THE NATIONAL JUDICIAL COLLEGE

Judicial Leaders in Climate Science

Reno, Nevada | March 11-14, 2024

In Collaboration with Environmental Law Institute

CJP CLIMATE JUDICIARY PROJECT™

www.judges.org | info@judges.org

NJC Course Policies

THE NATIONAL JUDICIAL COLLEGE

Course and Program Attendance Policy Statement

The National Judicial College (NJC) has a responsibility to the funding agencies that sponsor your attendance. NJC must ensure that the tax dollars spent on continuing education are utilized for the maximum benefit.

It is therefore the policy and practice of the NJC to award Certificates of Completion to participants who attend all educational sessions. If a participant is unable to attend a class session(s) due to an emergency situation, the participant must contact the program attorney or judicial education manager for the course immediately.

If any portion of the course is missed, the participant may be required to submit a written project determined in consultation with the program attorney for the course. Failure to receive written permission or completion of the written project may result in the denial of the Certificate of Completion and notification to the funding agency.

Continuing Judicial or Legal Education Credits (CJE/CLE)

While NJC courses are nationally recognized by CLE Commissions or Boards, participants are asked to please follow their state's specific filing rules to have their CLE/CJE credits approved. The NJC provides each participant a uniform certificate of attendance form upon completion of applicable NJC courses detailing how many CLE/CJE hours may be possible. Participants are responsible for filing this form with their state's Continuing Legal Education Commissions or Boards where required. Your state may require you to pay a filing fee for CLE approval. If further clarification is needed, please contact the NJC Registrar's Office at (800) 255-8343 or (775) 784-6747 or registrar@judges.org.

The amount of CJE/CLE credit you are eligible to receive may be reduced if you are absent during any class sessions. If you need to leave during the class, please make the appropriate deduction from your CJE/CLE request.

Courtesy to Faculty and Fellow Participants

Please note scheduled breaks will be offered during the class. Therefore, out of respect for your colleagues and speakers we ask that you not engage in activities that may be distracting during the class. Before each session, we ask that all electronic devices be muted or turned off. If you must take a call during the presentation, please take the call outside of the room.

Judicial Studies Program Exam (JSP)

This course qualifies for credit in the Judicial Studies degree program upon successful completion of the course and the course exam for those participants who are candidates in the University of Nevada, Reno Masters or Ph.D. Judicial Studies degree programs. Please see the course program attorney during the class for information regarding the exam. Additional information about this degree program can be viewed at https://www.unr.edu/judicial-studies. A take home JSP exam will be emailed following the conclusion of the course. (NOTE: This exam is optional for non-candidate participants.)

Harassment Policy Statement

The National Judicial College continues its long-standing commitment to eliminate and prevent bias and any form of harassment.

Harassment is misconduct which uses words or actions to convey disrespect for the human dignity and worth of a person, thereby creating a hostile, offensive work or study environment. Everyone at The National Judicial College must be assured a work and study environment free from any torment, verbal or physical harassment, and sexual overtures and innuendoes which debilitate morale and interfere with the mission of the College.

Harassment Policy Statement (Continued)

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Staff, faculty, and participants are accountable for their personal behavior and for supporting and encouraging the rights of all others to be free from improper or inappropriate behavior.

Instances of harassment affecting faculty or participants should be reported to the chief academic officer. Instances of harassment affecting staff members should be reported to the human resource specialist. in the absence of these individuals, the report should be made to the president of the College.

This policy applies, without exception, to all College staff, faculty members, and participants.

Title VI Program Rights Compliance Plan Policy Statement

The National Judicial College (NJC) and President Benes Z. Aldana are committed to, and give public notice of, NJC's policy to uphold and assure full compliance with the nondiscrimination requirements of Title VI of the Civil Rights Act of 1964 and related nondiscrimination authority. Title VI and related nondiscrimination authority stipulate that no person in the United States of America shall on the grounds of race, color, national origin, sex, age, disability, income level, or limited English proficiency be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance.

Any person who desires more information regarding NJC's Title VI Program may contact NJC's Title VI Program Officer Joy Lyngar at the address noted below.

Any person who believes he or she, individually or as a member of any specific class of persons, has been subjected to discrimination on the basis of race, color, national origin, sex, age, disability, income level, or limited English proficiency has the right to file a formal complaint. Any such complaint must be in writing and submitted to NJC within 180 days following the date of the alleged occurrence.

Mail to: Title VI Program Officer
Joy Lyngar, J.D.
The National Judicial College Judicial College Building / MS 358 Reno, NV 89557
(775) 784-6747
lyngar@judges.org

You may also file a Civil Rights complaint directly with the Office for Civil Rights within the U.S. Department of Justice as well as the Nevada Office of the Attorney General's Grants Unit.

Mail to: U.S. Department of Justice, Civil Rights Division
950 Pennsylvania Avenue, N.W.
Washington, D.C. 20530
Hotline (English & Spanish): (888) 848-5306

Office of the Attorney General, Grants Unit
100 North Carson Street
Carson City, Nevada 89701-4717
Phone: (775) 684-1110

THE NATIONAL JUDICIAL COLLEGE

Class Schedule

THE NATIONAL JUDICIAL COLLEGE

JUDICIAL LEADERS IN CLIMATE SCIENCE
MARCH 11-14, 2024
RENO, NEVADA

Room: 1245

Monday, March 11, 2024		Tuesday, March 12, 2024	
7:30-8:00	Continental Breakfast	7:30-8:00	Continental Breakfast
8:00-8:15	**NJC WELCOME & ORIENTATION**	8:00-8:50	EFFECTIVE LEADERSHIP: RECAP DAY 1 (Stedham)
8:15-8:50	**INTRODUCTIONS AND OVERVIEW** NJC: Joy Lyngar, Alf W. Brandt ELI: Helene Krasnoff, Dr. Paul Hanle		
8:50-9:00	Break	8:50-9:00	Break
9:00-9:50	PARTICIPANT ENGAGEMENT: WHAT BRINGS US HERE Honorable Stacy Boulware Eurie	9:00-9:50	EFFECTIVE LEADERSHIP: FROM TRANSACTION TO TRANSFORMATION (Stedham) (Concluded)
9:50-10:10	Break	9:50-10:10	Break
10:10-11:00	HUMAN AND NATURAL INFLUENCES ON CLIMATE [Divider 1] (Santer, Hanle)	10:10-11:00	INTRODUCTION TO CLIMATE SCIENCE [Divider 5] (Doherty)
11:00-11:10	Break	11:00-11:10	Break
11:10-12:00	FINGERPRINTING THE CLIMATE SYSTEM (Santer, Hanle) (Concluded)	11:10-12:00	CLIMATE LITIGATION TRENDS [Divider 6] (Page)
12:00-1:00	**Lunch**	**12:00-1:00**	**Lunch**
1:00-1:50	EFFECTIVE LEADERSHIP: THEORY AND PRACTICE [Divider 2] (Stedham	1:00-1:50	TEAMWORK AND LEADERSHIP [Divider 7] (Tait)
1:50-2:00	Break	1:50-2:00	Break
2:00-2:50	EFFECTIVE LEADERSHIP: FROM TRANSACTION TO TRANSFORMATION [Divider 3] (Stedham)	2:00-2:50	TEAMWORK AND LEADERSHIP (Tait) (Concluded)
2:50-3:00	Break	2:50-3:00	Break
3:00-3:50	EFFECTIVE LEADERSHIP: FROM TRANSACTION TO TRANSFORMATION (Stedham) (Continued)	3:00-3:50	TRANSFORMATIONAL LEADERSHIP [Divider 8] (Stedham)
3:50-4:00	Break	3:50-4:00	Break
4:00-4:50	LEADERSHIP AND COMMUNICATION [Divider 4] (Tait)	4:00-4:50	PARTICIPANT ENGAGEMENT (Boulware-Eurie)
		6 PM Dinner –	**Louis' Basque Corner** **301 E 4th St, Reno, NV**

Blue – Leadership
Green – Science
Red—Cohort Engagement

CJP CLIMATE JUDICIARY PROJECT™

THE NATIONAL JUDICIAL COLLEGE

JUDICIAL LEADERS IN CLIMATE SCIENCE
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Room: 1245

Wednesday, March 13, 2024	
7:30-8:00	Continental Breakfast
8:00-8:50	**EFFECTIVE LEADERSHIP: RECAP DAY 2** (Stedham)
8:50-9:00	Break
9:00-9:50	**TRANSFORMATIONAL LEADERSHIP** (Stedham) (Concluded)
9:50-10:10	Break
10:10-11:00	**THE BRAIN, DECISION MAKING, AND IDENTITY: LEADER'S PERSPECTIVE** [Divider 9] (Donald)
11:00-11:10	Break
11:10-12:00	**MINDFUL LEADERSHIP** [Divider 10] (Stedham)
12:00-1:00	**Lunch**
1:00-1:50	CLIMATE IMPACTS [Divider 11] (Doherty)
1:50-2:00	Break
2:00-2:50	CLIMATE IMPACTS: BREAKOUTS (Doherty) (Concluded)
2:50-3:00	Break
3:00-3:50	**LEADERSHIP AND MANAGING CHANGE** [Divider 12] (Tait)
3:50-4:00	Break
4:00-4:50	**PARTICIPANT ENGAGEMENT** (Boulware-Eurie)

Thursday, March 14, 2024	
7:30-8:00	Continental Breakfast
8:00-8:50	**EFFECTIVE LEADERSHIP: RECAP DAY 3** (Stedham)
8:50-9:00	Break
9:00-9:50	**LEADERSHIP AND MANAGING CHANGE** (Tait) (Concluded)
9:50-10:10	Break
10:10-11:00	**APPLYING LEADERSHIP PRINCIPLES: CASE STUDIES** [Divider 13] (Stedham, Tait, Brandt, Krasnoff, Boulware-Eurie)
11:00-11:10	Break
11:10-12:00	**APPLYING LEADERSHIP PRINCIPLES: CASE STUDIES** Stedham, Tait, Brandt, Krasnoff, Boulware-Eurie) (Continued)
12:00-1:00	**Lunch**
1:00-1:50	**APPLYING LEADERSHIP PRINCIPLES: CASE STUDIES** Stedham, Tait, Brandt, Krasnoff, Boulware-Eurie) (Concluded)
1:50-2:00	Break
2:00-2:30	**PARTICIPANT ENGAGEMENT: WHERE WE GO FROM HERE** (Boulware-Eurie)
2:30-2:40	Break and Complete Evaluations
2:40-3:00	**WORKSHOP GEMS & GRADUATION** Honorable Stacy Boulware Eurie

CJP CLIMATE JUDICIARY PROJECT™

THE NATIONAL JUDICIAL COLLEGE

ROSTER

JUDICIAL LEADERS IN CLIMATE SCIENCE

March 11-14, 2024
Reno, Nevada

Room:1227

THE NATIONAL JUDICIAL COLLEGE

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The National Judicial College is an Equal Opportunity/Affirmative Action, ADA organization, and admits participants of any age, race, color, gender, sexual orientation, or national or ethnic origin.

AB/CA

Judicial Leaders in Climate Science - Reno Conference 2024

March 11, 2024 — March 14, 2024

Reno, Nevada

Faculty

Hon. Stacy Boulware-Eurie
Associate Justice
Court Of Appeal
[redacted]

Dr. John M. Doherty
Science And Policy Analyst
Environmental Law Institute Oakland, CA
[redacted]

Hon. Bernice B. Donald
Circuit Judge
U.S. Court Of Appeals
[redacted]

Dr. Paul A. Hanle
Visiting Scholar
Climate Judiciary Project
[redacted]

Ms. Helene Krasnoff
Senior Attorney/Director Environmental
Law Institute
[redacted]

Mr. Jarryd Page
Fellow
Environmental Law Institute
[redacted]

Dr. Benjamin D. Santer
Visiting Researcher
[redacted]

Dr. Yvonne Stedham
Professor
[redacted]

Prof. Kelly Tait
Professor
Kt Consulting
[redacted]

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Reno, Nevada

Observers

Dr. Esteban J. Quiñones
Researcher
[redacted]

Judicial Leaders in Climate Science - Reno Conference 2024

March 11, 2024 — March 14, 2024

Reno, Nevada

Participants

Hon. Daniel Brock
Judge
Circuit Court
[redacted]

Hon. Daniel A. Bryant
Judge
District Court
[redacted]

Hon. Michael A. Flores
District Judge
District Court
[redacted]

Hon. Jeremy Ford
Presiding Judge
Superior Court
Clifton, AZ 85533
[redacted]

Hon. Helene Kazan
Justice Of The Superior Court
Superior Court
[redacted]

Hon. Stephen H. Keheo
Judge
Circuit Court
[redacted]

Hon. Clare Keithley
Judge
Superior Court
[redacted]

Hon. Brian Mccabe
Judge
Superior Court
[redacted]

Hon. Kristen D. Mickey
County Judge
County Court
[redacted]

Hon. Thainie Reyes
Superior Judge
Superior Court
[redacted]

Judicial Leaders in Climate Science - Reno Conference 2024

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Reno, Nevada

Participants

Hon. Bryan E. Round
Judge
Circuit Court
[redacted]

Hon. Jennifer L. Valencia
Judge
District Court
[redacted]

Hon. Thomas G. Walsh
Superior Court Trial Judge
Superior Court
[redacted]

Hon. Eric J. Wildman
Judge
Snake River Basin Adjudication
[redacted]

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JUSTICE STACY BOULWARE EURIE

Justice Stacy Boulware Eurie was unanimously confirmed as an Associate Justice of the Court of Appeal, Third Appellate District, on August 4, 2022. Previously, she served as a trial judge on the Sacramento Superior Court for 15 years, presiding over civil, criminal, coordinated California Environmental Quality Act (CEQA) litigation, and appellate matters. She also served as Presiding Judge of the Juvenile Court for eight years.

Prior to her tenure on the trial court, Justice Boulware Eurie was Senior Assistant Attorney General, the statewide head of the Government Law Section at the Attorney General's Office, where she was counsel to California's constitutional officers and the California judicial branch.

Justice Boulware Eurie has been an active member of the California legal community for more than 25 years. She served on the California State Bar's Litigation Section's Executive Committee, was a voting member of the California Judicial Council for six years, was a board member of the Women Lawyers of Sacramento for more than a decade and is a former President of the Sacramento County Bar Association. Justice Boulware Eurie was an executive member of the Commission on the Future of California's Court System, the Judicial Council of California, and the California Child Welfare Council. Justice Boulware Eurie has served as faculty for more than 10 years for the California Judicial Council's Center for Judicial Education and Research on a wide range of substantive and administrative topics, including environment and water law.

Justice Boulware Eurie has been the recipient of numerous awards, including the California Judges Association Juvenile Court Judge of the Year in 2014, the Sacramento County Bar Association Judge of the Year for 2020, the Chief Probation Officers of California Judge of the Year for 2015, and the Wiley Manuel African American Bar Association of Sacramento Judge of the Year in 2010 and 2022.

Justice Boulware Eurie received a Bachelor of Arts degree from the University of California, Los Angeles, and a Juris Doctor degree from the University of California, Davis. Justice Boulware Eurie joined the faculty of The National Judicial College in 2004.

DR. JOHN DOHERTY

Dr. John M. Doherty is a climate scientist broadly interested in the ways in which science interacts with and informs environmental governance. John first joined ELI in 2022 as a Fellow to provide scientific expertise to the Climate Judiciary Project (CJP). He was retained by the Institute as staff in 2024 and he continues to work on many of ELI's climate initiatives, including CJP. John's research interests include the impacts of climate change on litigation domestically and abroad, the role that science plays in climate lawsuits, and how attribution science can contribute to just and effective decision-making around climate change.

John holds a Ph.D. in Earth Sciences from the University of Hong Kong, an M.S. in Environmental Science from American University, and a B.A. in Political Theory from American University. For his doctoral research, John investigated the behavior of ocean circulation in the North Atlantic and its relevance to the global climate system on different geological timescales.

HONORABLE BERNICE B. DONALD

Bernice Bouie Donald is The National Judicial College's Mario Gabelli Distinguished Jurist-in-Residence on the Rule of Law. was born in DeSoto County, Mississippi, the sixth of 10 children of a domestic worker and a self-taught mechanic.

As a teenager, she was among the first four African-American students to integrate into the Olive Branch schools in Mississippi and graduated at the top of her class. As a first-generation college student, she paid her way through Memphis State University by working summers and at night for the phone company. She met her future husband, W. L. Donald, in a sociology class.

After earning her law degree from a part-time evening program at the University of Memphis, she made a name for herself by winning a pro bono lawsuit on behalf of a former co-worker who had suffered race-based discrimination at work. That success and others inspired her to run for a judgeship, and in 1982 she was elected Tennessee's first-ever African-American woman judge.

In 1988, she became the first African-American woman to serve as a U.S. bankruptcy judge, and in 1995 she became the first African-American woman to serve on the U.S. District Court for the Western District of Tennessee.

She has lectured at numerous prestigious law schools in the United States, including Vanderbilt, Yale, Northwestern and Harvard and has served as faculty for law programs in more than two dozen other countries around the world.

Judge Donald has received more than 100 awards for professional, civic and community activities, including the Pickering Award from the Senior Lawyers Division of the ABA (2014), the Margaret Brent Award from the ABA Commission on Women (2017), and the Lifetime Liberty Achievement Award from the ABA Tort Trial and Insurance Section (2020). In 2020, the ABA Labor and Employment Law Section created the Judge Bernice B. Donald Diversity, Equity and Inclusion Award. She joined the faculty of The National Judicial College in 1998.

DR. PAUL A. HANLE

Dr. Paul A. Hanle is a Visiting Scholar and the Founder of the Climate Judiciary Project of the Environmental Law Institute in Washington, DC. He retired in 2018 from his position as

President and CEO of Climate Central. Paul has devoted his 50-year career to public understanding of science and environmental conservation. From 1987 until 2011, he served serially as chief executive officer of the Maryland Science Center in Baltimore, president of the Academy of Natural Sciences of Philadelphia, and first president of the Biotechnology Institute in Washington, DC. His volunteer services have included advising the Obama Administration on the attribution of extreme weather events to climate change, serving on the planning group for its "Educate to Innovate" initiative, and serving on the Steering Committee of the Business and Industry STEM Education Coalition. Hanle earned a Ph.D. in the History of Science and Medicine and an M.S. in Physics from Yale University. He earned his undergraduate degree in physics from Princeton University.

MS. HELENE KRASNOFF

Helene Krasnoff is the Director of ELI's Climate Judiciary Project (CJP) and is responsible for the leadership, strategy, and management of the project. Prior to joining ELI in 2024, Helene spent more than 20 years at Planned Parenthood Federation of America, working on and leading a team of attorneys who support the Federation and its forty-nine affiliates with respect to public policy matters that implicate the Federation's mission.

Helene has litigated and supervised dozens of high-profile cases in all levels of both the federal and state courts on matters that involve complex issues of constitutional, statutory, procedural, and administrative law. She also has extensive experience working with lawmakers on Capitol Hill as well as Executive Branch and state government officials. At the core of her work was presenting scientific facts to decision-makers as well as lay audiences, and Helene is excited to bring these as well her leadership skills to CJP in order to provide judges with the scientific information needed to adjudicate the growing body climate-related litigation.

Helene was previously an associate with the law firm of Arnold & Porter, and she is a graduate of Duke University and the University of Michigan Law School.

MR. JARRYD PAGE

Jarryd is a Staff Attorney at the Environmental Law Institute. Jarryd works at the intersection of climate change, policy research, and education. He works on a broad portfolio of projects at ELI, including the Climate Judiciary Project, public lands management, and sea level rise and coastal resilience. He has experience in both domestic and international environmental law and policy issues. Page received his J.D. with Honors from The George Washington University Law School, where he earned the Charles and Kathryn Miller Environmental Law Award for excellence in the field of environmental law. He received his B.S. in Environmental Science &

Policy from the University of Maryland and holds a B.A. from the University of Wisconsin-Madison and M.A. from the University of Kansas, both in Art History.

DR. BENJAMIN D. SANTER

Ben Santer is an atmospheric scientist at Lawrence Livermore National Laboratory (LLNL). His research focuses on such topics as climate model evaluation, the use of statistical methods in climate science, and identification of natural and anthropogenic "fingerprints" in observed climate records. Santer's early research on the climatic effects of combined changes in greenhouse gases and sulfate aerosols contributed to the historic "discernible human influence" conclusion of the 1995 Report by the Intergovernmental Panel on Climate Change (IPCC). His recent work has attempted to identify anthropogenic fingerprints in a number of different climate variables, such as tropopause height, atmospheric water vapor, the temperature of the stratosphere and troposphere, ocean heat content, and ocean surface temperatures in hurricane formation regions. Santer holds a Ph.D. in Climatology from the University of East Anglia, England. After completion of his Ph.D. in 1987, he spent five years at the Max-Planck Institute for Meteorology in Germany, where he worked on the development and application of climate fingerprinting methods. In 1992, Santer joined LLNL's Program for Climate Model Diagnosis and Intercomparison. He retired from LLNL in 2021 and now pursues climate fingerprinting at Woods Hole Oceanographic Institution and at UCLA.

PROFESSOR YVONNE STEDHAM, Ph.D.

Dr. Yvonne Stedham is professor emerita in the Management Department in the College of Business Administration at the University of Nevada, Reno (UNR) and is a UNR Foundation Professor. She served as a professor of management, and chair of the Management Department at the College of Business at the University of Nevada, Reno (UNR). She joined the UNR faculty in 1988 and from 1999-2002 served as chair for the Managerial Sciences Department. Professor Stedham received a Ph.D. in business and M.B.A. from the University of Kansas, and undergraduate degrees in economics and business from the University of Bonn, Germany. She taught undergraduate and graduate courses in international business and mindful leadership. She was also a faculty member of the social psychology Ph.D. program. Her research covers a broad spectrum of management issues with a special focus on international and gender aspects. Many of her publications address cultural differences in business ethics. Her most recent research concerns the relationship between cultural differences, trust, and business ethics. Her research has been published in various top-tier peer-reviewed journals, including the Journal of Management, Journal of Management Studies, Journal of Business Ethics, Business Ethics: A European Review, Journal of Business Ethics Quarterly, Journal of European Industrial Training, Women in Management Review, and Journal of Knowledge Management Practice. Dr. Stedham

has served on the board of directors of numerous non-profit organizations in Northern Nevada and provides consulting and training services to many companies nationally and internationally. Professor Stedham has completed the training required for teaching the Mindfulness Based Stress Reduction (MBSR) Program at the Center for Mindfulness at the University of Massachusetts. She has taught MBSR based Mindfulness Programs at a variety of companies and organizations, including Microsoft, Nevada Department of Transportation, Custom Ink, National Judicial College, Nevada Air National Guard, Healing Healthcare Systems, and UNR. Professor Stedham has served as faculty for The National Judicial College since 2004, teaching Leadership for Judges and Management Skills for Presiding Judges programs as well as a Mindfulness for Judges retreat. She recently received the prestigious NJC award for her contributions to "Making the World a More Just Place."

PROFESSOR KELLY E. TAIT

Kelly Tait is a communication consultant who has specialized in justice system education for over twenty years. Her areas of expertise include faculty development, courtroom communication skills, procedural fairness, working with challenging people, communicating with the self-represented, leadership and change management, reducing biases, and judicial wellness. She is a Certified Justice System Coach. She has been on the faculty of The National Judicial College (NJC) since 2002 and has taught justice system professionals across the United States and Canada as well as in Mexico, Ukraine, Macedonia, Philippines, Russia, and the Caribbean. She has taught for organizations including the Judicial Division of the American Bar Association, National Association of Administrative Law Judges, National Association for Court Management, National Association of Women Judges, Environmental Law Institute, National Tribal Judicial Center, as well as numerous state organizations.

Professor Tait has taught communication at the University of Nevada, Reno, in the School of Social Research and Justice Studies as an adjunct professor for over twenty-four years. She is a past president of the National Association of State Judicial Educators (NASJE) and is a long-term member of the NASJE Communications Committee and the NASJE Diversity, Fairness, and Access Committee. Her publications include "Procedural Fairness: A Treat for the Brain" in Case In Point and numerous adult education-related articles for NASJE News. She is also one of the co-authors of the U.S. bench book "Handling Cases Involving Self-Represented Litigants: A National Bench Guide for Judges." Professor Tait received the NJC's 2022 Payant Award for Faculty Excellence.

