GHG gases. The international community recognizes this differentiation of responsibilities. The framework for an Adaptation Fund was established in 2001, finalized in the Bali Action Plan in 2007. The Board approved its first projects in 2010. Although the Adaptation Fund has committed hundreds of millions of dollars to adaptation projects in developing countries, the need is much greater.

Third, climate policy adopts the environmental principle known as "polluter pays." ²⁷ This principle asserts that the parties creating the environmental problem should finance remedial measures for those experiencing the harms. Polluter pays, again, draws attention to the fact that developed countries have made large contributions to the accumulation of GHG emission while, some of the countries most heavily impacted have made negligible contributions to accumulated GHG emissions. Thus, it follows that those creating the problem should pay for technologies and structures in countries that contributed little but face severe impacts. Certainly, working out the distribution of responsibilities and related financial obligations is no simple matter. It requires deciding how to allocate scarce resources between mitigation and adaptation, assigning responsibility according to past, present and future situations, determining whether individuals or states should bear the costs, and more. ²⁸ Still, polluter pays strongly indicates where primary responsibility lies.

Fourth, the precautionary principle shifts the burden of proof in favor of environmental protection. Specifically, the UNFCCC states, "lack of full scientific certainty should not be used as a reason for postponing" efforts to minimize or prevent actions that would contribute to global warming. A strong formulation of the principle calls for rejecting any action that might cause serious harm, emphasizing safety,

²⁶ Adaptation Fund, "Timeline" https://www.adaptation-fund.org/about/adaptation-fund-timeline/page/2/.

²⁷ Lauren Hartzell-Nichols (2011) "Responsibility for meeting the costs of adaptation," Wiley Interdisciplinary Reviews: Climate Change 2(5): 687-700.

²⁸ Ibid, pp. 692-696.

determining whether any safer alternatives are available, and ensuring that all decisions are taken democratically.²⁹

What does the precautionary principle mean for adaptation? First, adaptation policy should begin now. Global average temperature rise of 1.5°C might be "locked in" already, and additional GHG emissions mean that increases beyond that are likely. The lag between rising emissions concentrations and observed temperatures means that adapting to current conditions will be insufficient. Second, planning should assume that the more extreme temperature rises and climate disruption will occur. Optimistic mitigation pathways still leave about a one in three chance of increases beyond 2°C. Meanwhile, there may be no carbon budget remaining at all to stay below that level. ³⁰ If that is so, then adaptation planning should begin immediately for a significantly warmer world.

Fifth, the notion of "loss and damage" has entered the climate policy discourse as impacts are becoming evident and the inadequacy of mitigation is likely. "Loss and damage," write Geest and Warner, "refers to impacts of climate-related stressors that have not been or cannot be avoided through mitigation and adaptation efforts." ³¹ The responsibility of developed countries to compensate for unavoidable loss and damage due to climate change is implied. The Warsaw International Mechanism for Loss and Damage incorporates the objective of "enhancing action and support, including finance, technology and capacity building," ³² which would indicate the need for funding from wealthier nations.

Sustainable development guides application of these principles. "The Parties have a right to, and should promote, sustainable development," states Article 3 of the UNFCCC. Most of the countries of the world have signed onto the Sustainable Development Goals and to the UNFCCC. The broad commitment of the international community is to effective climate policy that is compatible with

²⁹ Paul Burkett (2016) "On Eco-Revolutionary Prudence: Capitalism, Communism, and the Precautionary Principle," Socialism and Democracy 30(2): 73-96.

³⁰ Spratt and Dunlop (2018) p. 24.

³¹ Kees van der Geest and Koko Warner (2015) "What the IPCC 5th Assessment Report has to say about loss and damage," UNU-EHS Working Paper, No. 21 (Bonn: United Nations University Institute of Environment and Human Security), p. 3.

³² Ibid, p. 7.

sustainable development, recognizing the needs of developing countries and future generations.

Principles of Adaptation and Transformational Change

Fulfillment of the five principles just outlined would go a long way toward implementing incremental adaptation where possible and transformational adaptation where necessary. Adaptation that is respectful of future generations, fair to rich and poor, puts the burden primarily on the parties responsible for the problem, prudently takes account of severe impacts on the most vulnerable, and recognizes that significant negative impact is unavoidable would provide an effective response to severe climate change. The question is whether such a comprehensive response is possible given existing social structures and practices. This is where transformational change enters the picture.

Transformational change is not, itself, an "on the ground" response to climate change. It is not about building infrastructure, protecting ecosystem services, moving people, changing planting times, or any of the other large and small measures societies and communities might take to protect themselves from damages resulting from climate change. Transformational change is about changing the broader context within which decisions, exchanges, and behaviors occur. On what basis do we decide whether to build a new power plant, or close down a factory, or rezone a coastline? The thinking behind transformational change suggests that current "wider political, economic, and social systems" are inappropriate to choosing a development pathway that would implement adequate, fair, forwardlooking incremental and transformational adaptation. In what ways, then, should those systems change so that adequate, effective adaptation can occur? Answering that question engages the deepest issues of social theory. Doing so is beyond the scope of this paper. In short, it means asking whether the system of sovereign states, global capitalism, faith in technological progress, and hopes for ever-rising standards of living must be abandoned in favor of more cooperative, simpler, ecologically healthy ways of life if disaster is to be averted.