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Staff Biographies

HONORABLE BENES Z. ALDANA (RET.), PRESIDENT

Benes Z. Aldana became the ninth president of The National Judicial College on May 1, 2017. Before joining the NJC, he was on active duty in the U.S. Coast Guard for over 22 years, retiring at the rank of captain and serving as chief trial judge during his last tour of duty. Prior to this assignment, he served as the chief legal officer for the 8th Coast Guard District in New Orleans, Louisiana, overseeing legal advice to Coast Guard operations spanning 26 states and the Gulf of Mexico. He was first appointed a military trial judge in 2005 and as an appellate judge in 2015. Other notable assignments as a Coast Guard judge advocate included: chief counsel, Legal Engagements Division, U.S. Africa Command in Stuttgart, Germany; deputy staff judge advocate, 13th Coast Guard District; special assistant U.S. attorney for the Western District of Washington; trial attorney at the Department of Justice, Environment and Natural Resources Division; legal advisor to the Department of Defense Criminal Investigation Task Force, Guantanamo Bay, Cuba; deputy chief, Office of Environmental Law, U.S. Coast Guard; and appellate and trial counsel. He also served as the commanding officer, personnel services and support unit, Seattle, and executive officer for Coast Guard Base Seattle. He is also a dedicated bar association leader and served as 2009 president of the Asian Bar Association of Washington. Although he grew up in the Seattle area, graduating from Seattle University and University of Washington School of Law, his career has taken him around the world. Among his many other achievements and accomplishments, he served as 2012-2013 chair of the American Bar Association Solo, Small Firm, and General Practice Division, which has approximately 20,000 members and is one of the largest entities in the ABA. He also served in the ABA House of Delegates and on the ABA Rule of Law Initiative Board, ABA Standing Committee on Judicial Independence, ABA Commission on Diversity and Inclusion 360, and as the assembly speaker of the ABA Young Lawyers Division. He recently concluded his service as a member of the ABA Law and National Security Advisory Committee. His military awards include the Defense Meritorious Service Medal, two Coast Guard Meritorious Service Medals, four Coast Guard Commendation Medals, the Army Commendation Medal, two Coast Guard Achievement Medals, and two Commandant's Letters of Commendation, as well as various team and unit awards. Non-military awards include the DHS General Counsel's Award of Excellence, the NAPABA Daniel Inouye Trailblazer Award, ABAW Judge of the Year, ABA Outstanding Young Military Lawyer Award, NAPABA's "Best Lawyer Under 40," and the American Bar Foundation Fellows Outstanding Chair Award.

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Staff Biographies

JOY LYNGAR, J.D., CHIEF ACADEMIC OFFICER

Joy D. Lyngar joined The National Judicial College in 2007 and was named Chief Academic Officer in 2008. As such, she is ultimately responsible for the quality and relevance of all education offered by the oldest and largest school for judges in the U.S. For over fifteen years, she has been an executive leader working to improve the justice system by educating judges, providing technical assistance, facilitating cross-jurisdiction sharing of best practices, encouraging judicial leadership, and by setting the bar for the highest standards of judicial ethics and competence. Over the past decade, Ms. Lyngar has led NJC to record academic achievement; NJC now educates more than 10,000 judges and court service professionals each year through in-person and on-line courses. Before joining the NJC, Ms. Lyngar spent 10 years at the National Council of Juvenile and Family Court Judges, most recently as director of the Juvenile and Family Law Department. Ms. Lyngar is a regular faculty member for NJC, Immediate Past-President of the National Association of State Judicial Educators. Prior to her work in national judicial education, Ms. Lyngar practiced law in Canada working in a general practice firm that handled criminal defense, civil litigation, and family law. Ms. Lyngar received a bachelor's degree and Juris Doctor from the University of Saskatchewan.

ALF W. BRANDT, J.D.

Alf W. Brandt develops courses for judges on water, the environment, and judicial independence, as Associate Director of Justice Solutions and Innovation at The National Judicial College (NJC). Brandt joined the college in 2023, after more than 30 years working on water law and policy in all three branches of government, and at all three levels (federal, state, and local).

Most recently, Brandt served as General Counsel to California State Assembly Speaker Anthony Rendon, who he served for more than a decade. Drawing on his extensive experience in California water policy, Brandt developed, analyzed and advocated for California water legislation. Working in the Assembly for almost 19 years, he played critical roles in the development and/or passage of the 2019 Safe Drinking Water Fund (SB 200), 2018 Water Bond, the 2014 Water Bond, 2014 Sustainable Groundwater Management Act, the 2009 Delta/Water Legislation, and the 2007 flood protection package. As Counsel to the Speaker, he also addressed a wide range of Assembly organizational issues, including protesters and meetings during COVID. His greatest pride was the Legislature's response to the "Me Too" movement, when he developed and negotiated its policy on creating a workplace "culture of respect, civility and diversity."

Brandt received his JD from UC Berkeley and his BA from UCLA. He joined the faculty of the National Judicial College in 2011.

THE NATIONAL JUDICIAL COLLEGE

FINGERPRINTING AND ATTRIBUTION SCIENCE

DIVIDER 1

Dr. Ben Santer
Dr. Paul Hanle

Human and Natural Influences on Climate

Ben Santer

Woods Hole Oceanographic Institution and UCLA

NJC lecture 1, March 11, 2024

[redacted]

My background

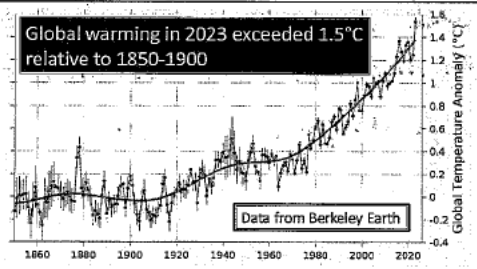
- Atmospheric scientist
- Education in U.K., Germany
- Research: Climate fingerprinting

Structure

- 2023 in review
- Natural effects on climate
- Human effects on climate

[redacted]

Global warming, 1850 to 2023



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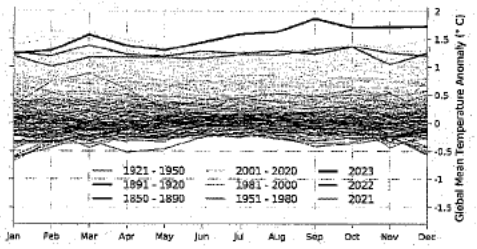
Global warming by month



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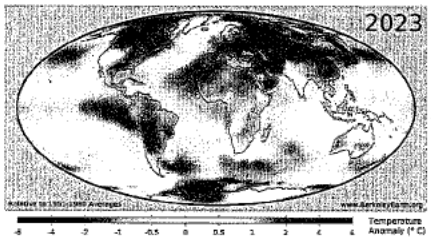
Pattern of warming in 2023



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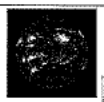
Structure

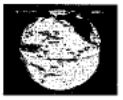
- 2023 in review
- Natural effects on climate
- Human effects on climate

[redacted]

Natural effects on climate

- The Sun
- Volcanoes
- Internal variability





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Studying changes in the Sun

- Direct measurements (since 1979)
- Sunspot numbers
- Cosmogenic isotopes

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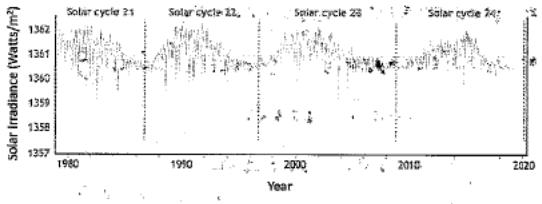
Satellite measurements

Sun's energy reaching top of Earth's atmosphere



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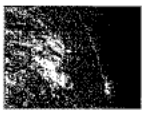
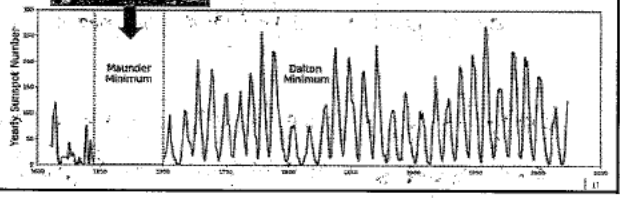
Sunspots



- First seen by telescope in 1611
- Sunspot numbers increase and decrease in a cycle of roughly 11 years
- Most sunspots in a cycle = Solar Maximum
- Least sunspots in a cycle = Solar Minimum

Sunspots



[redacted]

Natural effects on climate

- The Sun
- Volcanoes

- Internal variability

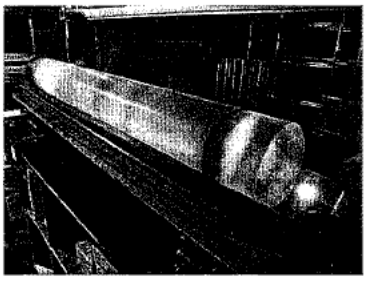
A long-standing fascination...

Climbing Mount St. Helens, April 1980

Studying changes in volcanic activity

- Using ice cores
- From space
- From the ground

Studying volcanoes with ice cores



Ice core from West Antarctic Ice Sheet

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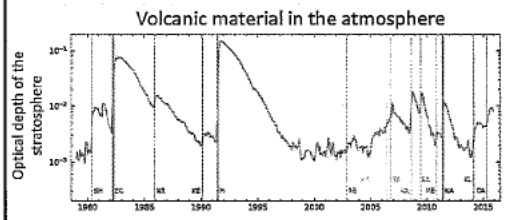
Studying volcanoes from space



El Chichón

Pinatubo

Nabro

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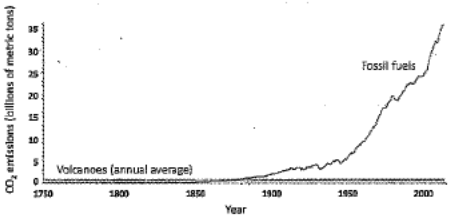
Volcanic CO_2 and human CO_2



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Natural effects on climate

- The Sun
- Volcanoes
- Internal variability

[redacted]

Internal climate variability

- Cyclical changes in global or regional climate
  - Purely natural
  - Mainly due to interactions between atmosphere and ocean
  - Happen on a range of timescales (months to centuries)
  - Unclear how human-caused warming will affect these cycles

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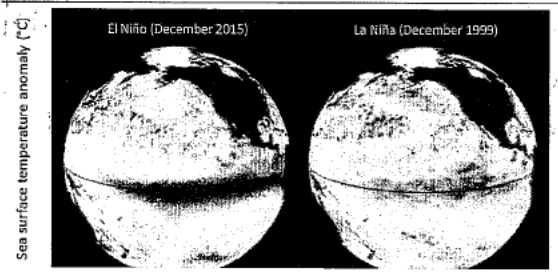
El Niños and La Niñas



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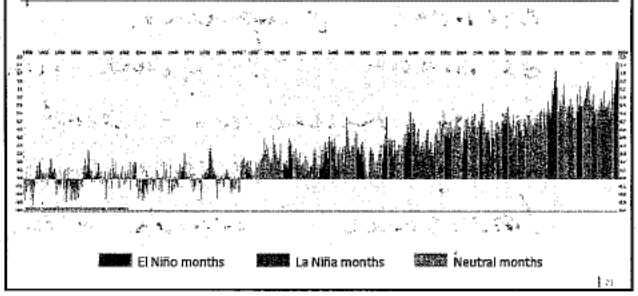
Influence of El Niños and La Niñas



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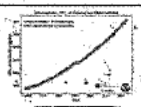
Human effects on climate

- Greenhouse gases

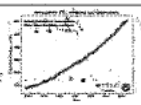


- Particulate pollution

- Land surface changes

Human effects on climate

- Greenhouse gases



- Particulate pollution
- Land surface changes

[redacted]

The greenhouse effect

- Greenhouse gases (GHGs) absorb heat
- Earth's surface would be about 33°C colder without GHGs
- Earth's natural greenhouse effect allowed life to evolve
- Adding GHGs enhances the natural greenhouse effect
- This warms Earth's surface and lower atmosphere

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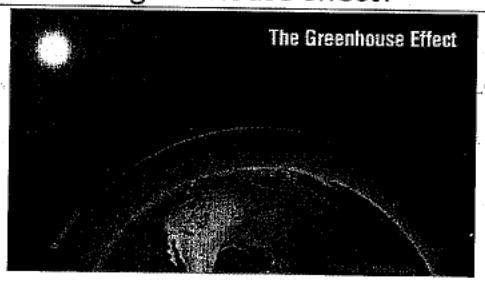
What is the greenhouse effect?



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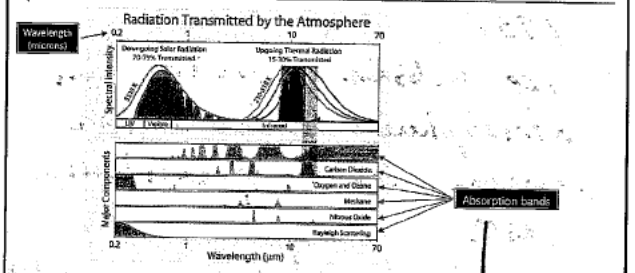
CO_2 is an important greenhouse gas



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Measuring greenhouse gas changes

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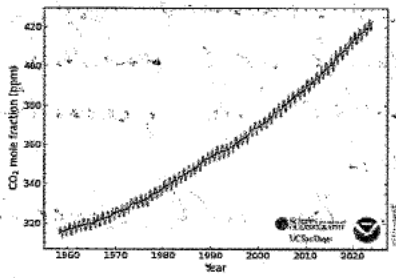
CO_2 in the atmosphere



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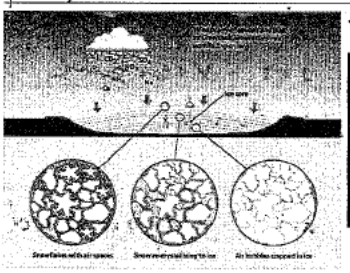
CO_2 in ice cores



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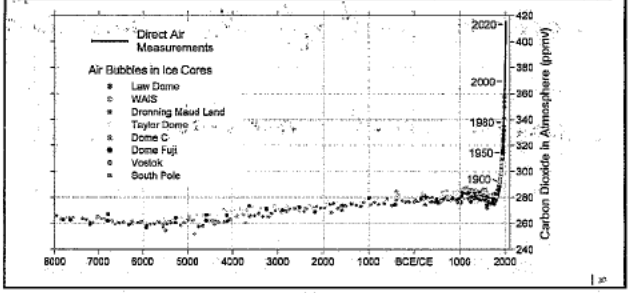
10,000 years of atmospheric CO_2



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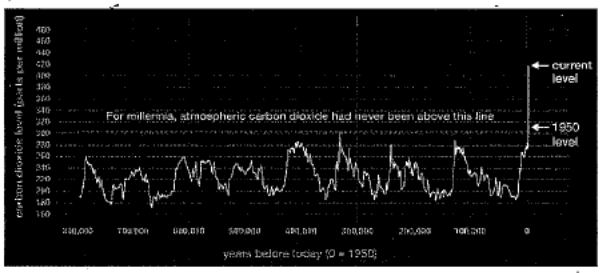
800,000 years of atmospheric CO_2



[redacted]

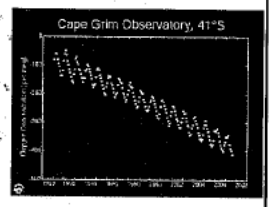
Is CO_2 increase mostly due to humans?

Yes! Because:

- Atmospheric oxygen is decreasing
- Isotopic carbon ratios are changing
- Oceans are acidifying

Atmospheric oxygen is decreasing

- Burning carbon requires O_2
- O_2 becomes part of the CO_2 molecule
- CO_2 increase from burning fossil fuels decreases atmospheric O_2



Cape Grim Tasmania

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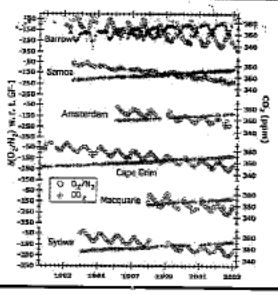
Atmospheric oxygen is decreasing

Green: O_2/N_2 ratio

Red: CO_2



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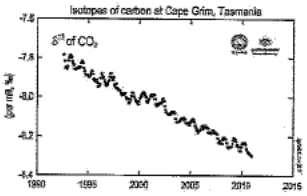
Isotopic carbon ratios are changing

- Isotopic signatures of natural atmospheric CO_2 and CO_2 from fossil fuel burning are different
- As CO_2 from fossil fuel burning mixes with the atmosphere, ratio of Carbon^{13} to Carbon^{12} decreases



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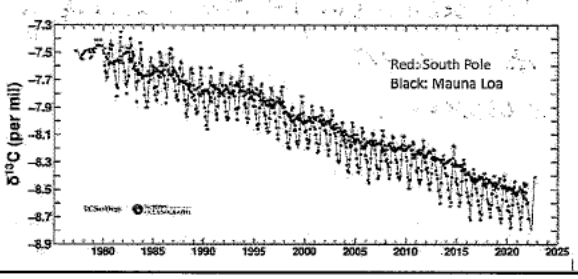
Isotopic carbon ratios are changing



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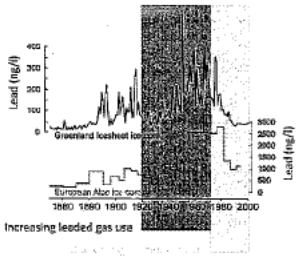
Human effects on climate

- Greenhouse gases
- Particulate pollution [redacted]
- Land surface changes

[redacted]

Pollutants in ice cores



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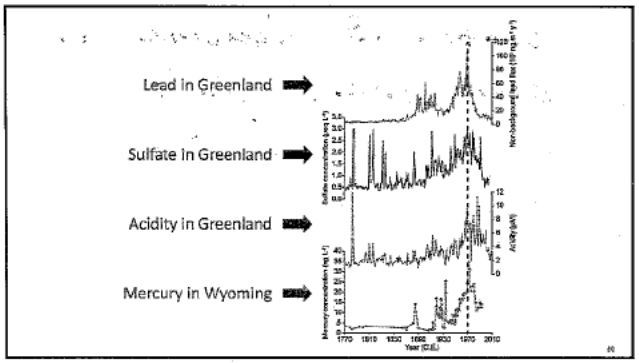

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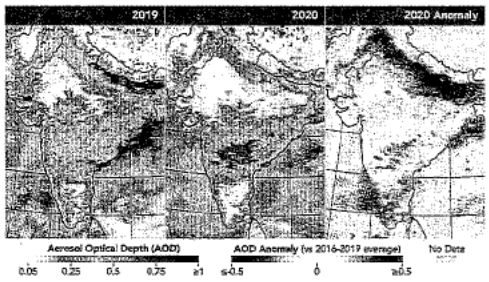
Pollution during lockdown



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Human effects on climate

- Greenhouse gases
- Particulate pollution
- Land surface changes

Deforestation

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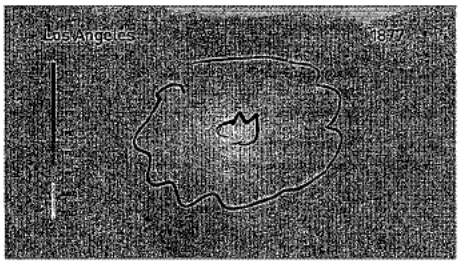
Urbanization



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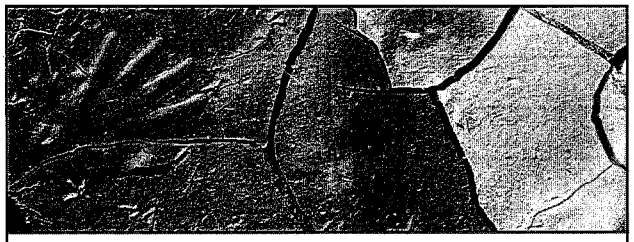
Summary

- Climate is influenced by:
  - Natural factors (the Sun, volcanoes, internal variability)
  - Human factors (greenhouse gases, particulate pollution, land surface changes)
- Lecture 2: How scientists separate natural and human influences on climate

[redacted]

[redacted]



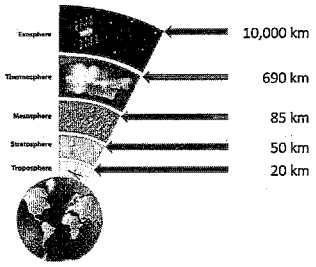
Fingerprinting the Climate System

Ben Santer

Woods Hole Oceanographic Institution and UCLA

NJC Lecture 2. March 11, 2024

Different layers of the atmosphere



Structure

- What are climate models?
- Climate fingerprinting 101
- Fingerprinting examples
- Looking at the causes of changes in extreme events
- Lessons learned

Structure

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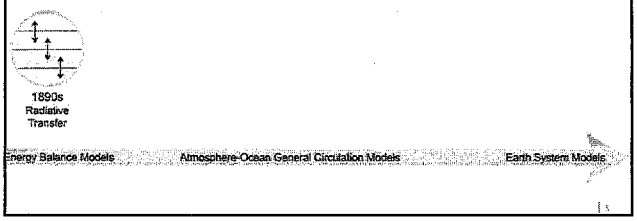
Why do we need climate models?

- In paleoclimate, there's no analogue for today's climatic situation
- We need computer models to understand the likely changes in climate over the 21st century and beyond

Evolution of climate models



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Some climate model simulations

- Human factors only ("world with us")
- Natural factors only ("world without us")
- Human and natural factors ("historical")
- No human or natural factors ("control runs")
- Future warming scenarios

Testing climate models

- Today's average climate
- Seasonal climate
- Run a climate model as a weather forecast model
- Last Ice Age
- Response to large volcanic eruptions
- Variability

Structure

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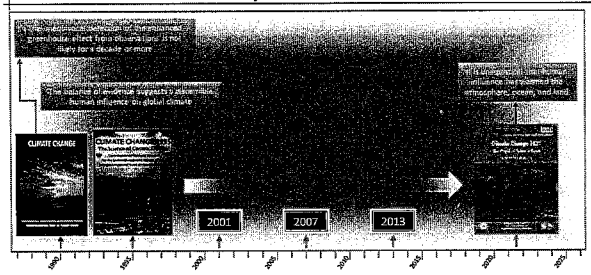
The arc of history

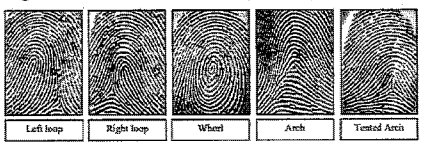


How was scientific progress made?

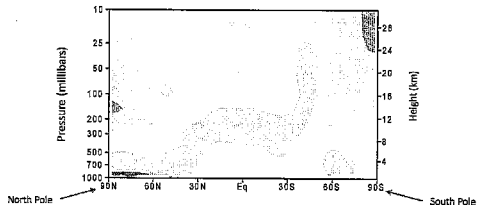
- Improved (and more) climate models
- Better understanding of factors that affect climate
- Improved (and longer) observed climate records
- Community-wide analysis of climate model results
- Infrastructure for sharing climate model output
- Climate "fingerprint" methods

Climate fingerprinting

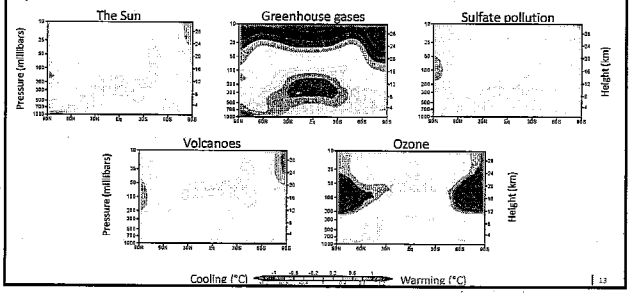
- Basic idea:
  - Different influences on climate have different signatures
  - Signatures are easier to discern in patterns ("fingerprints")



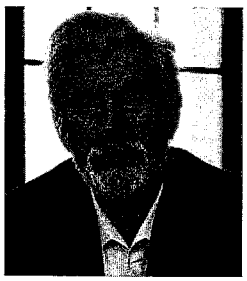
The fingerprint of the Sun



Natural and human fingerprints



Klaus Hasselmann



2021 Nobel Physics Prize

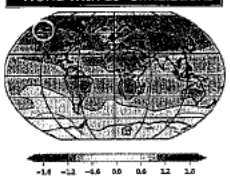
Awarded for developing:

"...methods for identifying specific signals, fingerprints, that both natural phenomena and human activities imprint in the climate"

Look globally, not locally

Human and natural effects on climate

"World with us" simulations



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Suki Manabe

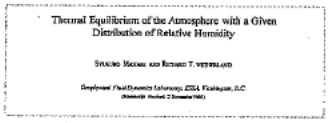
2021 Nobel Physics Prize

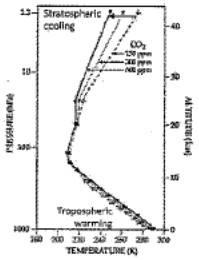
Awarded for:

"...the physical modelling of Earth's climate, quantifying variability and reliably predicting global warming"

[redacted]

A famous paper from 1967


Thermal Equilibrium of the Atmosphere with a Given Distribution of Relative Humidity



18

Structure

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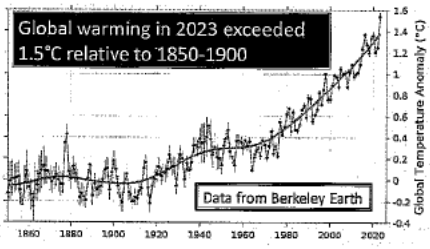
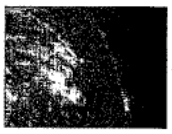
Temperature

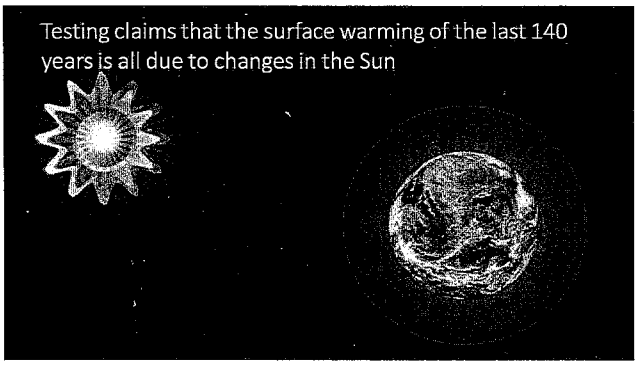




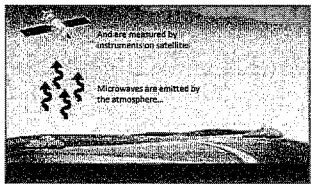
"It's all the Sun"

20

Testing claims that the surface warming of the last 140 years is all due to changes in the Sun

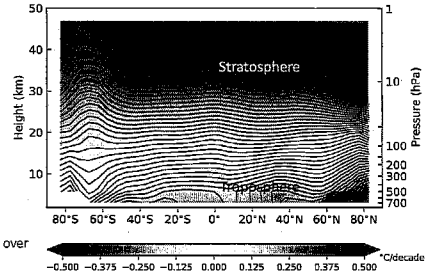


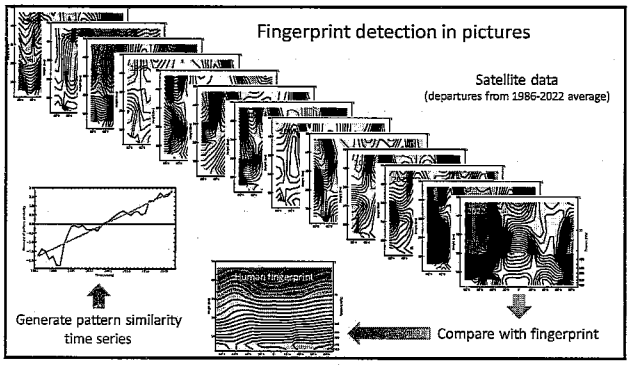
Atmospheric temperature from space

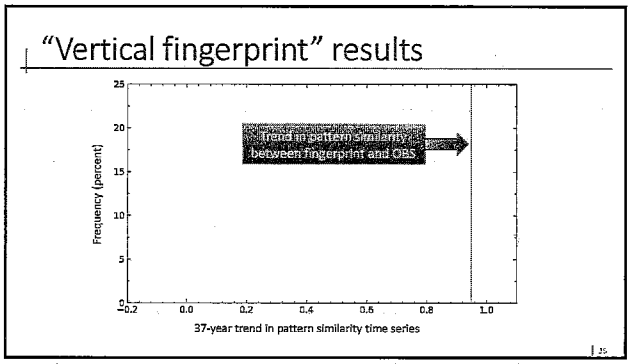


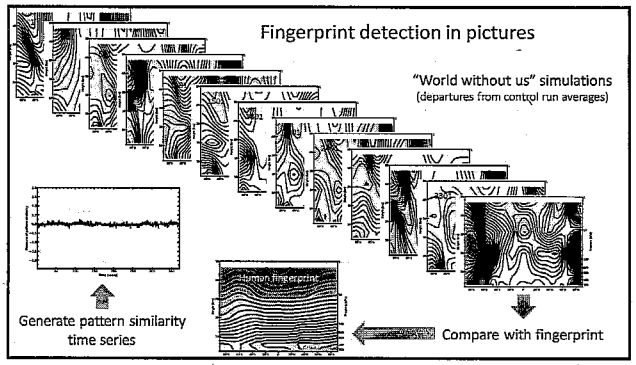
- Higher temperatures = More microwave emissions from oxygen molecules
- Different microwave frequencies measure temperature of different atmospheric layers

Manabe's fingerprint...

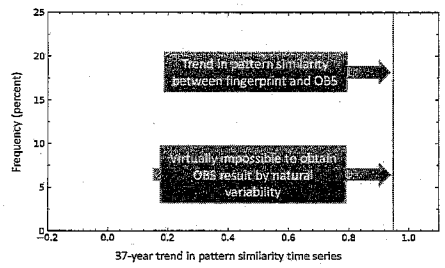



Fingerprint detection in pictures
Satellite data
(departures from 1986-2022 average)
Generate pattern similarity time series
Compare with fingerprint

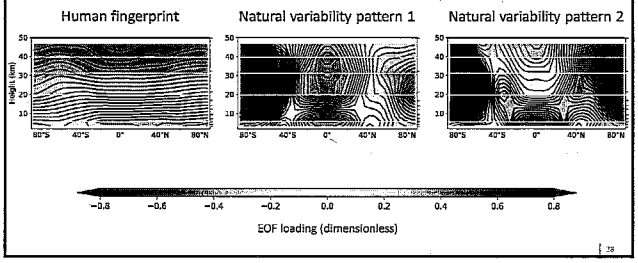

"Vertical fingerprint" results
Trend in pattern similarity between fingerprint and OBS
Frequency (percent)
37-year trend in pattern similarity time series


Fingerprint detection in pictures
"World without us" simulations
(departures from control run averages)
Generate pattern similarity time series
Compare with fingerprint

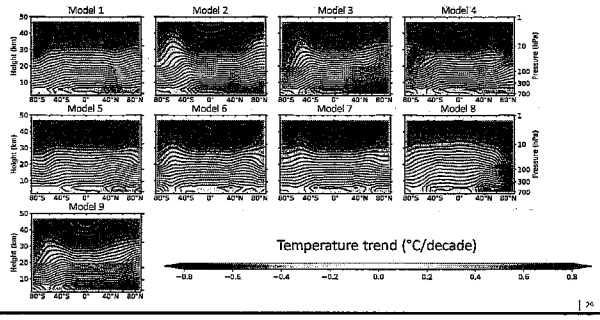
"Vertical fingerprint" results



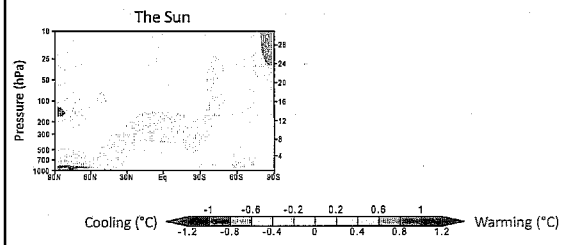
Why?



The human-caused "vertical fingerprint" is robust across a range of climate models



Natural external factors

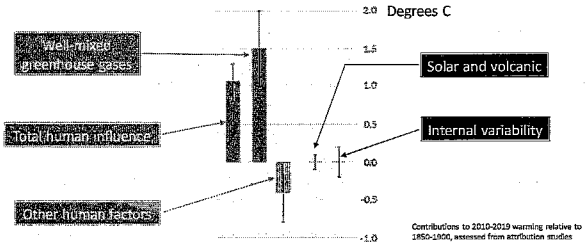


Beyond "temperature only" studies

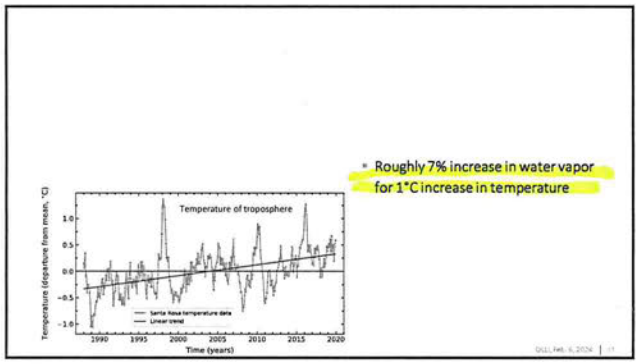
- Climate scientists have identified human "fingerprints" in many different aspects of the climate system – not just in temperature

- Changes in different climate variables are physically and internally consistent, and are independently monitored with different instruments

Sizes of human and natural influences



Ubiquitous human fingerprints

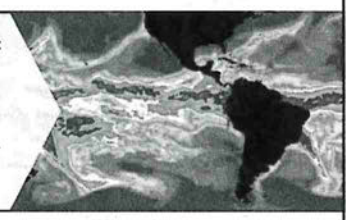


- Roughly 7% increase in water vapor for 1°C increase in temperature

Human fingerprints in atmospheric moisture

Santer et al. (*PNAS*, 2007) found that:

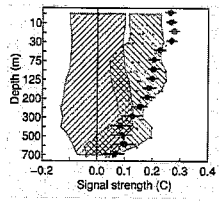
- There is an emerging human-caused signal in the increasing moisture content of Earth's atmosphere
- The signal is primarily due to human-caused increases in well-mixed greenhouse gases



Santer et al., Proceedings of U.S. National Academy of Sciences (2007)

Fingerprinting in the ocean…

North Atlantic

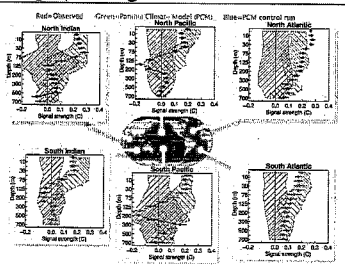


Red = Observed
Blue = Model "world without us" simulations
Green = Model "world with us" simulations

Temperature changes over 1955-1999

Barnett et al., *Science* (2005)

Fingerprinting in the ocean…



Penetration of Human-Induced Warming into the World's Oceans

Tim P. Barnett,[1*] David W. Pierce,[1] Krishna M. AchutaRao,[2] Peter J. Gleckler,[1] Benjamin D. Santer,[2] Jonathan M. Gregory,[3] Warren M. Washington[4]

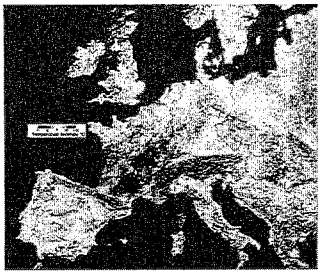
A warming signal has penetrated into the world's oceans over the past 40 years. The signal is complex, with a vertical structure that varies widely by ocean. It cannot be explained by natural internal climate variability or solar and volcanic forcing, but is well simulated by two independently forced climate models. We conclude that it is of human origin, a conclusion robust to observational sampling and model differences. Changes in advection combine with surface forcing to give the overall warming pattern. The implications of this study suggest that society needs to seriously consider model performance of future climate change.

Barnett et al., *Science* (2005)

Structure

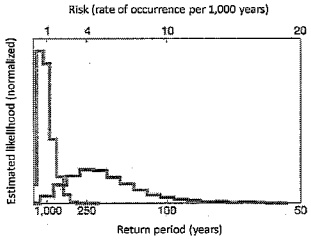
- What are climate models?
- Climate fingerprinting 101
- Fingerprinting examples
- Looking at the causes of changes in extreme events
- Lessons learned

The 2003 European summer heatwave



- July and August 2003
- Health crises in several countries
- Estimated death toll: 72,000*

The 2003 European summer heatwave

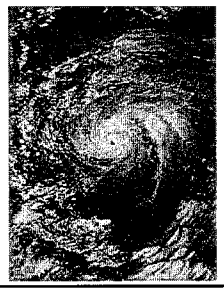


Histogram of return periods without human-caused climate change

Histogram of return periods with human-caused climate change

"We estimate it is very likely (confidence level >90%) that human influence has at least doubled the risk of a heatwave exceeding this threshold magnitude."

Hurricane Harvey (2017)



- Category 4 hurricane
- Landfall: August 2017
- $125 billion in damages
- More than 100 deaths
- Peak rainfall: > 60 inches in 4 days

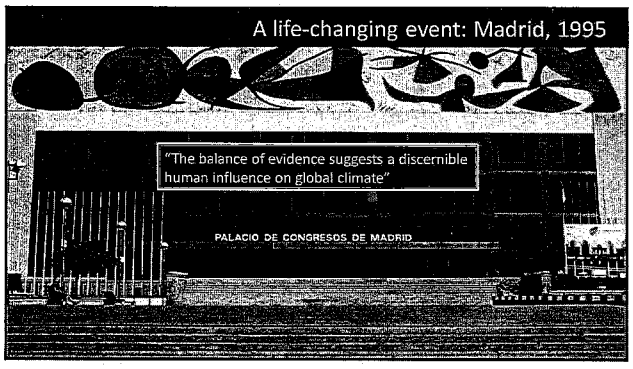
"...anthropogenic climate change likely increased Hurricane Harvey's total rainfall by at least 19% with a best estimate of 38%"

Event attribution: Legal issues

- Can we reliably estimate the human contribution to the extreme event's likelihood?
- In estimating this contribution, are the key uncertainties well-quantified?
- Are there reliable damage estimates for the extreme event?

Structure

- What are climate models?
- Climate fingerprinting 101
- Fingerprinting examples
- Looking at the causes of changes in extreme events
- Lessons learned



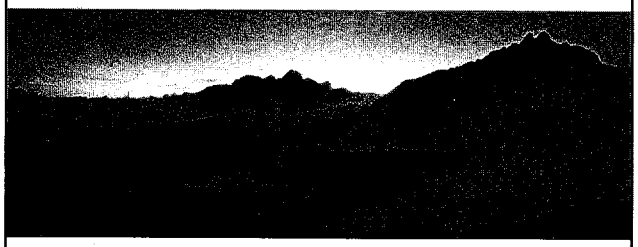
Claims about 1995 IPCC Report

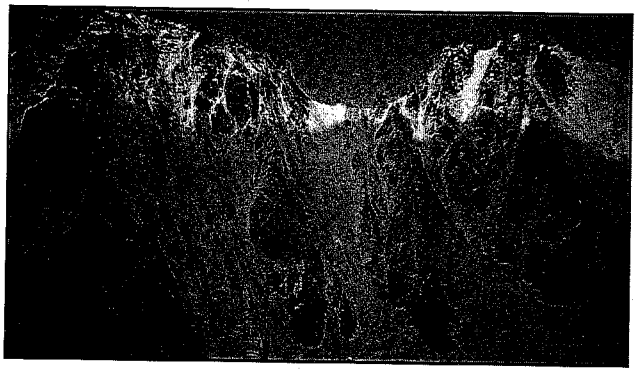
- "Corruption of the peer-review process"
- "Political tampering"
- "Scientific cleansing"
- "Human influence" finding based on two papers

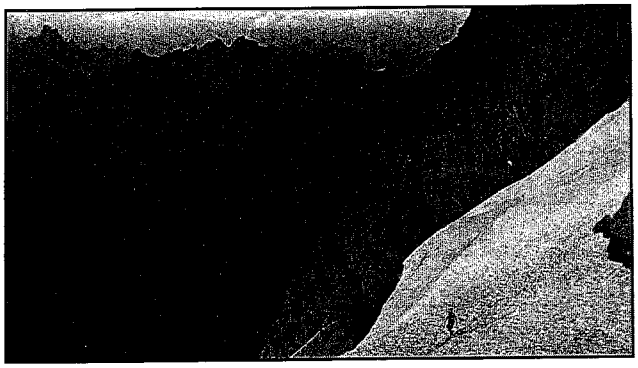
Four lessons learned

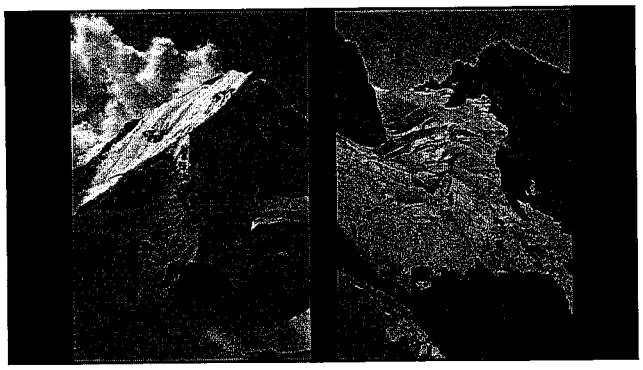
1. Defend scientific understanding
2. Don't engage in science by eminence of position
3. Don't just preach to the choir
4. Declare your values

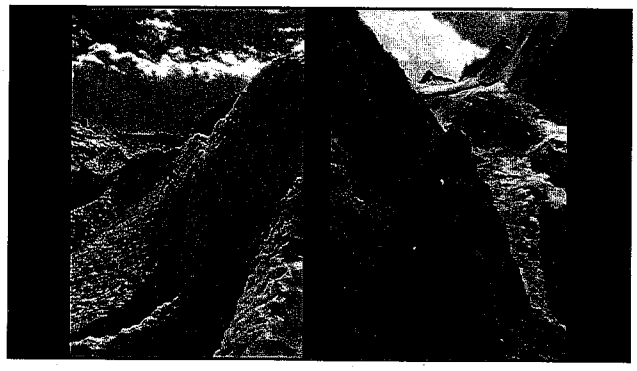
Declare your values

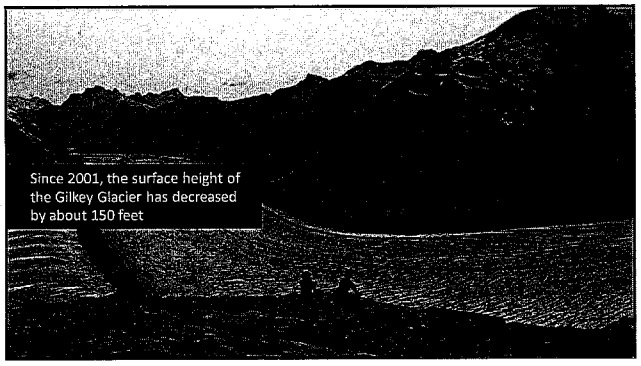












Summary

- "Climate fingerprinting" uses pattern information to separate human and natural effects on climate
- It was developed in the late 1970s
- Human fingerprints on climate are unequivocal and ubiquitous
- Today, scientists routinely estimate the impacts of climate change on extreme events

Further reading

- https://climate.nasa.gov/explore/ask-nasa-climate/2949/why-milankovitch-orbital-cycles-cant-explain-earths-current-warming/
- https://www.carbonbrief.org/explainer-how-the-rise-and-fall-of-co2-levels-influenced-the-ice-ages/
- https://nap.nationalacademies.org/catalog/25733/climate-change-evidence-and-causes-update-2020

2024

Judicial Leaders in Climate Science

THE NATIONAL JUDICIAL COLLEGE

Leadership

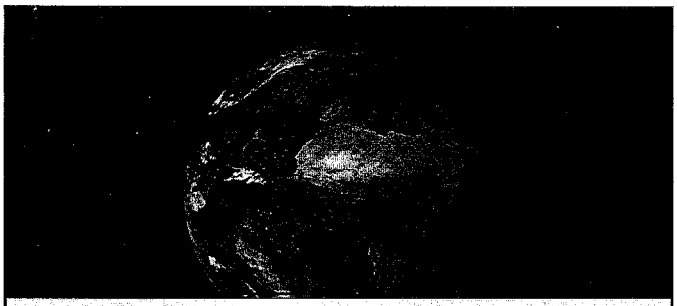
Theory and Practice

THE NATIONAL JUDICIAL COLLEGE

Dr. Yvonne Stedham

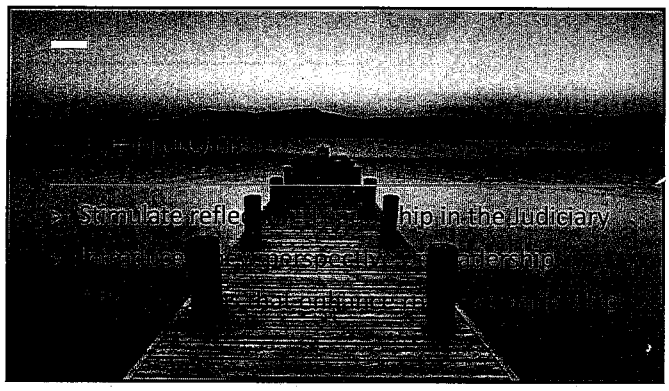
Welcome

Why
"Leadership"?



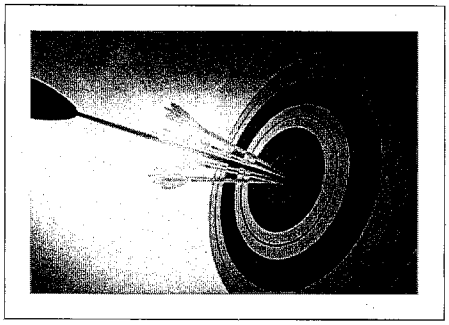
Leaders shape the world through their influence on . . .

- Family
- Education
- Societal Values
- Economy
- Government
- Technology
- Science



Leadership Topics

1. Leadership - Theory and Practice
2. From Transactional to Transformational Leadership
3. Enhancing Leadership Skills
   1. Focus and Attention
   2. Communication
   3. Teamwork
4. Leadership and Managing Change

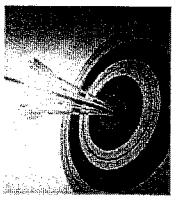


Leadership

Theory and Practice

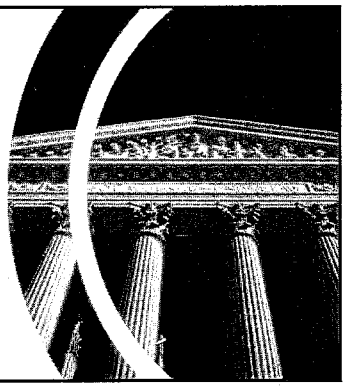
Learning Objectives

1. Describe what it means to be a leader
2. Explain the relationship between power and influence
3. Compare management with leadership



1. What does leadership mean to you?
2. In the context of your work as a judge, what leadership opportunities do you have?
3. What do you think are the two most important traits/behaviors of an effective leader?

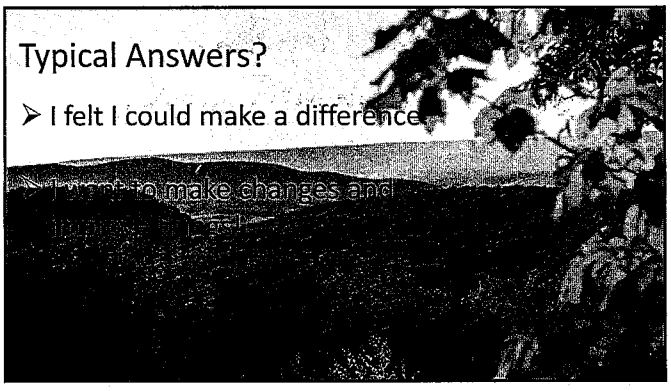
In the context of your work as a judge, what leadership opportunities do you have?



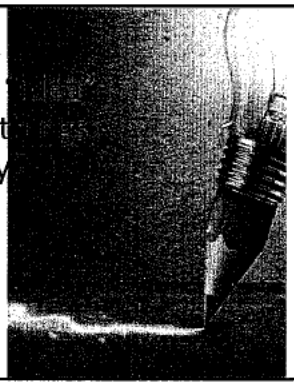
Reasons for accepting an official leadership position?

Typical Answers?

- I felt I could make a difference
- I wanted to make changes and improvements



How does the
for improving t
become reality



Through changes
in people's behavior!

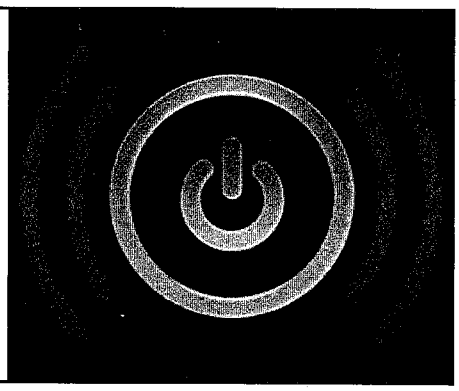
Leadership is about influencing others' behavior!

[redacted]

How do you influence others' behavior?

Influence and Power

Power is the ability to produce an effect



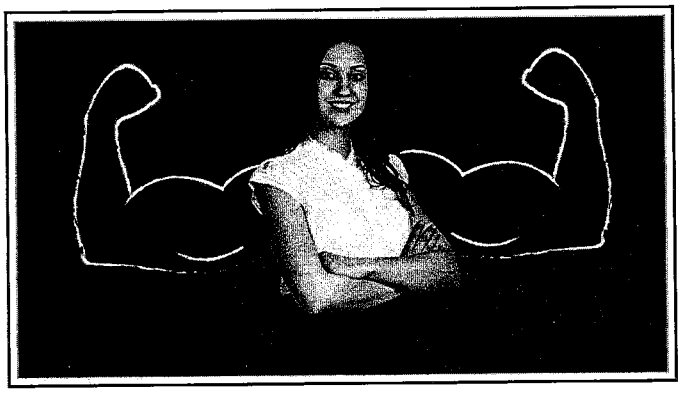
Position-based Power

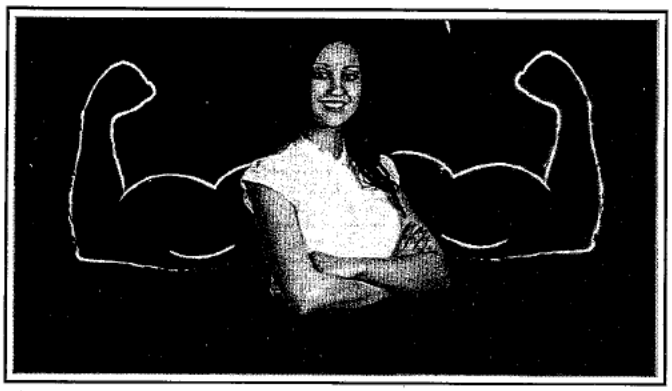
Legitimate Power

Coercive Power

Reward Power

23



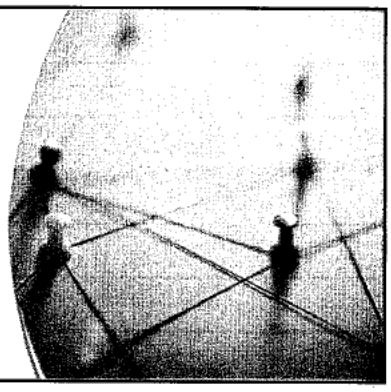


Five Power Bases (French and Raven)

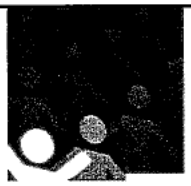
Person	Position
1. Expert Power	1. Legitimate
2. Referent Power [redacted]	2. Coercive
	3. Reward

[redacted]

Position-based vs.
Person-based power?



Most effective power bases are the personal power bases, expert and referent power, in combination with reward power!!



Leadership and Management

Compare Management and Leadership

- Groups of 3
- Pick a spokesperson
- Two to three points
- 5 minutes

What is "management?"

What do managers do?

[redacted]

Managerial Activities

Planning

Define goals, establish strategies to achieve goals, develop plans to integrate and coordinate activities.

Organizing

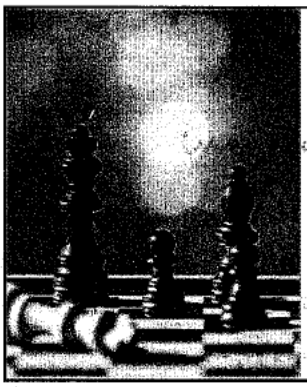
Arrange work (structure/process) to accomplish organizational goals.

Leading

Work with and through people to accomplish goals.

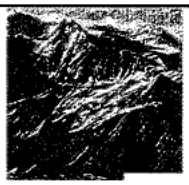
Controlling

Monitor, compare, correct work.



- Do you have to be in a position with authority to lead?
- Do you have to be in a management position to lead?

The Need for Effective Leadership



What is an "organization"?

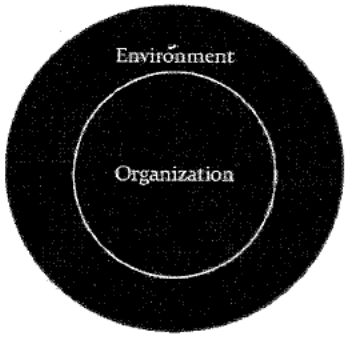
Organizations exist to provide products and services that society wants -

efficiently and effectively.

[redacted]

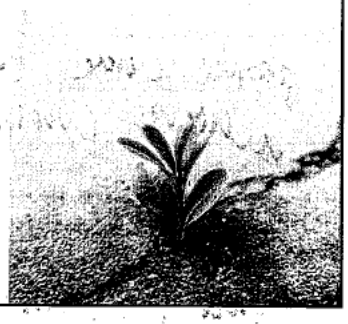
Efficiency vs. effectiveness

Long-term vs. short-term



PESTEL Factors

Political
Economic
Social
Technological
Environment/Climate
Legal



Dynamic external environment
(PESTEL)

Continuous need for CHANGE in the organization's internal environment (people/behavior, processes, structure, culture)

Need for Effective Leadership

Dynamic external environment (PESTEL)

Continuous need for CHANGE in the organization's internal environment (people/behavior, processes, structure, culture)

Leaders

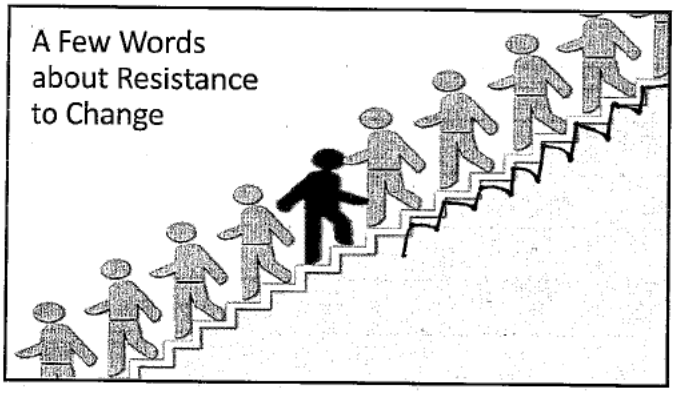
Identify the need for change

Initiate change

Implement change

⇨ Ensure the effectiveness of the organization

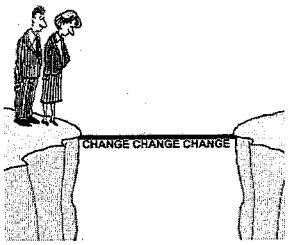
A Few Words about Resistance to Change

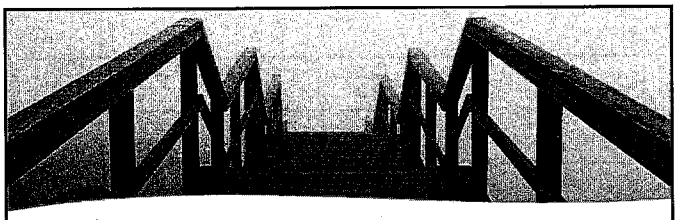


[redacted]

Why is it so difficult to create change?

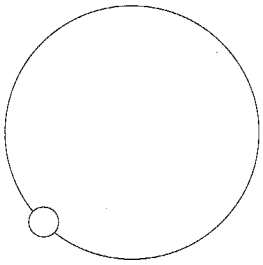
Why is there resistance to change?





Uncertainty and Fear

Can I perform in the changed environment?
Can I deliver the newly defined outcome?



Extra Work

The need to learn something new

Different values and beliefs

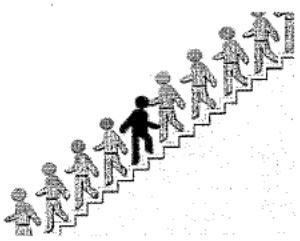
[redacted]

Managing Resistance to Change

[redacted]

Address resistance to change through -

- Communication:
  - Why and how change?
  - Benefits of change for ....
- Involvement
- Training and Preparation
- Coaching
- Growth Mindset (Carol Dweck)
- Importance of TRUST



Based on our conversation thus far, why do you think was Gandhi such an effective leader?

EFFECTIVE LEADERSHIP: FROM TRANSACTION TO TRANSFORMATION

DIVIDER 3

Dr. Yvonne Stedham

OBJECTIVES:

Effective Leadership – From Transaction to Transformation – Introduction

After this session, participants will be able to

1. Describe an effective leader
2. Discuss the importance of trust in effective leadership
3. Identify three components of trust

Effective Leadership – From Transaction to Transformation – Traits, Personality, EI

After this session, participants will be able to

1. Name traits associated with effective leaders
2. Describe the Big Five Personality Characteristics and their relationship to leadership
3. Explain emotional intelligence

Effective Leadership – From Transaction to Transformation – Leader Behaviors, Situational

After this session, participants will be able to

1. Differentiate between person- and production-oriented leadership behaviors
2. Articulate the importance of understanding situational factors to effective leadership
3. Highlight how early leadership research relates to trust

2024

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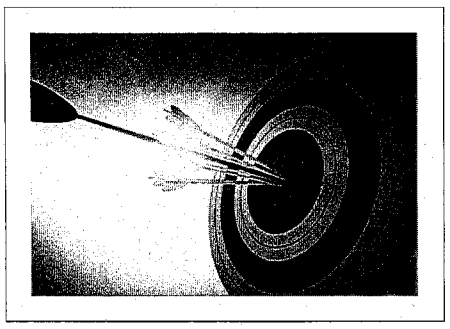
Leadership

From Transaction to Transformation

Dr. Yvonne Stedham

THE NATIONAL JUDICIAL COLLEGE

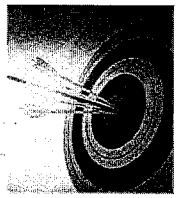


Leadership

From Transaction to Transformation

Learning Objectives

1. Summarize key leadership ideas
2. Learn about your personality and leadership style
3. Know the importance of trust to leadership

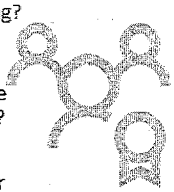


Groups of 3 to 4

5 to 10 minutes

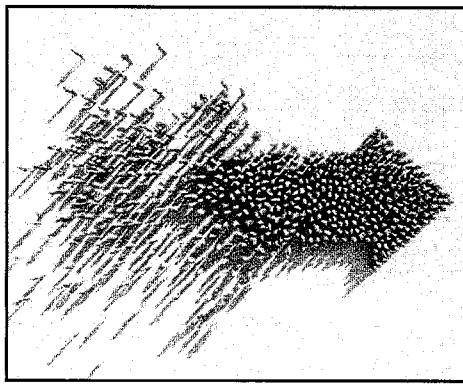
Pick a spokesperson

1. What do "leaders" do? What are you doing when you are leading?



1. Describe an effective leader: Traits? Skills? Behaviors?

Refer to your earlier reflection.



What people value in their leaders

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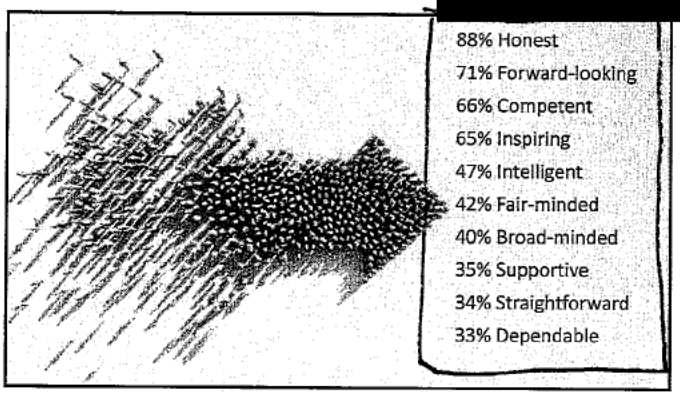

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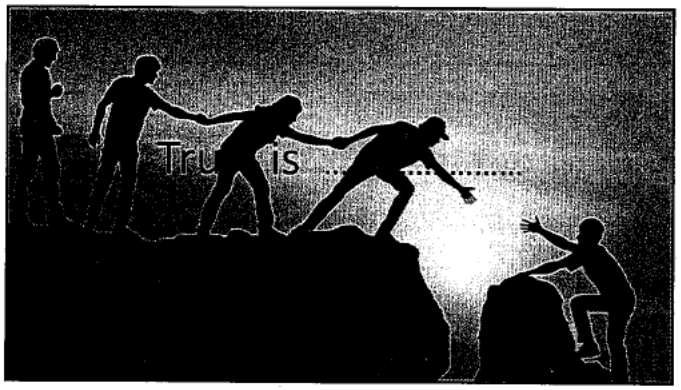
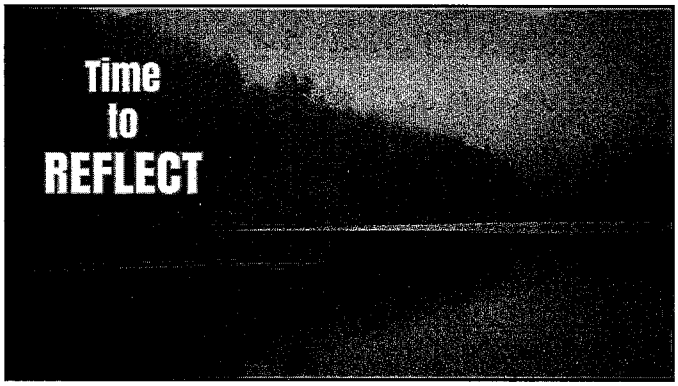
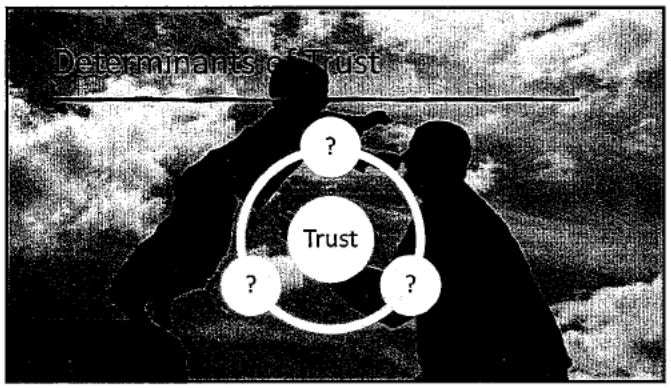
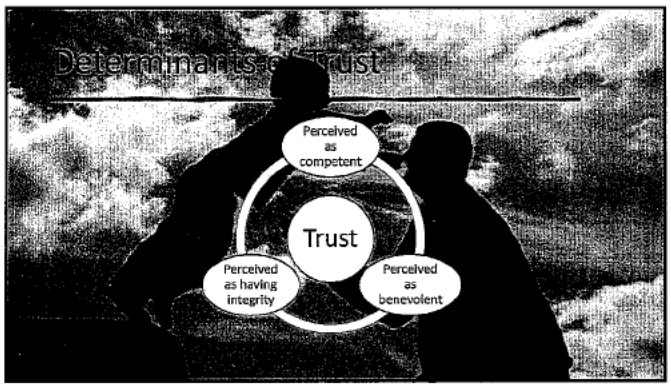




1. What is trust?
2. What determines whether you trust or don't trust another person?

Trust is the willingness to be vulnerable





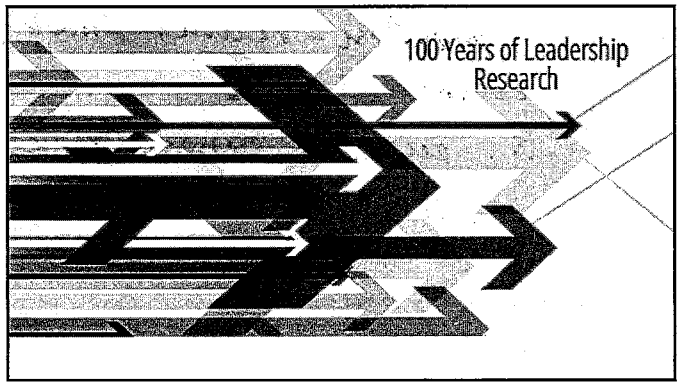
Creating Trust

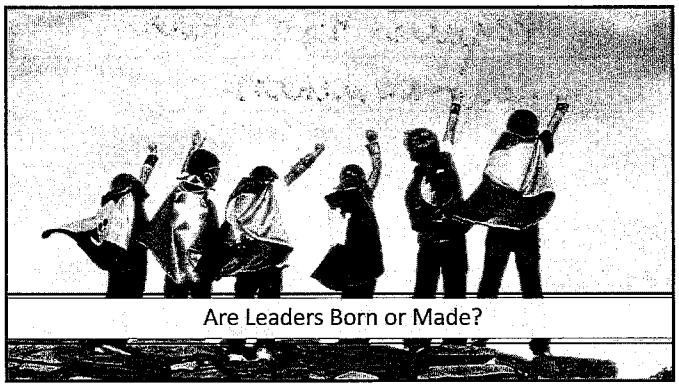
Perceived ability

Perceived integrity

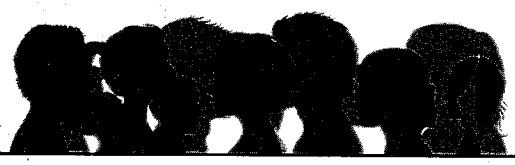
Perceived benevolence

What does it take to be an effective leader?





Leader Traits



Traits are enduring patterns of thoughts, feelings, and behaviors.

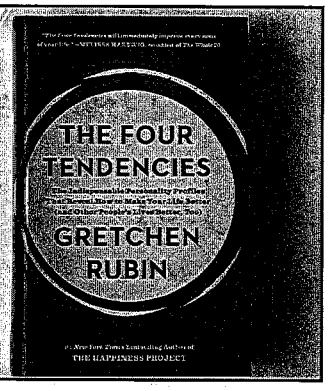
They include psychological dimensions that shape how a person interacts with the world around them.

They are relatively stable over time and across different situations.

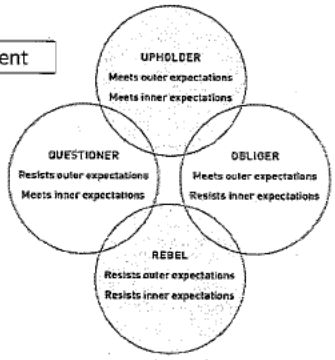
Gretchen Rubin

Four Tendencies

The impact of internal versus external expectations on our behavior.

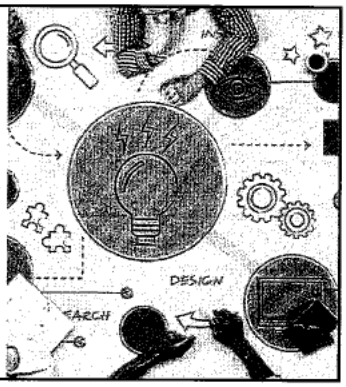


Self Assessment

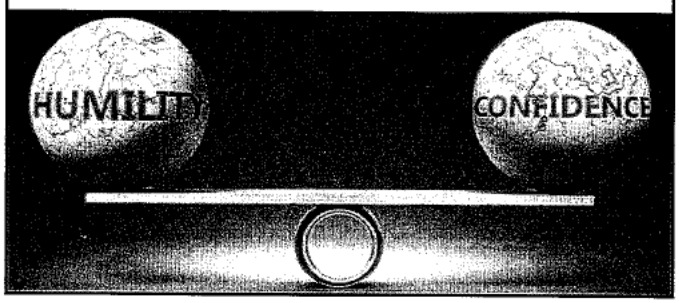


Leader Traits

- Intelligence
- Self-confidence
- Determination
- Sociability
- Integrity
- Humility



Leadership and Humility



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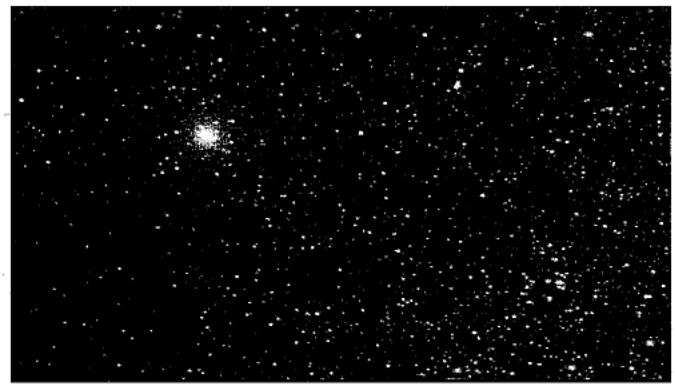

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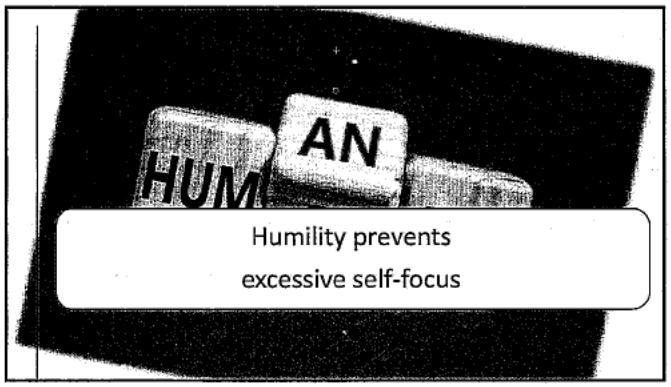
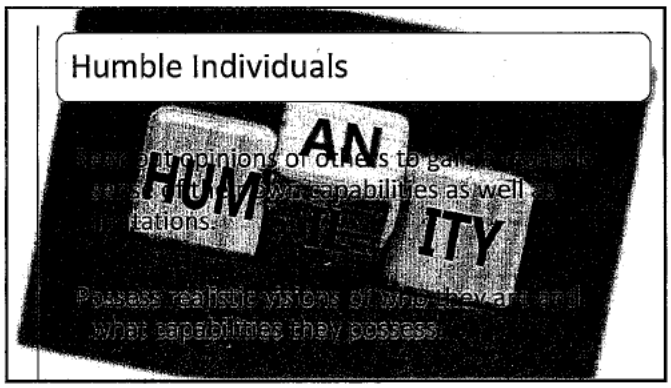

HUM
AN
Humility prevents
excessive self-focus


Humble Individuals
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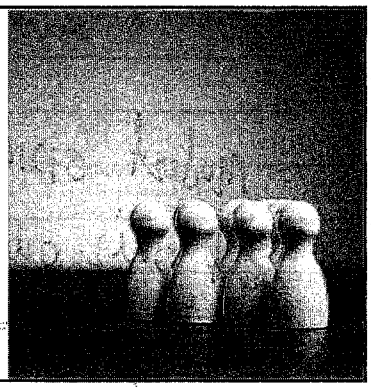
AN
ITY
Possess realistic visions of who they are and
what capabilities they possess.

Individuals with humility do not react defensively toward criticism and

are able to take in positive information about the self judiciously.



Baldoni (2009)

Harvard Business Review

A sense of humility is essential to leadership because it authenticates a person's humanity.

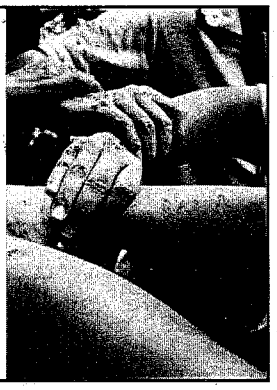
We humans are frail creatures; we have our faults.

Recognizing what we do well, as well as what we do not do so well, is vital to self-awareness and paramount to humility.

"We should take care not to make the intellect our god. It has, of course, powerful muscles, but no personality. It cannot lead; it can only serve."

~ *Albert Einstein* (1879-1955)

The Relationship
between
Leader Traits and Trust

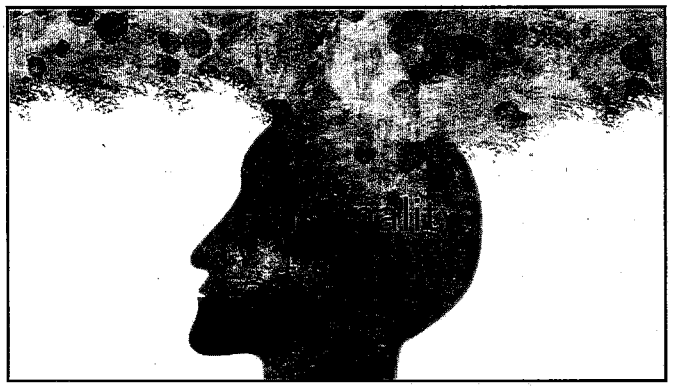


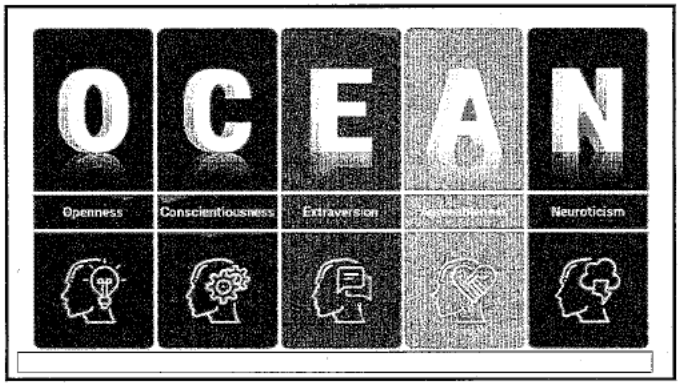
Trust

Perceived Ability
Perceived Integrity
Perceived Benevolence

Traits and Trust

- Intelligence -> Ability
- Determination -> Ability, Integrity
- Self-Confidence -> Ability
- Sociability -> Benevolence
- Humility -> Ability, Integrity, Benevolence





Which of the Big 5 do you think is most important for effective leadership?

The "Big 5" Personality Traits (OCEAN)

Rank from <u>most to least strongly</u> associated to leadership

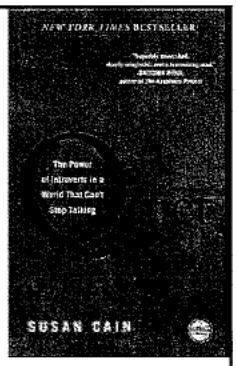
Most important:	Extraversion
Second:	Conscientiousness
Third:	Neuroticism, Openness
Fourth:	Agreeableness

Do these results relate to trust?

Quiet: The Power of Introverts

Susan Cain

https://www.ted.com/talks/susan_cain_the_power_of_introverts



Emotional Intelligence

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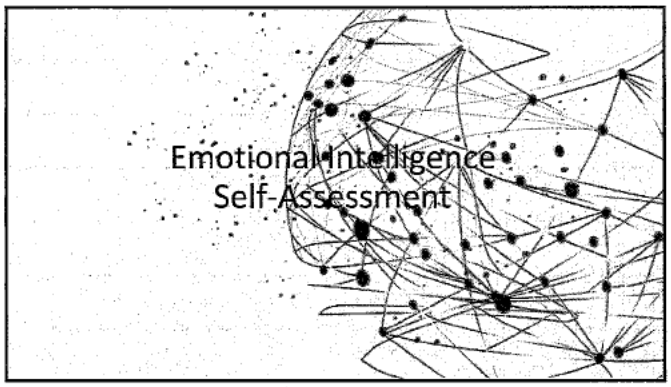

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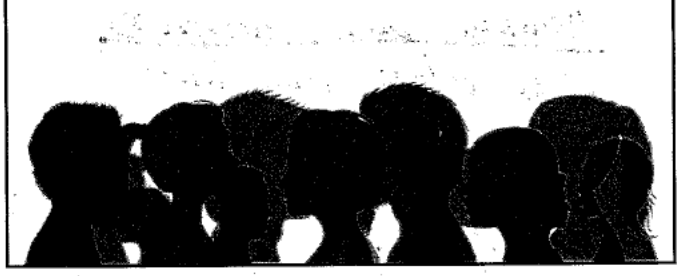
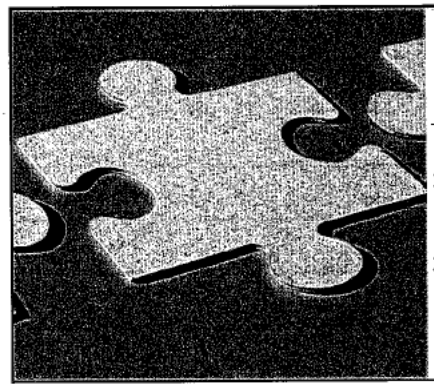
Components of Emotional Intelligence

- Self awareness
- Social awareness
- Self-management
- Relationship management

Leader Behavior





Two Behaviors

1. Concern for production, structure, outcomes, efficiency
2. Concern for people

The Leadership Grid [Blake and Mouton]

Two Behaviors

1. Concern for production
2. Concern for people

Scale: 1 to 9

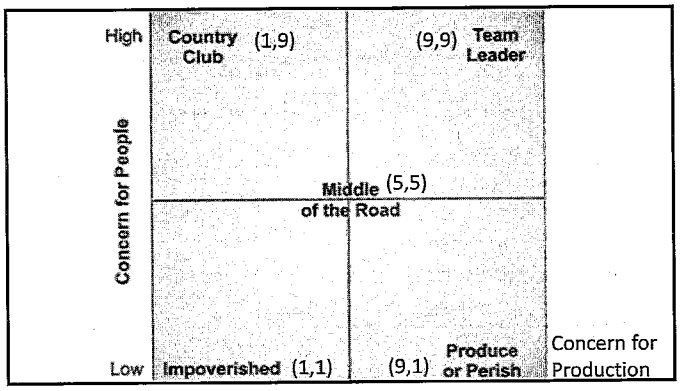
[redacted]

Five Styles

1. Impoverished (1,1)
2. Produce or perish (9,1)
3. Country club (1,9)
4. Middle of the road (5,5)
5. Team leader (9,9)

9,9 – Team Leader found to be most effective
Why? Relate to trust!

[redacted]



CASE STUDY

Judge Kim Franks has been a trial court judge for seven years. Recently, the state's chief justice asked Judge Franks to spearhead the development of a case management system. The court has 15 judges and about 40 court staff members. Judge Franks is known for putting in long hours (usually between 45 and 50 hours per week). There is never a moment when Judge Franks isn't doing something to either manage the docket or improve the court system in some way. Employees' reactions to Judge Franks are strong and varied: some like the judge's style, while others don't. Those who like the judge talk about efficiency, clear goals, and they feel they've accomplished something at the end of the day. Those who don't like the judge's style complain the judge is driven, rarely takes a break, and doesn't socialize with the staff. They suggest the judge is hard to relate to, and that it is not fun to work at the court. The judge notices the different reactions. This bothers the judge, but the judge doesn't know what to do about it. The judge also has a busy home life with a spouse and three children.

Groups of 4 participants

5 minutes

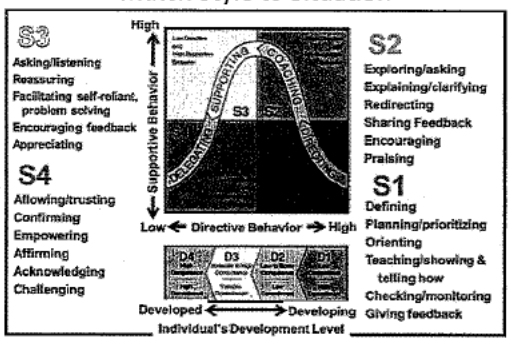
Pick a spokesperson

Reflect on the following questions

1. How would you describe Judge Frank's leadership, considering the Leadership Grid?
2. Why does it create such a pronounced reaction from the subordinates?
3. Do you think Judge Frank should change her/his style? Please provide a rationale.

Situational Leadership

Match Style to Situation



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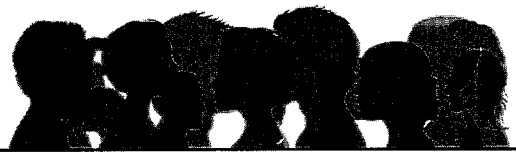
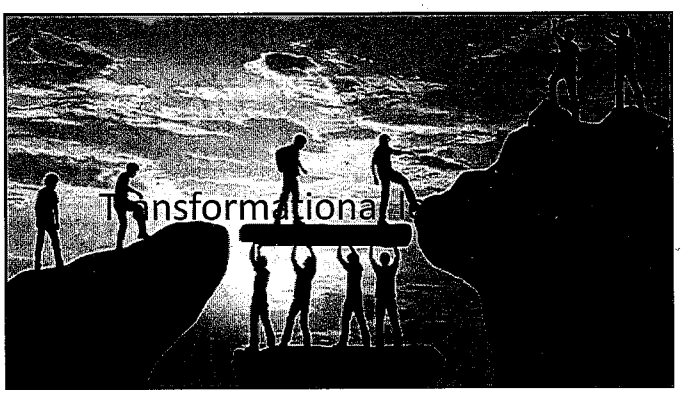
Responding to follower's needs is the surest way to achieve effectiveness and success.

Transformational Leadership

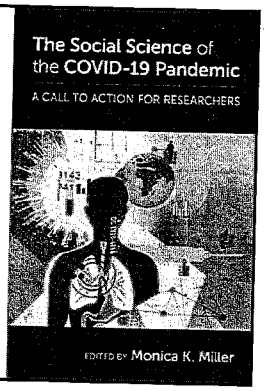




... transcend their own self-interest and inspire their followers to do the same.

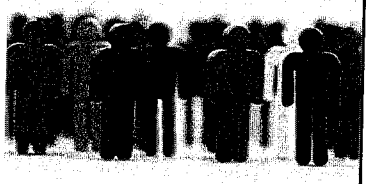
Stedham, Y. and Mueller, S.
"Leadership During the Pandemic"

in Monica Miller (Ed.)
The Social Science of the COVID-19 Pandemic: A Call to Action for Researchers.
Oxford University Press, 2024

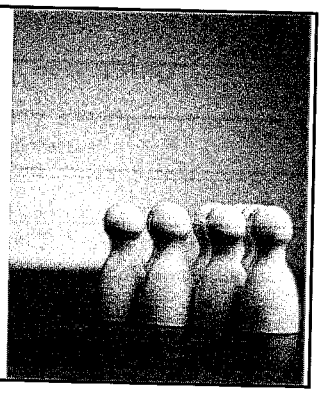


Transformational Leadership (TL) is the

- process of engaging with others -
- creating a connection that
- results in mutual trust and
- raises the level of motivation and morality
- in both the leader and the followers



Transformational Leadership (TL) is represented by four behavioral sets



A transformational leader helps followers to reach their highest potential. Followers become leaders.

- Inspirational motivation [vision, passion
- Idealized Influence [referent power, charisma, values]
- Intellectual stimulation [invites different perspective]
- Individualized consideration [coach, teacher, expectations]

Selected Research Results

Characteristics of Transformational Leaders

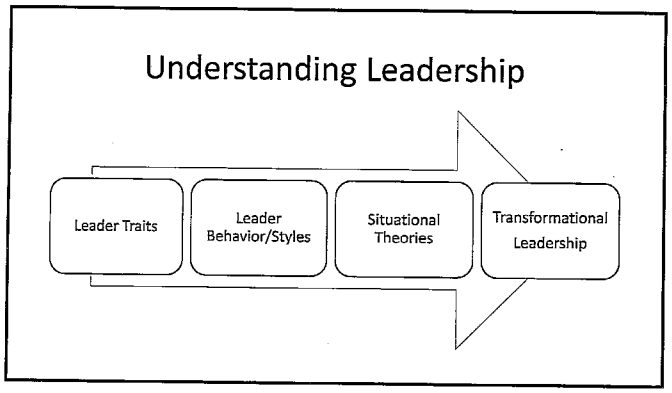
- Self awareness
- Empathy
- Confidence
- Humility
- Communication skills
- Integrity
- Focus
- Emotional Intelligence

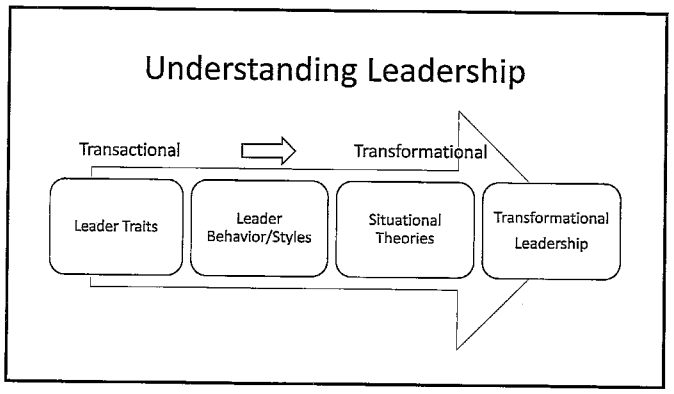
Transactional Leadership

Exchanges between leaders and followers (contingent rewards). Does not individualize followers' needs.

Transformational Leadership

Process engaging with others and creating a connection that raises the level of motivation and morality in both the leader and the followers. Tries to help followers to reach their highest potential


Understanding Leadership
Leader Traits
Leader Behavior/Styles
Situational Theories
Transformational Leadership


Understanding Leadership
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Transformational
Leader Traits
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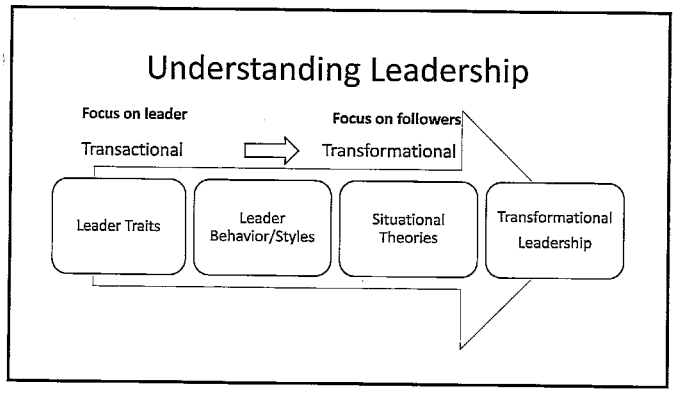
Transformational Leadership


Understanding Leadership
Focus on leader
Focus on followers
Transactional
Transformational
Leader Traits
Leader Behavior/Styles
Situational Theories
Transformational Leadership

Communication: Any behavior (or lack of) that can be interpreted as having meaning

Nonverbal Communication: Everything that communicates in addition to the words ~ facial expressions, eye behavior, gestures, body position and movement, vocal elements, appearance…

Verbal Communication: The words (and only the words) ~ oral and written

Essential Elements of Communication: Content, Structure, and Delivery

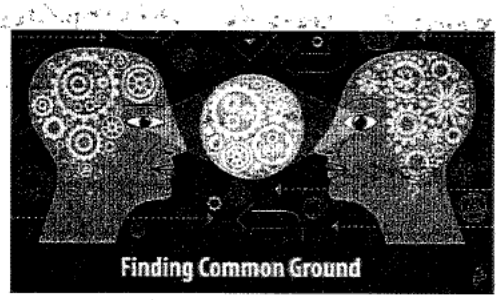
Content: Information & how it is conveyed
⇨Is it appropriate for the audience?

Structure: How information is organized & if/how the organizational pattern is made clear
⇨Does it make sense to the audience?

Delivery: Use of voice, face, body, hands, etc. in conveying the message(s)
⇨Do you connect with & engage the audience?

They're All Important, But First Things First

Audience **B**efore **C**ontent



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Words and **Framing**

"Changing the Language of Climate Change"

Scientific American

S.J. Hassol, 2/1/2-23

[redacted]

Scientific Term	Public Meaning	**Better** Choice
Natural gas	Clean fuel	Methane gas
Nuisance flooding	Inconvenient water	Recurrent sunny-day flooding
Negative emissions	Bad pollution	CO_2 removal or drawdown
Sequester	Keep jury from news	Lock up carbon over long term
Climate change	Any change in climate	Climate disruption

[redacted]

Nonverbal Pathways

Facial Expressions	Eye contact
Gestures	Body Position
Appearance	Voice
Proxemics	Others

[redacted]

[redacted]

Nonverbal Communication

BOTH of these are true—we need to:

- Be sensitive to nonverbal cues and use them to **adapt** our communication
- Avoid over-reliance on what we **assume** they mean
  - Humans are *chronically overconfident* in our ability to understand the minds of others

Importance of Perspective **Getting**

"The secret to understanding each other better seems to come not through an increased ability to read body language or improved perspective taking but, rather, through the hard relational work of putting people in a position where they can tell you their minds openly and honestly."

~Nicholas Epley, *Mindwise: How We Understand What Others Think, Believe, Feel, and Want*

Perspective Getting: Ask and Carefully Listen

✓ HOW to ask so they're more likely to be open?

- ❑ Context: where and when
- ❑ What you say
- ❑ How you say it
  - Voice: tone, pace, silences
  - Body & hands: positioning, proximity, gestures
  - Face: expressions, eye contact

"It's difficult to think of a single communication behavior that is more fundamental for constructive conflict resolution than listening. But most people think they're better than they are."

~Jones and Brinkert, *Conflict Coaching*

Active Listening: Clarifying and Confirming the Message

1. Focus on the speaker and his or her message
2. Draw out the message as necessary
3. Communicate your understanding of the message
4. Encourage confirmation or clarification of the meaning

Tips To Increase Honest Communication with You as a Leader

- Offset built-in cognitive errors (assumptions)
- Start with curiosity
- Invite dissent
- Embrace the outliers; argue the opposite
- Ask good questions (the power of wording)

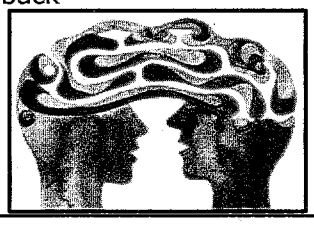
We Can ALL Get Better

Effective Communication : Effective Leadership

✓ The Need for Feedback

✓ Communicator SUPERPOWERS:

- **Curiosity**
- **Empathy**



Active, Engaged Listening: Clarifying and Confirming the Message

Active listening usually involves four steps:

1) ***Focus on the speaker and his or her message:*** This involves both *being* attentive and receptive and *demonstrating* that you are attentive and receptive.

--Use nonverbal behaviors such as eye contact, nods, a positive tone of voice, and upright posture or a slight forward lean as well as verbal encouragers such as "I see..." "Mm hmm..." "Go on."

2) ***Draw out the message as necessary:*** You might need to initiate the interaction, to encourage fuller responses or bring the speaker back from a tangent, etc. To do this, ask questions. The type of question you ask will impact the answer you get:

- Close-ended questions allow for short, direct answers; they often start with *is, are, did, do, when.*[Use when you need very specific information and when you need to establish control of the topic or the proceeding]
- Open-ended questions allow for a broader range of responses; they often start with *what, how, why, describe, explain, tell, give an example.* [Effective when probing for information and when you need answers of greater depth. Examples include: "Help me understand..." "Tell me more about..."]

3) ***Communicate your understanding of the message:*** There are usually several levels of meaning in every exchange:

- Content: facts, information. Paraphrasing is one of the most useful tools there is for checking (and showing) understanding of the content of a message. ["If I understand you correctly...." "What I'm hearing is.... Is that right?" "So, you're saying _____?"]
- Emotions: feelings, reactions. When emotions play an important role in the message, it can be very effective to acknowledge their existence, even if the emotions aren't relevant to your decision. ["It sounds like you're very frustrated.... What I need from you now in order to move forward is..."]
- Intent: why they're giving you this message, what they're trying to achieve with it, what the connection to the overall proceeding is. ["You believe this information means that _____?"]

4) ***Encourage confirmation or clarification of the meaning:*** To make sure you got the message right, you need to give the other person a chance to verify or clarify your interpretation. ("Yes, that's what I meant;" or "Well, not quite. What I meant was...")

- For true active listening, you should always do this regarding the content of the message. Regarding the emotional aspect, you need to decide whether to focus on the emotions and to encourage confirmation or clarification of them. This is known as "reflective listening."
- Also consider when voicing your own feelings could be useful in conveying empathy: "It makes me quite sad to see how things have worked out;" "I am confused by what happened here."

Active, engaged listening helps ensure the communication is effective.

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Guidelines for Better Listening

⇒ When **You're** the Listener...

1) **Shape your attitude:** State the need to listen carefully as a goal (to yourself and/or to others): "It's important that I listen carefully;" "I need to focus on the key components." Try to tune out distractions, including those created by the speakers themselves (e.g., nervous quirks) and your own internal distractions.

2) **Be physically ready to listen**. This usually includes erect posture, leaning slightly forward, and establishing eye contact. This not only shows attentiveness, it can *add* to your attentiveness.

3) **Work to see the situation from the speaker's point of view**. Understanding others' perspectives is *key* to effective communication. Ideally *ask* them about their perspective, rather than making assumptions.

4) **Withhold judgment** until a decision is required—once we label something as right or wrong, good or bad, credible or not, we lose objectivity. Give it a fair hearing before passing judgment.

5) **Use the 4:1 ratio** (4:1 = speed you think in relation to the speed people talk) to your advantage—stay on task by mentally reviewing, paraphrasing, summarizing (etc.) what the speaker is saying. Work to tune out distractions and avoid spending most of the time planning your response (= *illusion* of listening)

6) **Use two-way communication** when understanding is particularly important (both your understanding and others' understanding) -- seek and provide feedback. Make sure people know early in the process that they will have opportunities to speak up, then at the appropriate times, sincerely invite the interaction (e.g., "I'd really appreciate getting another perspective on this; I want to make sure I'm not missing something") and *wait* ... pause for 7-10 seconds (count to yourself). If needed, invite again it: "I really want to hear any thoughts or questions you have about this."

7) **Recognize** when you have stopped listening carefully and **develop techniques to get back on track:** take a break, ask a question, ask someone to summarize (let them know ahead of time), take sips of water, have a small mint, others....

8) **Build self-awareness and skills**: Get feedback on your own style and habits from a trusted colleague or via a recording. Are you sending the messages you intend? Pay active attention to others' nonverbal behaviors, and whenever possible check your perceptions—were your interpretations accurate?

Helping Others Listen Better

1) ***Make it clear what's in it for them.***

- ⊗ People "tune in" more if there's a clear reason to listen (a benefit for the listeners).
- ⊗ State the overall goal and/or the common ground of everyone involved in the interaction near the beginning, and touch back on it.

2) ***Make it active*** *(and make it clear that it will be active)* - Listeners work harder to listen effectively when they know they are going to be *active* participants in the communication process, such as:

- ⊗ When they will have to answer questions
- ⊗ When they can ask questions and seek clarification
- ⊗ When they are asked to note information and/or complete a task with it

3) When you need to talk about something for a longer period of time, help listeners stay with you by giving them a framework that includes ***a preview, signposting, transitions, and a summary.***

- ⊗ *Preview:* Give a "mental map" of what's ahead (an overview of what you'll be talking about—"chunked")
- ⊗ *Signpost:* Verbal "signposts" help the listener keep track of the message more easily. ("The *second* point…") Also "flag" important information ("It is especially important that....").
- ⊗ *Transition* between segments of a proceeding or categories of a topic by making it clear how the parts connect (e.g., "Now that we've discussed ___, the next step is to....").
- ⊗ *Summarize* what's been said/done at relevant points (after major segments and at the end, for instance).

4) ***Use supporting materials*** - The task of listening is almost always made easier if you more than one channel (more than one sense) is used, and people are much more likely to remember it if they receive it through more than one channel. use the visual channel in addition to the auditory one,.

- ⊗ Consider if it would be helpful to the listeners to have visual information in addition to oral information.
- ⊗ Consider when supplementary written material might be useful (to read ahead of time or to read after).

5) ***Create an appropriate listening environment:*** Control the factors you can (sound level, temperature, etc.) that could make the room more conducive to effective listening.

Tips for Preparing for and Facilitating Collaborative Conversations

Kelly Tait

Before Conversations

- ✓ Consider your audience! What common ground might you share? Ask colleagues.
- ✓ Anticipate tripwires; practice addressing them
- ✓ Practice conversations with people you're comfortable with.
- ✓ Know your triggers.
- ✓ Have a learner mindset.

Starting A Conversation

- ✓ Start with a curious, open mindset (pep talk)
- ✓ Assume positive intent
- ✓ Make it clear it's a dialogue, not a debate—try for understanding, not necessarily agreement
- ✓ Consider ground rules (e.g., "share the air")
- ✓ Establish common ground

Keeping It Constructive During a Conversation: Respect, Reflect, Relate

- ✓ Ask clarifying questions: what, how (not why)
- ✓ Use "I" statements
- ✓ Build in a pause before you react; breathe
- ✓ Return to common ground
- ✓ Connect to official responsibilities and policies
- ✓ If overly aggressive or off-track: briefly paraphrase and redirect; offer follow-up

Sample Phrases: Ask Questions and Listen

- ❑ "What is important to you?"
- ❑ "What is your perspective on...?"
- ❑ "How did you come to feel that way?"
- ❑ "What concerns you about _____?"
- ❑ "Can you help me understand why that's important?"
- ❑ "What would you like to happen instead?"

Sample Phrases: Respect and Connect

- ❑ "I hadn't thought of it that way before."
- ❑ "Like you said...."
- ❑ "I respect the way that you...."
- ❑ "It sounds like we agree on that."
- ❑ "I appreciate...."
- ❑ "I also find that [difficult, important, helpful, interesting, etc.]."

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Resources: Leadership and Communication Skills

Compiled by Kelly Tait

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3. **Climate Change in the American Mind**. George Mason Center for Climate Change Communication and Yale Program on Climate Change Communication. "Tracks and investigates public understanding of climate change and support for climate policies." Excellent recent (and on-going) reports and tools. https://www.climatechangecommunication.org/climate-change-in-the-american-mind/
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~Continued~

Resources: Leadership and Communication Skills ~ *Continued*

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THE NATIONAL JUDICIAL COLLEGE

INTRODUCTION TO CLIMATE SCIENCE

DIVIDER 5

Dr. John M. Doherty

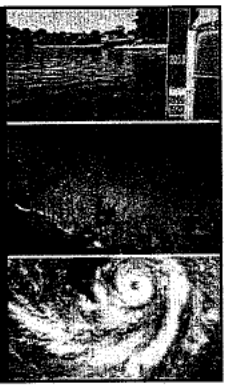
ENVIRONMENTAL LAW INSTITUTE
CJP CLIMATE JUDICIARY PROJECT

Judicial Leaders in Climate Science 2024

CLIMATE SCIENCE 101

March 12, 2024

John M. Doherty, Ph.D.



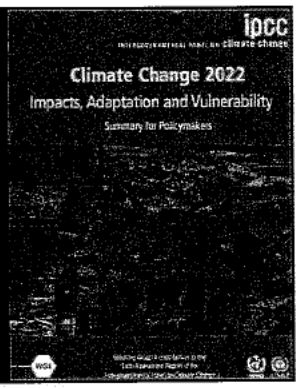
ROADMAP

1. EARTH'S ENERGY BALANCE AND HUMAN INTERFERENCE
2. CLIMATE RISKS, IMPACTS, AND THEIR ATTRIBUTION
3. CLIMATE SOLUTIONS
4. CONCLUSION

2

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

- The IPCC is the world's leading authority for assessing the science related to climate change. It consists of members from 195 countries, including the United States.
- IPCC prepares comprehensive Assessment Reports about:
  - the state of scientific, technical and socio-economic knowledge on climate change,
  - its impacts and future risks, and
  - options for reducing the rate at which climate change is taking place



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THE NATIONAL CLIMATE ASSESSMENT

The National Climate Assessment is the U.S. government's preeminent report on climate change in the United States.

It is a congressionally mandated report that is coordinated by the U.S. Global Change Research Program, which is comprised of 15 scientific agencies.

The NCA is policy-neutral but policy-relevant

Here, I'll be showing content from NCA4 (2018) and NCA5 (2023)

[redacted]

LEGAL MANDATE OF THE USGCRP

"On a periodic basis (not less frequently than every 4 years)...the [USGCRP] shall prepare and submit to the President and the Congress an assessment which:

1. Integrates, evaluates, and interprets the findings of the Program and discusses the scientific uncertainties associated with such findings

2. Analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity

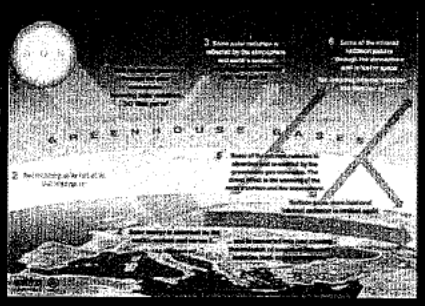
3. Analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years."

[redacted]

1

EARTH'S ENERGY BALANCE AND HUMAN INTERFERENCE

ENERGY BALANCE AND THE GREENHOUSE EFFECT



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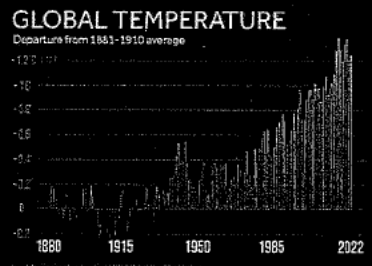
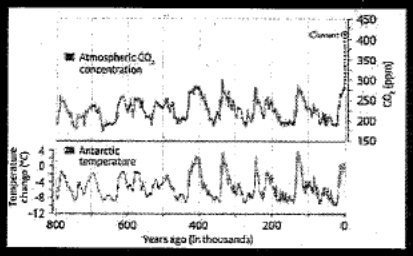
GLOBAL TEMPERATURE ANOMALY



CARBON DIOXIDE (CO_2) AND TEMPERATURE



- Variations in atmospheric carbon dioxide levels contributed to changes in temperature throughout geological history
- Modern levels of atmospheric carbon dioxide are unprecedented on this time scale due to human activity

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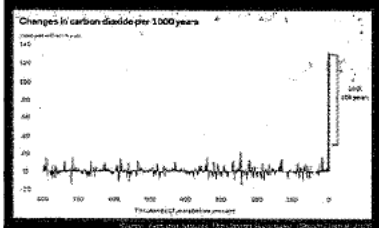
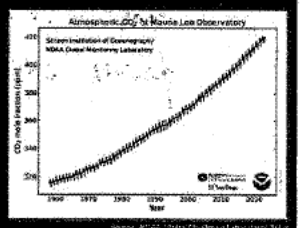
INCREASING ATMOSPHERIC CO_2

Changes in Atmospheric Carbon Dioxide over Time

Dramatic rate of increase of CO_2 occurred at the start of the industrial revolution





DETECTION AND ATTRIBUTION

A central issue in both climate science and the law is the attribution of effects to causes

DETECTION

Detect that the climate has changed by documenting an observable change in a particular climate measure

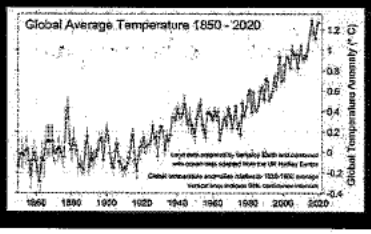
ATTRIBUTION

Attribute that change to causal factors

[redacted]

GLOBAL AVERAGE TEMPERATURE (DETECTION)

The most obvious signal of climate change is global mean surface temperature



Demonstrates a detectable increase in global mean surface temperature coincident with the rise in CO_2

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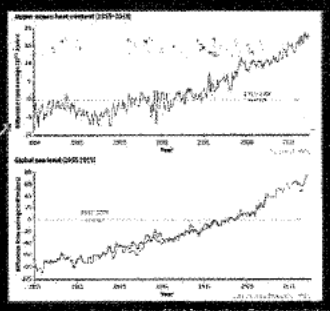
OTHER CLIMATE SIGNALS (DETECTION)

A clear warming trend since the industrial era is indicated by other climate signals, including:

- Ocean heat content
- Sea level rise



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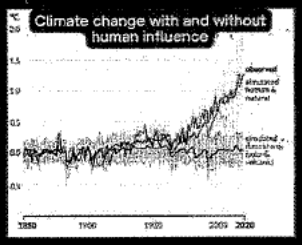
IDENTIFYING HUMAN INFLUENCE (ATTRIBUTION)

Changes in global surface temperature relative to 1850-1900



Observations and models show that the observed warming trend cannot be due to causes other than human activity, notably greenhouse gas emissions

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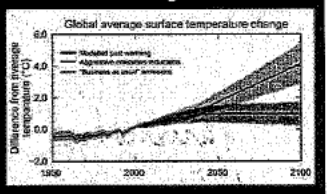
OUR CHOICES MATTER FOR FUTURE CLIMATE

Climate Change Scenarios



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2

CLIMATE RISKS, IMPACTS, AND THEIR ATTRIBUTION

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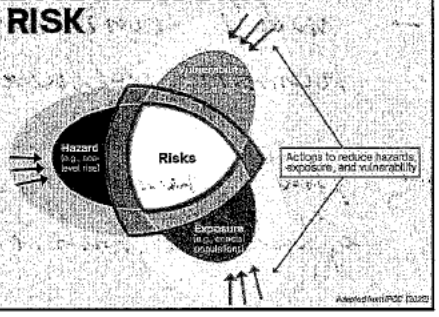
2 CLIMATE RISKS, IMPACTS, & THEIR ATTRIBUTION

CONCEPTUAL FRAMEWORK OF CLIMATE RISK

Risks result from the interaction of **hazards** with people and ecosystems that are **exposed** and **vulnerable** and that respond in different ways.



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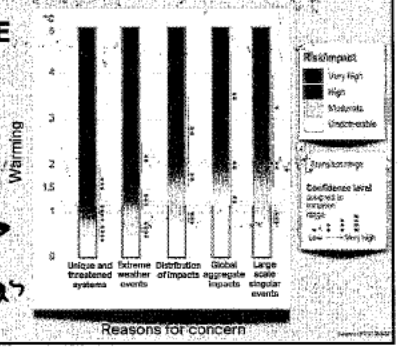
2 CLIMATE RISKS, IMPACTS, & THEIR ATTRIBUTION

GLOBAL CLIMATE RISKS UNDER DIFFERENT WARMING SCENARIOS

Risks increase with increasing levels of warming

1850 - 1900 levels



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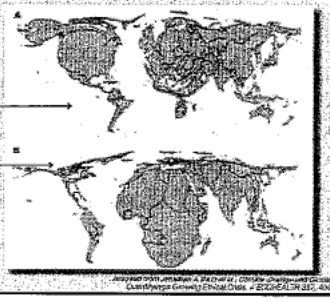
DIFFERENT GEOGRAPHICAL IMPACTS

Maps of the world with country sizes corresponding to:

(A) relative proportions of cumulative carbon dioxide emissions by country

(B) the magnitude and severity of climate-related mortality including malaria, malnutrition, and inland flood-related drownings by country

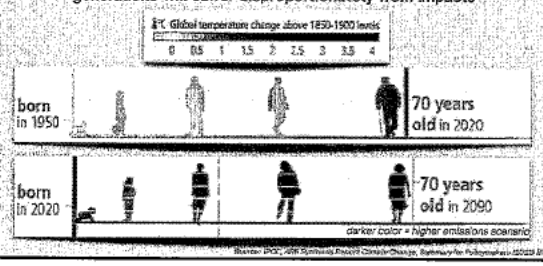
The global north is responsible for most emissions, but the global south suffers most impacts



Adapted from Jonathan A. Patz et al., Climate Change and Global Health: Quantifying a Growing Ethical Crisis, 4 ECOHEALTH 397, 400 (2007).

DIFFERENT GENERATIONAL IMPACTS

Climate extremes will get worse over time, so young people and future generations will suffer disproportionately from impacts



Source: IPCC, 2014 Synthesis Report Climate Change, Summary for Policymakers (2015) (figure adapted)

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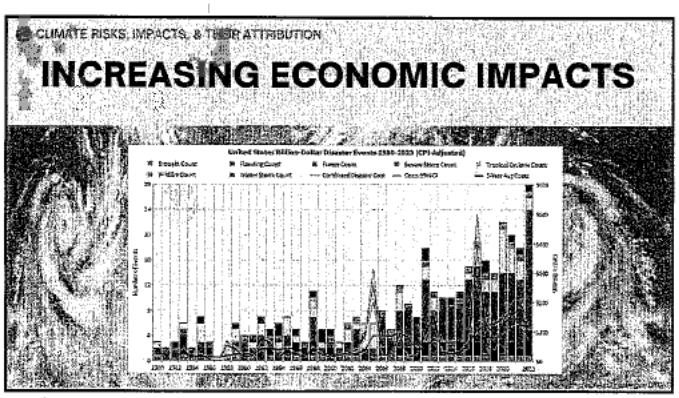
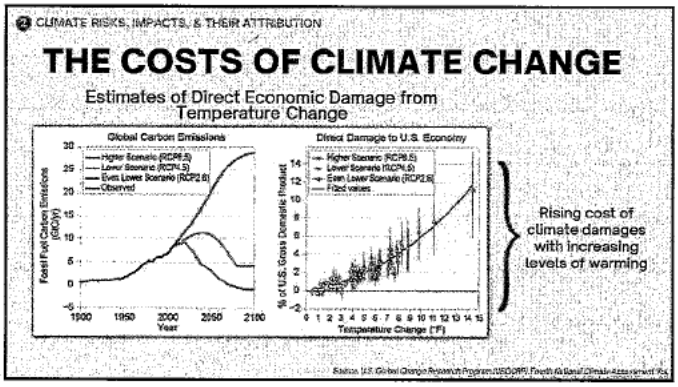
HEALTH IMPACTS ON VULNERABLE POPULATIONS

CLIMATE RISKS	VULNERABLE GROUPS	WHY?
Heat Waves	Children	Children have a higher risk of heat stroke
Drought	Rural communities	Highly dependent on irrigation for economic productivity
Hurricanes	Elderly individuals	Limited mobility to evacuate
Wildfires	Low income communities	More likely to live in substandard housing with higher home ignitability

Adapted from Jonathan A. Patz et al., The Impact of the Climate Crisis to Public Health, 3 NATURE 141, 144 (2020).





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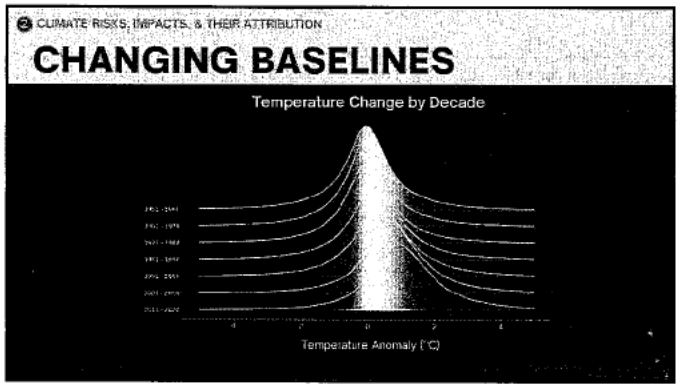

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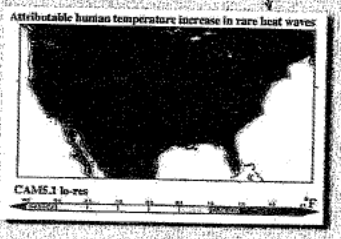
THE HUMAN INFLUENCE ON HEAT WAVES

The causal link between human-caused climate change and some extreme events, like heatwaves, is so well-established that scientists can isolate the fingerprint of climate change on them.

Example of attributing intensified heatwaves to human-caused climate change



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ATTRIBUTION SCIENCE

Source Attribution

Global Climate Change Attribution

(Extreme) Event Attribution

Impact Attribution

[redacted]

[redacted]

3

CLIMATE SOLUTIONS

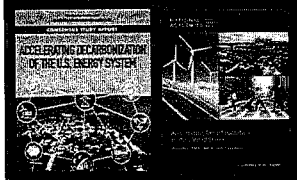
THE PARIS AGREEMENT

An international treaty signed by 196 countries, including the United States

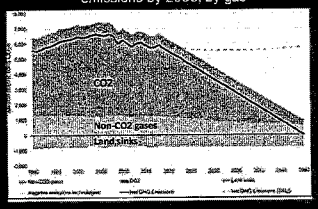
Goal is to hold "the increase in the global average temperature to well below 2°C (3.6°F) above pre-industrial levels" and pursue efforts "to limit the temperature increase to 1.5°C (2.7°F) above pre-industrial levels."

Signed UNFCCC

NET ZERO EMISSIONS BY 2050 IS POSSIBLE...



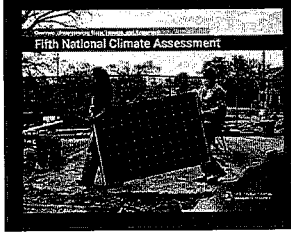
Path to net-zero greenhouse gas (GHG) emissions by 2050, by gas



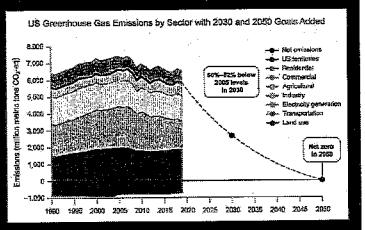
One pathway to net-zero emissions by 2050:

- Deep reduction in carbon dioxide emissions
- Moderate declines in non-carbon dioxide greenhouse gas emissions
- Expansion of land carbon sinks
- Expansion of negative emissions technologies

...BUT WE HAVE A WAYS TO GO



Total Emissions by Sector

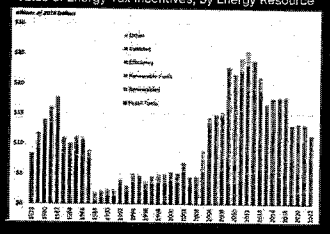


Source: U.S. Global Change Research Program (USGCRP), Fifth National Climate Assessment, Chapter 32 (2023) Figure 32.11

ENERGY SUBSIDY TRENDS

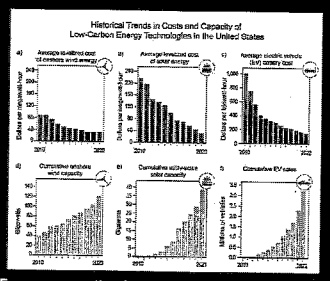
In recent years, subsidies have lowered the cost and increased the competitiveness of renewable energy resources

Value of Energy Tax Incentives, by Energy Resource



Source: Gilroy Riley and Jonathan Bruce, "The Value of Energy Tax Incentives," Congressional Research Service, July 18, 2018 (Figure 1)

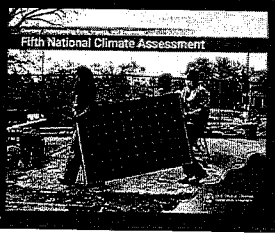
COSTS AND CAPACITY OF RENEWABLES

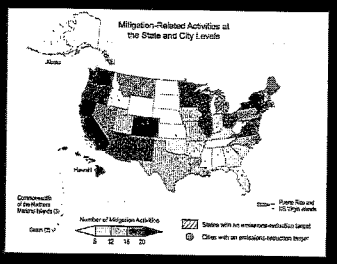


Energy generation from renewables has increased as their costs have decreased

Source: U.S. Global Change Research Program (USGCRP), Fifth National Climate Assessment, Chapter 32 (2023) (Figure 32.8)

STATES AND CITIES ARE LEADERS

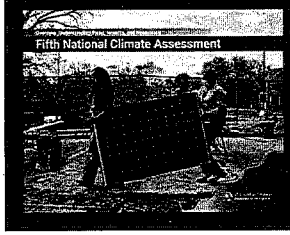


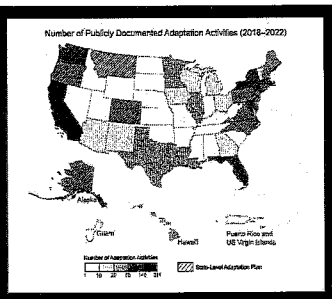


Many states and cities have put emissions reduction targets and other climate change mitigation policies on the books

Source: U.S. Global Change Research Program (USGCRP), Fifth National Climate Assessment, Chapter 32 (2023) (Figure 32.20)

STATES AND CITIES ARE LEADERS





States have also led the way in climate change adaptation policies, for the climate impacts that can't be mitigated

Source: U.S. Global Change Research Program (USGCRP), Fifth National Climate Assessment, Chapter 31 (2023) (Figure 31.3)

4

CONCLUSION

KEY TAKEAWAYS

1. Levels of heat-trapping greenhouse gases in the atmosphere, arising mostly from human activity, will be the most important determinant of risks and impacts that occur
2. Climate change will have widespread social, economic, and health impacts and will be disproportionately borne by marginalized and underserved communities
3. State and local governments are leading the way in climate mitigation and adaptation

RESOURCES

- U.S. Global Change Research Program, National Climate Assessment
  - Fourth National Climate Assessment, Vol. 1: Climate Science Special Report
  - Fourth National Climate Assessment, Vol. 2: Impacts, Risks, and Adaptation in the United States
  - Fifth National Climate Assessment
- Intergovernmental Panel on Climate Change, Sixth Assessment Report
  - Climate Change 2022: Mitigation of Climate Change
  - Climate Change 2022: Impacts, Adaptation and Vulnerability
  - Climate Change 2021: The Physical Science Basis
  - AR6 Synthesis Report: Climate Change 2023
- National Academies of Science, Engineering, and Medicine
  - Climate Change: Evidence and Causes: Update 2020 (2021)
  - Climate Stabilization Targets (2010)
  - Accelerating Decarbonization of the U.S. Energy System (2021)
  - Attribution of Extreme Weather Events in the Context of Climate Change (2016)
- NOAA
  - State Climate Summaries
  - State of the Climate, Monthly Reports
- Academic Journal Articles
  - Jonathan A. Patz et al., *Climate Change and Global Health: Quantifying a Growing Ethical Crisis*, 4 ECOHEALTH 397, 400 (2007)
  - Andy Haines & Kristie Ebi, *The Imperative for Climate Action to Protect Health*, 380 NEJM 263 (2019)
  - Michael Wehner et al., *Early 21st Century Anthropogenic Changes in Extremely Hot Days As Simulated by the CGDC+ Detection and Attribution Multi-model Ensemble*, 20 Weather & Climate Extremes (2018)

[redacted]

CLIMATE LITIGATION TRENDS

DIVIDER 6

Jarryd Page

ENVIRONMENTAL LAW INSTITUTE
CJP CLIMATE JUDICIARY PROJECT

JUDICIAL LEADERS IN CLIMATE SCIENCE

CLIMATE LITIGATION 101

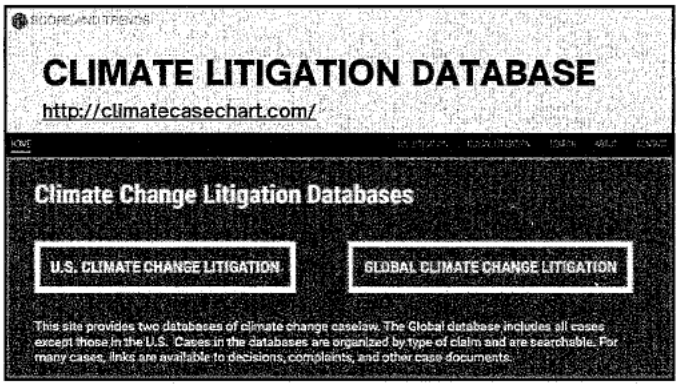
Jarryd Page, Climate Judiciary Project
Reno, Nevada
March 12, 2024

ROADMAP

1. SCOPE AND TRENDS
2. LEGAL AND POLICY LANDSCAPE
3. ROLE OF CLIMATE SCIENCE IN CLIMATE LITIGATION
4. CONCLUSION

1

SCOPE AND TRENDS



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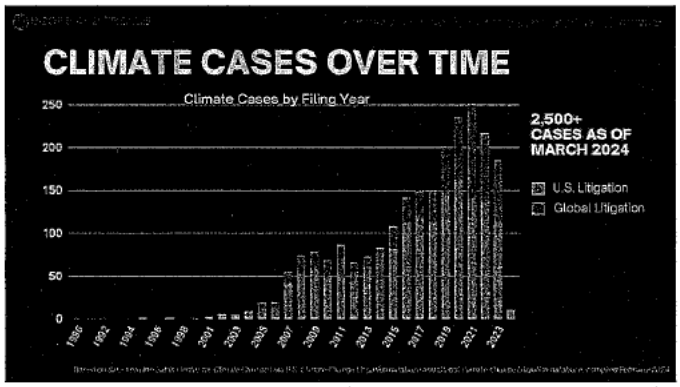

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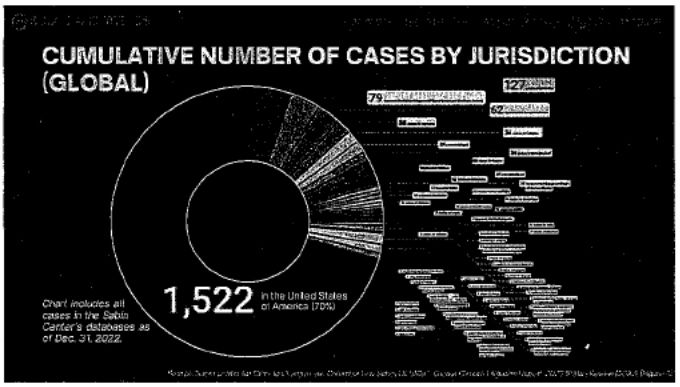

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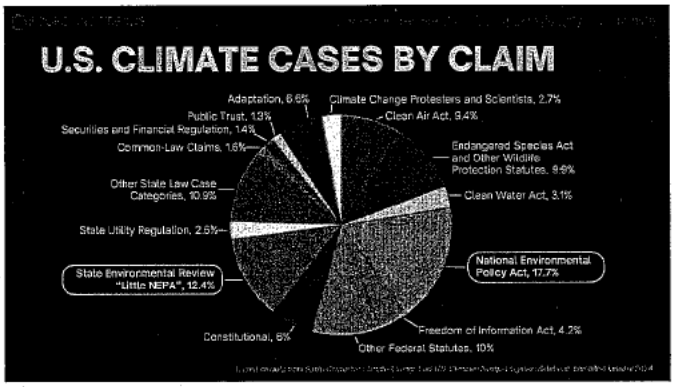
CLIMATE CASES BY COUNTRY
No. of climate cases
0
1-5
6-10
11-20
21-50
51-100
100-150
1678


CLIMATE CASES BY U.S. STATE
No. of climate cases*
0
1-5
6-10
11-20
21-40
41-60
900+
* Based on Sabin Center definition
This chart is based on cases in state courts and before state agencies. Some cases may be counted more than once if they appeared before more than one adjudicatory body.


U.S. CLIMATE CASES BY CLAIM
Adaptation, 6.6%
Climate Change Protesters and Scientists, 2.7%
Public Trust, 1.3%
Clean Air Act, 9.4%
Securities and Financial Regulation, 1.4%
Common-Law Claims, 1.6%
Endangered Species Act and Other Wildlife Protection Statutes, 9.6%
Other State Law Case Categories, 10.9%
Clean Water Act, 3.1%
State Utility Regulation, 2.5%
National Environmental Policy Act, 17.7%
State Environmental Review "Little NEPA", 12.4%
Freedom of Information Act, 4.2%
Constitutional, 6%
Other Federal Statutes, 10%

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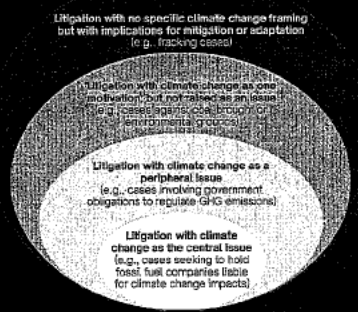
DEFINING CLIMATE LITIGATION



2

LEGAL AND POLICY LANDSCAPE

SCENE SETTING

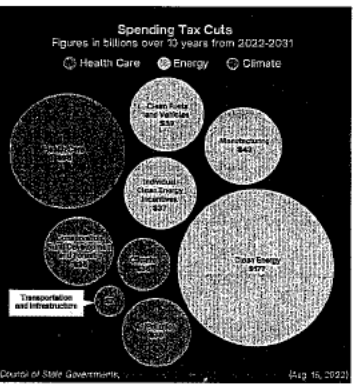
FOCUS AREA	EXAMPLE(S)
Federal Action	• Inflation Reduction Act (IRA) • National Environmental Policy Act • Federal agency regulations (EPA, Army Corps)
State Action	• Emissions reductions targets • Adaptation activities • Climate Action Plans (pursuant to the IRA)
Private Action	• Renewable energy development • Environmental, Social, Governance policies • Other practical factors: planning, building, maintenance, insurance

INFLATION REDUCTION ACT

- $369 billion - $1.2 trillion to advance clean energy
- 45 states are moving forward with State Action Plans

- State-by-State Fact Sheets

- Offshore Wind
- Fossil Fuel Production
- Agriculture and Forestry
- Alternative Fuels
- Manufacturing



Source: The Council of State Governments (Aug. 16, 2022)

LEGAL LANDSCAPE

For more, see the Overview of Climate Litigation module.

TYPES OF CLIMATE CASES

MITIGATION

cases involve the amount of greenhouse gases in the atmosphere

ADAPTATION & RISK MANAGEMENT

cases involve financial, physical, and other risks posed by a changing climate

IMPACTS

cases involve reducing or compensating for harm caused by the effects of climate change

LEGAL LANDSCAPE

For more, see the Overview of Climate Litigation module.

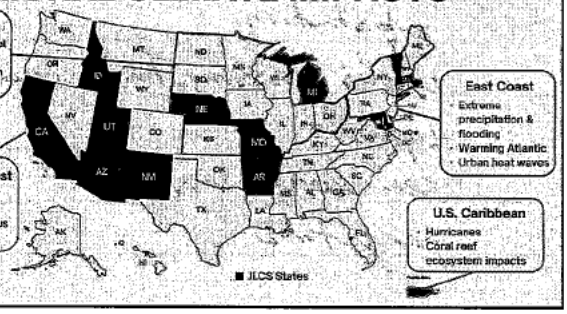
REGIONAL CLIMATE IMPACTS

Midwest
- Agricultural volatility
- Ecosystem impacts

Southwest
- Wildfire
- Drought
- Dangerous heat

East Coast
- Extreme precipitation & flooding
- Warming Atlantic
- Urban heat waves

U.S. Caribbean
- Hurricanes
- Coral reef ecosystem impacts

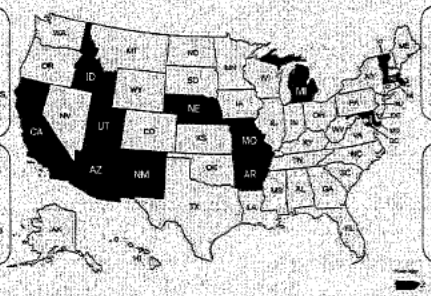


LEGAL LANDSCAPE

CLIMATE CASES* IN YOUR STATES...

California
270
- CEQA (224)
- Other state laws, constitutional, torts, utility regulation, public trust, contracts

Arizona
4
- Utility regulation
- Public trust
- Climate protestors and scientists
- Other state laws



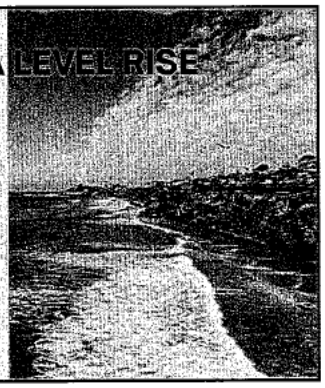
Massachusetts
16
- Other state laws (11)
- Utility regulation
- Constitutional
- Public Records
- Torts

Maryland
13
- Utility regulation (6)
- Torts
- Contracts
- Clean Water Act
- Other state laws

* Based on Sabin Center data

LEGAL LANDSCAPE

ADAPTATION - SEA LEVEL RISE



***Martin v. California Coastal Commission* (Cal. Ct. App. 2021)**

- A California Appellate Court upheld an order from the California Coastal Commission requiring new residences in the City of Encinitas to be set back 78 feet from an oceanside bluff.
- The plaintiffs challenged the state's assumed rates of sea level rise and coastal erosion with data from a geotechnical consultant. Ultimately, the court found for the State, noting the State "used well-accepted scientific methodology to support its setback recommendation" and employed more recent sea-level rise data than the plaintiff's expert.

[redacted]

LEGAL LANDSCAPE

ADAPTATION - SEA LEVEL RISE

***GreenRoots, Inc. v. Energy Facilities Siting Board* (Mass. 2021)**

- The Massachusetts Supreme Judicial Court upheld the siting of a proposed electric substation.
- The plaintiffs argued the substation was at risk from sea-level rise. Specifically, they argued the State used too short of a planning horizon when projecting the future impacts of sea-level rise. However, the court found the State's assumptions were reasonable "given the uncertainties in long-term predictions of sea-level rise and electricity demand."

[redacted]

LEGAL LANDSCAPE

UTILITY REGULATION

Hampstead County Hunting Club, Inc. v. Arkansas Public Service Commission (Ark. 2010)

- The Arkansas Supreme Court reversed the Arkansas Public Service Commission's approval of a coal-fired power plant.
- The majority opinion cited the Commission's procedural errors concerning public participation, but two concurring justices added that the Commission failed to demonstrate the plant's adverse environmental impacts, including from carbon dioxide emissions, would be acceptable, as required under the Arkansas Utility Code.

In re Vermont Gas Systems, Inc. (VT. 2024)

- The Vermont Supreme Court upheld the approval of a gas company's contract to purchase renewable natural gas from a New York landfill.
- Plaintiffs challenged the contract as inconsistent with the Vermont Global Warming Solutions Act and the State's 2022 Comprehensive Energy Plan.
- The court upheld the contract based on expert testimony concerning the carbon impact of renewable natural gas.

[redacted]

CLIMATE CASE TRENDS

TREND	EXAMPLES
Suits by states and cities against fossil fuel companies for money damages	• California • Chicago, Illinois • County of Multnomah, Oregon
Challenges to federal climate regulations	• SEC rule • U.S. EPA rules on clean power • U.S. EPA, NHTSA vehicle emissions rules
Challenges to renewable energy projects	• Zoning • Wildlife impacts • Utility regulation
Trials under state constitutions	• Held v. Montana (Aug. 2023, on appeal) • Navahine F. v. Hawai'i Dept. of Transp. (June 2024)

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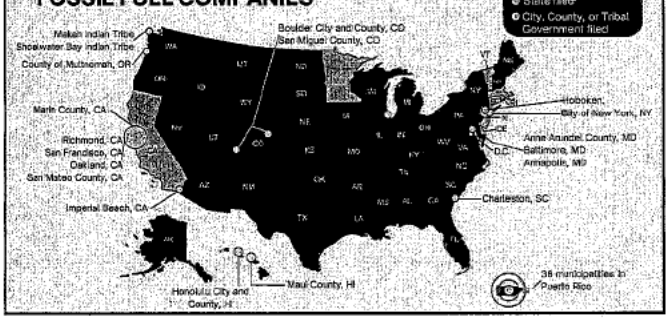
LEGAL LANDSCAPE

STATE AND LOCAL GOVERNMENTS V. FOSSIL FUEL COMPANIES



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STATE AND LOCAL GOVERNMENTS V. FOSSIL FUEL COMPANIES

How did we get here?

- *American Electric Power (AEP) v. Connecticut*, 564 U.S. 410 (2011)
  - Clean Air Act "displace[s] any federal common-law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired power plants."
- *Native Village of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849 (9th Cir. 2012)
  - extending AEP v. Connecticut in case seeking damages
- In 2017, shift from federal to state courts, alleging state-law claims
- Procedural back and forth, with one exception:
  - *City of New York v. Chevron Corp.*, 993 F.3d 81 (2d Cir. 2021)

Where are we going?...

[redacted]

STATE AND LOCAL GOVERNMENTS V. FOSSIL FUEL COMPANIES CASE ARC: AN EXAMPLE

Rhode Island v. Chevron Corp. (1 of 2)

- 7/2/18 - Rhode Island files complaint in state court
- 7/13/18 - Chevron files notice of removal to federal district court (D.R.I.)
- 8/17/18 - Rhode Island files remand motion to send case back to state court
- 7/22/19 - D.R.I. grants remand motion. Chevron appeals to the First Circuit Court of Appeals
- 8/13/20 - State court stays the case in state court pending federal appeal

[redacted]

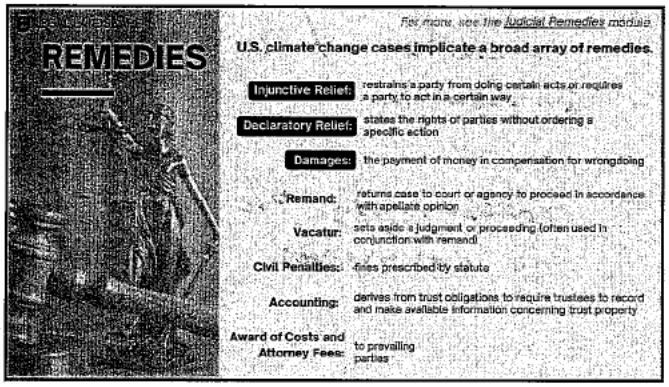
STATE AND LOCAL GOVERNMENTS V. FOSSIL FUEL COMPANIES CASE ARC: AN EXAMPLE

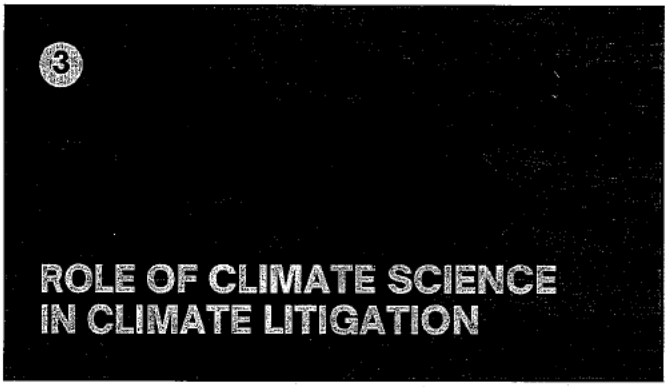
Rhode Island v. Chevron Corp. (2 of 2)

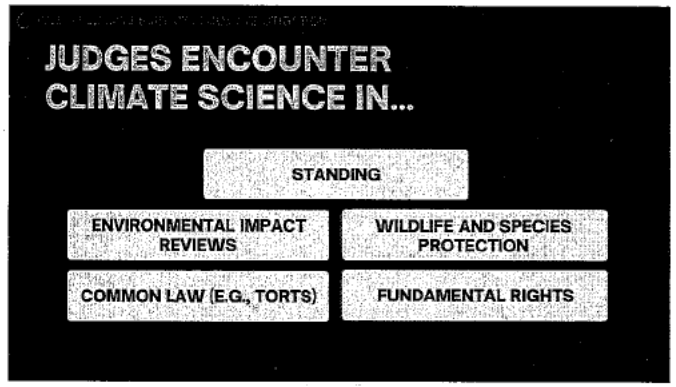
- 10/29/20 - First Circuit affirms D.R.I. Chevron petitions the U.S. Supreme Court.
- 5/23/22 - First Circuit affirms remand order. The case is remanded to state court. Chevron appeals this decision, asking for en banc review.
- 5/24/21 - U.S. Supreme Court decision sends the case back to the First Cir.
- 7/7/22 - First Circuit denies request. Chevron petitions the U.S. Supreme Court.
- 4/24/23 - U.S. Supreme Court denies the petition.
- 4/28/23 - State court orders jurisdictional discovery.

The latest...

Feb. 28, 2024 - Sunoco, et al., petitions U.S. Supreme Court in City and County of Honolulu case


REMEDIES
For more, see the Judicial Remedies module
U.S. climate change cases implicate a broad array of remedies.
Injunctive Relief: restrains a party from doing certain acts or requires a party to act in a certain way
Declaratory Relief: states the rights of parties without ordering a specific action
Damages: the payment of money in compensation for wrongdoing
Remand: returns case to court or agency to proceed in accordance with appellate opinion
Vacatur: sets aside a judgment or proceeding (often used in conjunction with remand)
Civil Penalties: fines prescribed by statute
Accounting: derives from trust obligations to require trustees to record and make available information concerning trust property
Award of Costs and Attorney Fees: to prevailing parties


3
ROLE OF CLIMATE SCIENCE IN CLIMATE LITIGATION

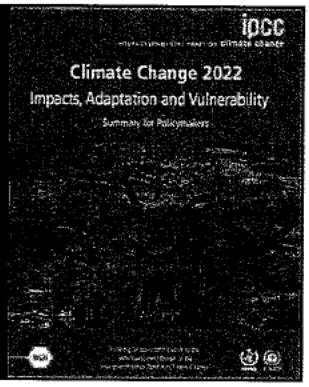

JUDGES ENCOUNTER CLIMATE SCIENCE IN...
STANDING
ENVIRONMENTAL IMPACT REVIEWS
WILDLIFE AND SPECIES PROTECTION
COMMON LAW (E.G., TORTS)
FUNDAMENTAL RIGHTS

[redacted]

STANDING

(2007)

- The Commonwealth of Massachusetts challenged the U.S. EPA for denying a petition to regulate greenhouse gas emissions (GHGs) from new motor vehicles
- Aspects of climate science were critical in the U.S. Supreme Court's determination that the Commonwealth had standing, including:
  - Climate scientists' declarations
  - Intergovernmental Panel on Climate Change (IPCC) reports
  - GHG emissions accounting



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HELD V. STATE OF MONTANA

Montana Environmental Policy Act (MEPA) Limitation

- Barred the consideration of GHG emissions and climate impacts in environmental reviews

Montana's Constitution →

- Singles out and elevates environmental rights, declaring an inalienable right to a healthful environment (Art. II, §3; Art. IX, §1).

> "The state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations."
> -Art. IX, Sec. 1, CL 1

[redacted]

CLIMATE SCIENCE IN *HELD*

Climate change is real, and it is human caused

"There is overwhelming scientific consensus that Earth is warming as a direct result of human GHG emissions, primarily from the burning of fossil fuels."

Dr. Steven Running (climate science)

Montana's emissions contribute to global climate change

"Montana is a major emitter of GHG emissions in the world in absolute terms, in per person terms, and historically."

Peter Friskoen (GHG accounting)

Climate threatens public health, and children specifically

"The unrefuted testimony at trial established that climate change is a critical threat to public health."

Moreover, "[t]he physiological features of children make them disproportionately vulnerable to the impacts of climate change and air pollution."

Dr. Lori Byron (pediatrics)

Dr. Lisa Von Sydenham (mental health)

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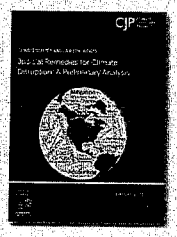
4

CONCLUSION

CLIMATE JUDICIARY PROJECT RESOURCES



Climate Science and Law for Judges Curriculum

Providing judges and the judiciary with reliable and up-to-date information about the legal and scientific issues in the climate litigation of today and tomorrow

KEY TAKEAWAYS

1. More climate impacts means more cases involving climate change
2. Climate science and attribution studies will continue to improve
3. The Climate Judiciary Project provides reliable and authoritative resources on climate science and the law

ADDITIONAL RESOURCES

- Sabin Center for Climate Change Law
  -
  -
- American Bar Association
  -
- The Environmental Forum
  -
- Columbia Journal of Environmental Law
  -

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https://www.cjp.eli.org

cjp@eli.org

TEAMWORK AND LEADERSHIP

DIVIDER 7

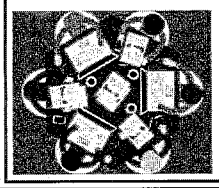
Professor Kelly Tait

OBJECTIVES:

After this session, you will be able to:

1. Identify basic principles of small group dynamics;
2. Explain the stages of Tuckman's Group Development Model: Forming, Storming, Norming, and Performing;
3. Discuss the importance of psychological safety to teamwork and several ways to foster it; and
4. Reflect on how teamwork relates to your efforts as a Judicial Leader in Climate Science.

Teamwork and Leadership



Professor Kelly Tait
University of Nevada, Reno
KT Consulting

Overview:

- ❑ Foundations: small group dynamics
- ❑ Framework ~ Tuckman Model:
  - ✓ Forming, Storming, Norming, Performing
- ❑ Five Aspects of Successful Teams
- ❑ Leadership Practices for Effective Teams
  - ✓ Fostering Psychological Safety

Leaders...Leadership/Teams...Teamwork

Small groups: Three or more people connected through a common purpose, mutual influence, and a shared identity

What makes a team? Many frameworks and definitions exist. Often includes:

- Level of interdependence
- Teamwork: **behaviors**
- Internal sense of identity

What's Different about Groups?

- More people = _____
- More people = _____
- More people = _____

Aspects of Small Group Dynamics

- Everyone has an impact on the climate of the group: varied leadership roles
  - Changing one member changes the group
  - People tend to synchronize with leader
- Time counts: zero-history vs continuing groups
- There are group and individual goals

Leadership and Group Dynamics

- Require both a **task-focus** (accomplishing goals) and a **relational-focus** (socio-emotional aspects ~ EQ)
- **Norms**—explicit and implicit rules of behavior—can have a huge impact on group performance
- Groups tend to go through phases of development

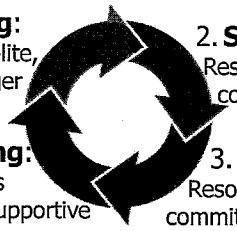
Finding Common Ground

- Values as a foundation for common ground
- VALUES:
  - Something that is intrinsically valuable or desirable (such as a principle or quality) ~Merriam-Webster
  - One's judgement of what's important in life ~Oxford Languages

A Framework: Tuckman's Group Development Model

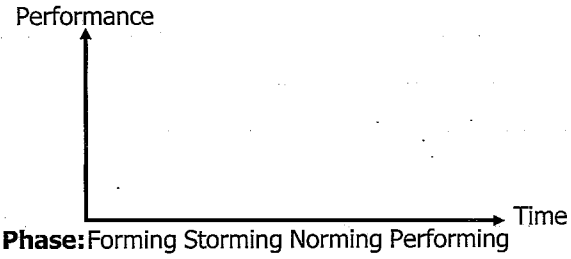
- ✓ Research: 1965-current
- ✓ Stages groups tend to go through as they develop, especially groups that are successful
- ✓ Useful tool for understanding what leadership behaviors are most likely to be needed
- ✓ Not always experienced in order

Tuckman's **Group Development Model**

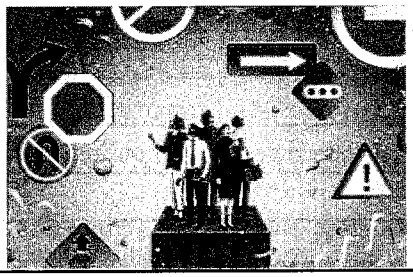


1. **Forming**: Cautious, polite, anxious, eager
2. **Storming**: Resistance, conflict, competition
3. **Norming**: Resolving differences, commitment, group ID
4. **Performing**: Getting things done, fluid, supportive

General Performance Based on Phase



1. Forming



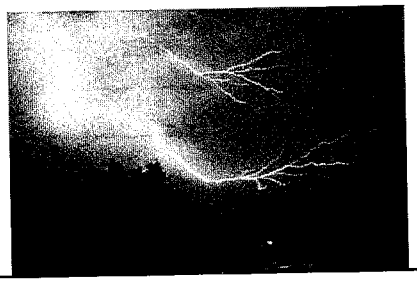
1. Forming ~ As a Leader:
Provide Guidance and Direction

- ✓ **Clarity about the work of the group**
  - ❑ Vision, "big picture," objectives
  - ❑ Group expectations, ground rules
  - ❑ Individual responsibilities + how fit
    - Help see how personal goals/talents fit
  - ❑ Success criteria + permission to fail

1. Forming ~ As a Leader:
Provide Guidance and Direction (cont'd)

✓ **Focus on building relationships**
- ❑ Facilitate introductions, sense of belonging
  - Importance of including personal aspects
- ❑ Set foundations for trust
- ❑ Help build rapport
- ❑ Encourage collegiality

2. Storming



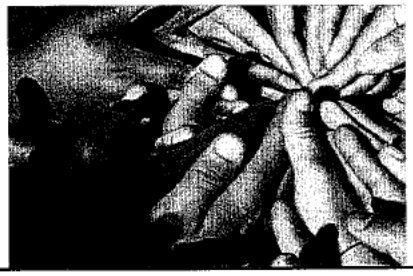
2. Storming

- ✓ Conflict emerges: people trying out roles, negotiating where fit in group
- ✓ High emotions, competition, resistance
- ✓ Moving toward group norms
- ✓ Conflict is inevitable and necessary - can be positive and productive
  - ❑ Don't want to get stuck here, though

2. Storming ~ As a Leader:
Coaching Approach

- ✓ Identify issues, facilitate their resolution
- ✓ Evaluate/adapt ground rules for interaction
- ✓ Build trust by honoring commitments
- ✓ Request and encourage feedback
- ✓ Point out bright spots and small wins
- ✓ Others

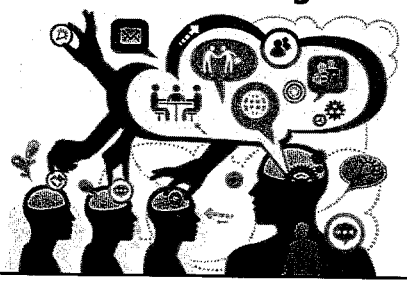
3. Norming



3. Norming

- ✓ Clarity; more confidence, less anxiety; engaged and supportive; developing cohesion
- ✓ **Leader:**
  - ❑ Facilitate learning opportunities, feedback
  - ❑ Recognize individual, group accomplishments
  - ❑ Monitor energy of group
  - ❑ Empower team members
  - ❑

4. Performing



4. Performing

- ✓ Motivation, agreement, consensus; consistent performance; interdependence; self-direction
- ✓ **Leader:**
  - ❑ Guide from the side
  - ❑ Delegate
  - ❑ Encourage collective decision-making
  - ❑ Celebrate successes

re:Work ~ Google

"Project Oxygen"–What makes a great manager

"Project Aristotle"–What makes a great team

"The whole is greater than the sum of its parts." ~Aristotle

re:Work ~ Project Aristotle

- ❑ "Teams" – Interdependent, 3-50 people
- ❑ Identified factors that:
  - ✓ impacted multiple outcomes
  - ✓ surfaced for different types of teams
  - ✓ showed consistent, robust statistical significance
- ❑ Rooted in broader team performance research

re:Work ~ Key Dynamics of Effective Teams

1. Psychological Safety: Feels safe to take risks and be vulnerable with each other
2. Dependability: Members reliably complete quality work on time
3. Structure and Clarity: Understanding of job expectations and how to meet them
4. Meaning: Personal sense of purpose
5. Impact: Sense your work makes a difference

Psychological Safety

Confidence they won't be rejected, embarrassed, or punished for speaking up. **Includes:**

- ◈ Fairly equivalent participation
- ◈ High average sensitivity to cues about feelings
- ◈ Interpersonal **trust**, respect

Dr. Edmundson: How to Build Psychological Safety as a Leader

1. Frame the work as a learning problem, not an execution problem.
2. Acknowledge your own fallibility.
3. Model curiosity and ask lots of questions.

"... [T]he individual skills most critical for collective intelligence are those that enhance the ability of group members to collaborate effectively or that enrich the collaboration by bringing a sufficient diversity of perspectives."

~ Wooley et al. 2015

Juries: Decision-Making Groups

785 felony jury trials – 2 counties Fla. 2000-2010

All white juries: **81%** Black and **66%** White defendants convicted

Juries w/at least 1 black juror: conviction rates of Black and White defendants almost identical: **71%** black and **73%** white

* Study did not account for comparative case strength

2016 Mock Jury Trial Study

All White Juries vs Heterogeneous Juries

Heterogeneous Juries:

- ✓ Deliberated longer
- ✓ Considered a wider range of information
- ✓ Raised more case facts
- ✓ Made fewer factual errors
- ✓ Were more amenable to discussion of race-related issues

Effective Small Groups: Teamwork

- ✓ Structure and clarity
- ✓ Meaningful work: purpose and impact
- ✓ Dependability: follow-through
- ✓ High Social Sensitivity
  - ❑ Psychological safety
- ✓ Equal participation

More Information ...

- ✓ Team Effectiveness Discussion Guide
- ✓ Manager Actions for Psychological Safety
- ✓ Group Dynamics and Roles
- ✓ Resource List with links

Leadership Approaches to Group Facilitation

Kelly Tait - University of Nevada, Reno

Leadership Approach The best facilitators use a combination of being in the lead and stepping back depending on what the goals are, where the group is in the process, what the group dynamics are, and how much time there is.

Use a More Directive Style:

In General: When time is limited and tasks are explicit

In Particular: When starting and stopping
When eliciting resources
When getting back on track
When dealing with problems

Use a More Nondirective Style:

In General: When you need varied input: perspectives, experiences, knowledge, ideas
When you want high levels of participation
When building cohesiveness in the group
When in-depth discussion is appropriate

In Particular: For the idea-generation portion of problem solving

⇨ How to avoid becoming the hub of the wheel:
Do not respond to every statement
Redirect questions to group members when possible
Remember the power of silence with positive nonverbal behaviors
Assign jobs to group members
Don't always sit in a position of power

Getting Started Know these things before you facilitate a group experience, and consider sharing them with your group:

- The purpose / rationale for meeting and/or the group
- An overview of the process
- Clarification of your role; for instance, if you will:
  - -- Act as timekeeper: starting, time cues during, stopping
  - -- Keep the group on task when a report-back is assigned
  - -- Encourage participation by all
  - -- Deal with problems

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Group Leadership Resources

Compiled by Kelly Tait

1. Bourke, Juliet. "**The Diversity and Inclusion Revolution: Eight Powerful Truths**." *Deloitte Review*, Is. 22 (2018). https://www2.deloitte.com/us/en/insights/deloitte-review/issue-22/diversity-and-inclusion-at-work-eight-powerful-truths.html
2. Bryant, Adam. "**How to Build a Successful Team,**" *The New York Times: Business https://www.nytimes.com/guides/business/manage-a-successful-team*
3. Edmondson, Amy. "**Building a Psychologically Safe Workplace**." (2014) TEDxHGSE TED.com https://www.youtube.com/watch?v=LhoLuui9gX8
4. Goleman, Daniel. ***The Brain and Emotional Intelligence: New Insights.*** 2011, More Than Sound, Florence, MA. ebook re:brain's ethical radar; brain states underlying optimal performance; the social brain-rapport, resonance; enhancing emotional intelligence abilities.
5. Google, "**Guides: Practices, research, and tools from Google to improve your people processes,**" re:Work at Google. https://rework.withgoogle.com/guides/ Includes numerous excellent free resources, such as: --"**Team Effectiveness Discussion Guide**." Free tool to help teams determine their own needs (vailable as PDF or as a Google Doc) https://rework.withgoogle.com/guides/understanding-team-effectiveness/steps/help-teams-determine-their-needs/ and "**Manager Actions for Psychological Safety**." https://rework.withgoogle.com/guides/understanding-team-effectiveness/steps/foster-psychological-safety/
6. Hogeveen, Jeremy, Michael Inzlicht, and Sukhvinder S. Obhi. "**Power Changes How the Brain Responds to Others**" *Journal of Experimental Psychology: General*, Vol 143(2), 4-2014, 755-762. High-power participants demonstrated lower levels of resonance than low-power participants, suggesting reduced mirroring of other people in those with power. https://www.oveo.org/fichiers/power-changes-how-the-brain-responds-to-others.pdf
7. Madden, Debbie. "**The Four Stages of Building a Great Team – and the One Where Things Usually Go Wrong,**" *Inc. Magazine*. (2019, May 19). https://www.inc.com/debbie-madden/the-4-stages-of-building-a-great-team-and-1-where-things-usually-go-wrong.html
8. Tuckman, B. W., & Jensen, M. A. C. (1977). "**Stages of Small-Group Development Revisited**." *Group and Organizational Studies, 2* (4): 419-427.
9. University of Minnesota. "**Group Member Roles**" from *Communication in the Real World*, last accessed 6/4/2021. https://open.lib.umn.edu/communication/chapter/14-2-group-member-roles/
10. Watkins, M. D. "**Leading the Team You Inherit**" *Harvard Business Review*, June, 2016. https://hbr.org/2016/06/leading-the-team-you-inherit

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TRANSFORMATIONAL LEADERSHIP

DIVIDER 8

Dr. Yvonne Stedham

OBJECTIVES:

After this session, you will be able to:

1. Define transformational leadership;
2. Differentiate the four behavioral sets of transformational leadership;
3. Give an example of transformational leadership;
4. Specify the purpose of the Leadership Challenge project;
5. Describe the five transformational leadership practices; and
6. Apply the results of the Leadership Practices Inventory to enhance their own leadership effectiveness.

2024

Judicial Leaders in Climate Science

THE NATIONAL JUDICIAL COLLEGE

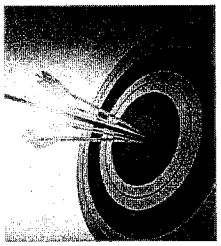
Transformational Leadership

Dr. Yvonne Stedham

THE NATIONAL JUDICIAL COLLEGE

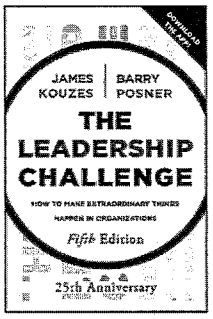
Learning Objectives

1. Describe the 5 transformational leadership practices
2. Assess your own leadership practices
3. Design a plan to develop your transformational leadership practices



The Leadership Challenge is a global campaign to liberate the leader in everyone. We believe that teams, businesses – and even the world – get better when ordinary people enable those around them to achieve extra-ordinary things."

James Kouzes and Barry Posner



About the
Leadership Challenge
Research

Leadership is defined as the art of mobilizing others to <u>want</u> to struggle for shared aspirations.

[redacted]

Data Collection

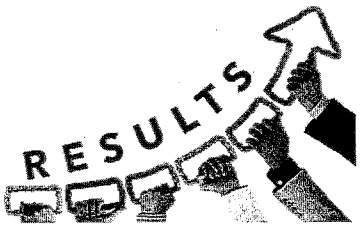
Observation of individuals with leadership responsibilities – more than 3,000 cases

Interviews with 1,300 managers who described their personal bests as leaders

Analysis and Study Results

Consistent pattern of leader behavior that created extraordinary results.

Leaders who were able to achieve extraordinary results did so by ...



1. Fostering loyalty and commitment
2. Increasing motivational levels & willingness to work hard
3. Possessing high degrees of personal credibility
4. Reducing absenteeism and turnover

5. Meeting job-related demands

6. Effectively representing their units to upper management

7. Creating high performance teams

Five Transformational Leadership Practices

Five Transformational Leadership Practices (MICEE)

1. Modeling the way
2. Inspiring a shared vision
3. Challenging the process
4. Enabling others to act
5. Encouraging the heart

[redacted]

Model the Way

4. I set an example of what is expected.
9. I ensure that people adhere to agreed-on standards.
14. I follow through on the promises and commitments.
19. I am clear about my "philosophy" of leadership
24. I ensure that goals and milestones are set.
29. I make progress toward goals one step at a time.

[redacted]

Inspire a Shared Vision

2. I talk about future trends.
7. I describe a compelling image of the future.
12. I appeal to others to share a dream of the future.
17. I show others how their interests can be realized.
22. I am enthusiastic and positive about the future.
27. I speak with conviction about the meaning of work.

[redacted]

Challenge the Process

1. I seek out challenging opportunities.
6. I challenge people to try out new approaches.
11. I look outside the organization for ways to improve.
16. I ask, "What can we learn from this?"
21. I experiment and take risks.
26. I take the initiative to overcome obstacles.

[redacted]

[redacted]

Enable Others to Act

3. I develop cooperative relationships.
8. I listen to diverse viewpoints.
13. I treat people with dignity and respect.
18. I support others' decisions.
23. I let people chose how to do their work.
28. I ensure that people grow in their jobs.

[redacted]

[redacted]

Encourage the heart

5. I praise people for a job well done.
10. I express confidence in people's abilities.
15. I creatively reward people for their contributions.
20. I recognize people for commitment to shared values.
25. I find ways to celebrate accomplishments.
30. I give members of the team appreciation and support.

[redacted]

Authentic Frequency

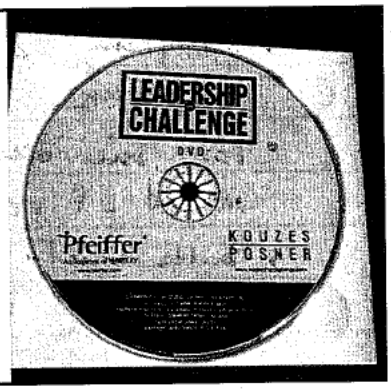
The more frequently people engage in these practices, the more likely it is that they are effective as leaders.

Success requires authentic frequency.

Five Transformational Leadership Practices

Examples

VIDEO



[redacted]

Group Results

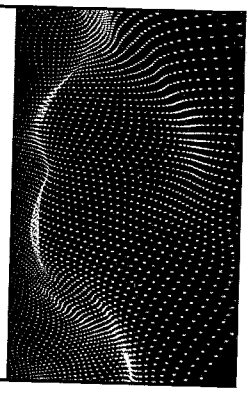
	Mean	Rank
Model the way		
Inspire a shared vision		
Challenge the process		
Enable others to act		
Encourage the heart		

Group Results

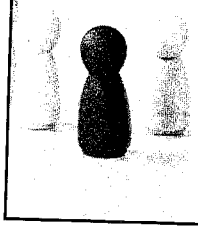
	Mean – This group	Rank
Model the way	/52	/2
Inspire a shared vision	/44	/5
Challenge the process	/46	/4
Enable others to act	/53	/1
Encourage the heart	/49	/3

Leadership Practices Inventory

Self-Assessment



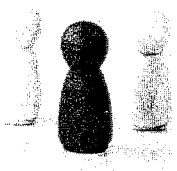
Leadership Practices Inventory



Six behaviors for each of the five practices (MICEE)

Total 5X6=30 transformational leadership behaviors

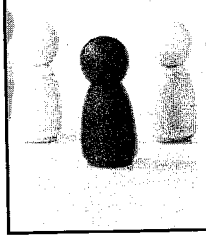
Leadership Practices Inventory



To what extent do you engage in each of the behaviors:

1 = almost never, 10 = almost always

Leadership Practices Inventory



Therefore, per practice,

the maximum is a score of 60

Six behaviors per practice, each with a max of 10 points.

Analyzing Your LPI Results

1. Review the practices on which you scored yourself lower.
2. Which behaviors within the practice contributed to the lower score?

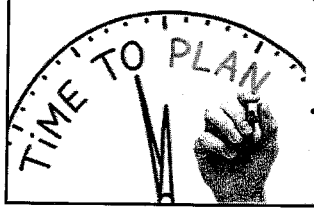
Modeling the Way	52	
Inspiring a Shared Vision	44	
Challenging the Process	50	
Enabling Others to Act ⟺	38	Behavior with lowest score
Encouraging the Heart	48	

Lowest Scored Item
for Enabling Others to Act

Question 8: I listen to diverse viewpoints.

Score of 3/10

Make a Plan



- Make a plan for more frequently engaging in the behaviors with the lowest scores.
- Write below the behavior what you plan to do (in a single statement if possible). What will you do, specifically? Behavior changes?
- Provide a completion date

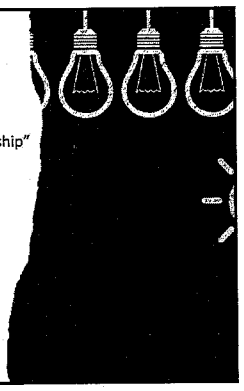
Dyads

5 minutes

Share your results and your plan with a partner!

1. Which practice(s) will you focus on?
2. Within each of the practices, which behavior(s) will you focus on?
3. What will you do, specifically? Behavior changes?

Leadership - Readings



Bass, Bernard M. & Riggio, Ronald E. "Transformational Leadership"

Kouzes, James & Posner, Barry "The Leadership Challenge"

Kouzes, James & Posner, Barry "Learning Leadership"

Kouzes, James & Posner, Barry "The Leadership Practices Inventory"

Northouse, Peter "Leadership – Theory and Practice"

THE BRAIN, DECISION-MAKING, AND IDENTITY: A LEADER'S PERSPECTIVE

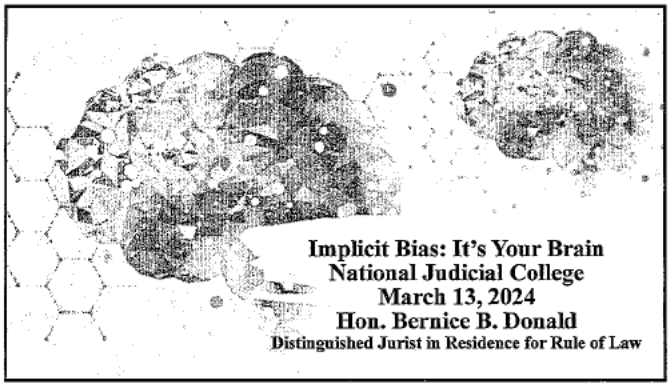
DIVIDER 9

Hon. Bernice B. Donald

OBJECTIVES:

After this session, you will be able to:

1. Regonize the way the human brain processes give meaning to identify;
2. Define implicit bias and implicit association;
3. Explain the impact of implicit bias in decision making; and
4. Apply strategies to mitigate implicit bias.


Implicit Bias: It's Your Brain
National Judicial College
March 13, 2024
Hon. Bernice B. Donald
Distinguished Jurist in Residence for Rule of Law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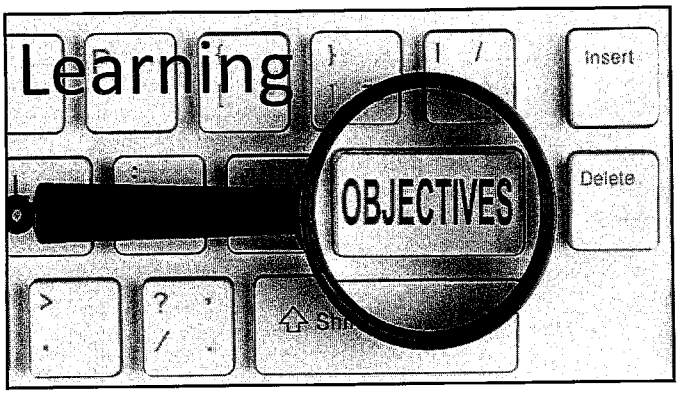
Learning
OBJECTIVES
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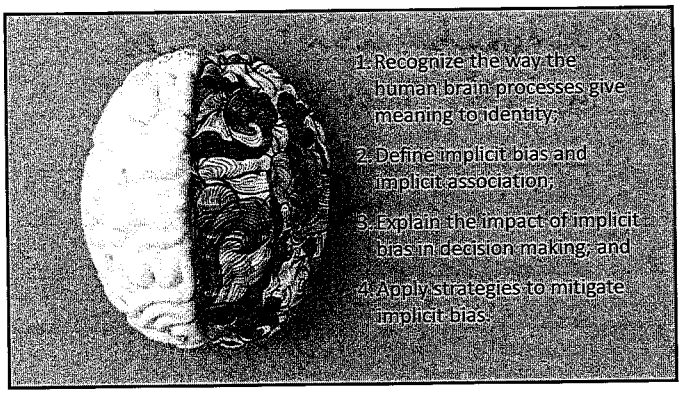
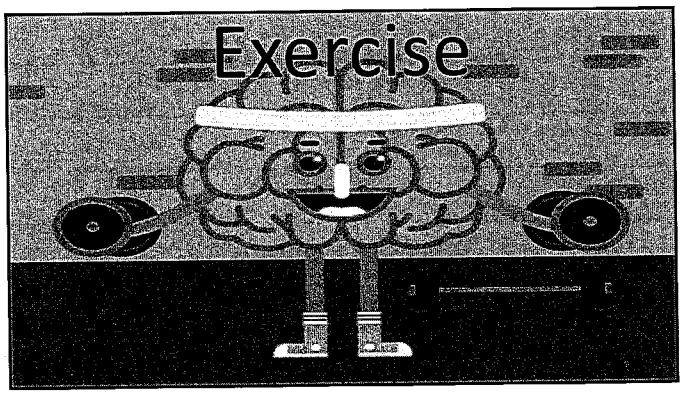
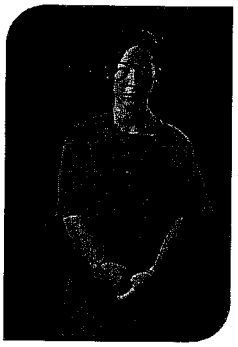
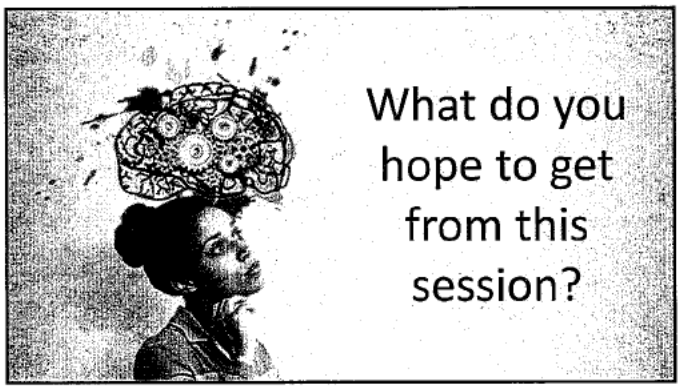
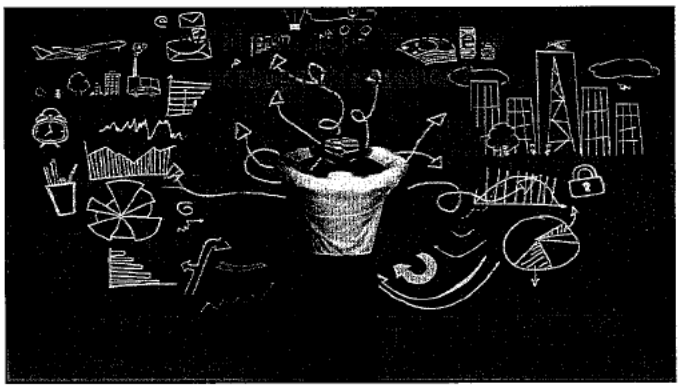

1. Recognize the way the human brain processes give meaning to identity;
2. Define implicit bias and implicit association;
3. Explain the impact of implicit bias in decision making; and
4. Apply strategies to mitigate implicit bias.


Exercise







[redacted]

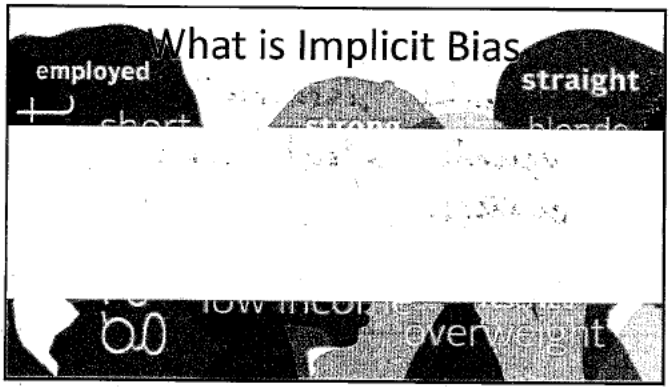
ABA Model Rule 2.3(B): Bias, Prejudice, and Harassment

(B) A judge shall not, in the performance of judicial duties, by words or conduct manifest bias or prejudice, or engage in harassment, including but not limited to bias, prejudice, or harassment based upon race, sex, gender, religion, national origin, ethnicity, disability, age, sexual orientation, marital status, socioeconomic status, or political affiliation, and shall not permit court staff, court officials, or others subject to the judge's direction and control to do so.

ABA Model Rule 2.3(C): And also to Lawyers

(C) A judge shall require lawyers in proceedings before the court to refrain from manifesting bias or prejudice, or engaging in harassment, based upon attributes including but not limited to race, sex, gender, religion, national origin, ethnicity, disability, age, sexual orientation, marital status, socioeconomic status, or political affiliation, against parties, witnesses, lawyers, or others.

What is Implicit Bias



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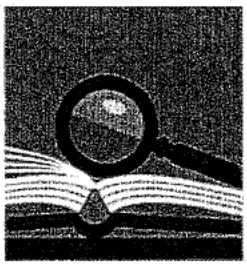
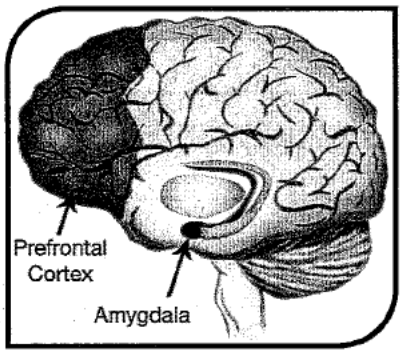


Definitions

Implicit Bias, also known as implicit social cognition, refers to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner.

These biases, which encompass both favorable and unfavorable assessments, are activated involuntarily and without an individual's awareness or intentional control.

Residing deep in the subconscious, these biases are different from known biases that individuals may choose to conceal for the purposes of social and/or political correctness. Rather, implicit biases are not accessible through introspection.



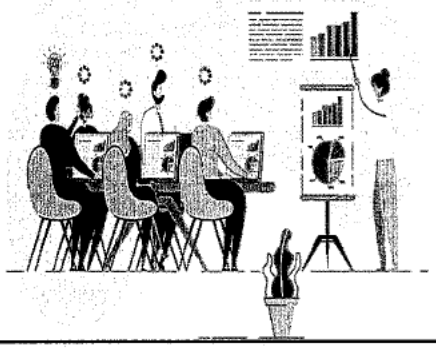
Implicit Bias or Social Cognition

- Implicit social cognition is the process by which the brain uses "mental associations that are so well-established as to operate without awareness, or without intention, or without control."

Source: Project Implicit, Harvard University https://implicit.harvard.edu/implicit/demo/background/faqs.html#faq2

Project Implicit®

[redacted]



How Does Exposure/Training Help?

- Better prepared
- More detailed
- More accurate
- Better performing
- More innovative
- More inclusive

[redacted]

DIRECTIONS:

Images/words will appear.

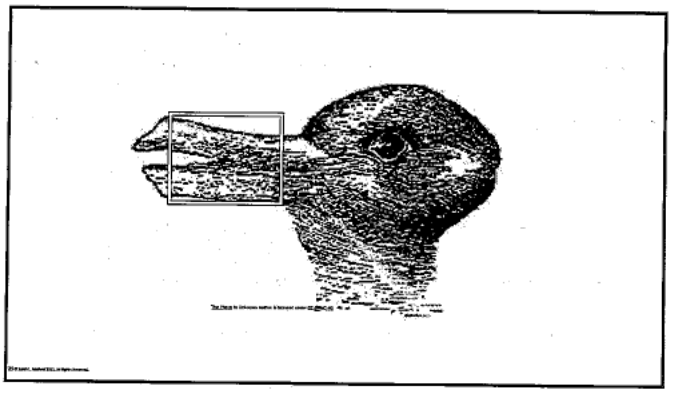
State the **COLORS** as fast as you can.

Stroop: this layout, John Grohow VA National Center for Patient Care, via Dr. Valerie Purdie-Greenaway, https://www.youtube.com/watch?v=GuQcOCQRI6&feature=youtu.be.

State the COLORS as fast as you can.

State the COLORS as fast as you can.

Red	Blue	Yellow	Purple	Black
Yellow	Purple	Black	Blue	Red



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Explicit Intentional Focused System 2	Implicit Unintentional Shortcut (schema) System 1	Schema
		
• Deliberately generated • Verbally endorsed evaluations • Directly experienced, reported as our own • Measured directly	• Learned associations • Absorbed from world around us • Outside our direct awareness • Measured indirectly	• Mental shortcuts • Associational networks, largely nonconscious, automatic

[redacted]

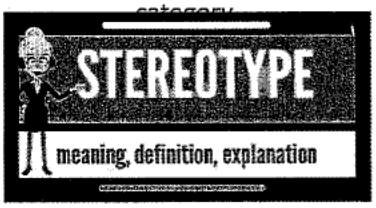
System 1

In other words, "decisions may be biased, even though the decisionmaker and the target of the decision may be unaware of it and may not desire it." (Vitriol)

"The identifying feature of implicit cognition is that past experience influences judgment in a fashion not introspectively known by the actor." (Greenwald)

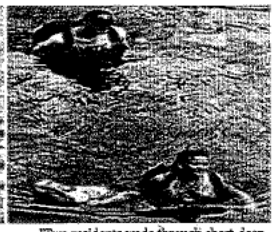
Stereotype

A stereotype is a widely held set of beliefs about attributes and behaviors of members of a social [redacted]



Stereotypes in the Media

"A young man walks through chest deep flood water after looting a grocery store in New Orleans on Tuesday."



"Two residents wade through chest-deep water after **finding** bread and soda from a local grocery store in New Orleans, Louisiana."

Stereotypes are:

1. Shortcuts to categorize people
2. Stored (hard-wired) in memory
3. Automatically assigned to members of the categorized group
4. Fixed and rigid
5. Positive and/or negative

System 2 EXPLICIT

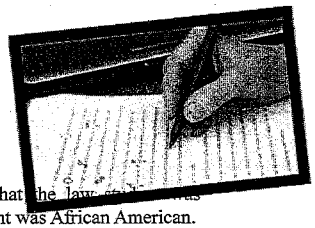
- Deliberately generated understanding, actions, decisions

"The identifying feature of implicit cognition is that past experience influences judgment in a fashion not introspectively known by the actor."

- Consciously experienced as own

- Have you had an experience where you believe that you were the object of implicit bias?
- Is there a decision that you made, where in hindsight, you believe was influenced by implicit bias?
- Let's discuss.

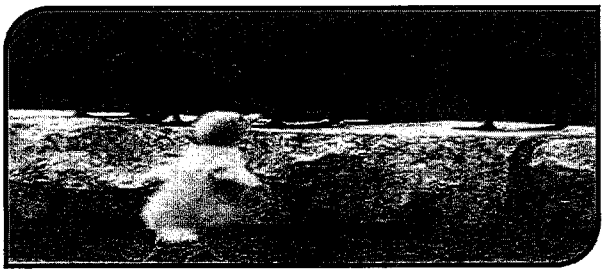
- Sixty lawyers received the exact same research memo written by a theoretical third year law student.



- Half of the lawyers were told that the law student was white, the other half that the student was African American.

- The memo under the hypothetical African American law student averaged a 3.2/5.0 rating.
- The exact same memo under the hypothetical white law student averaged a 4.1/5.0 rating.
- The qualitative comments on memos, consistently, were more positive for the white student.

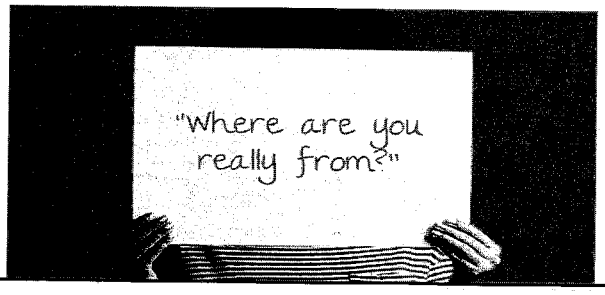
Ingroups v. Outgroups

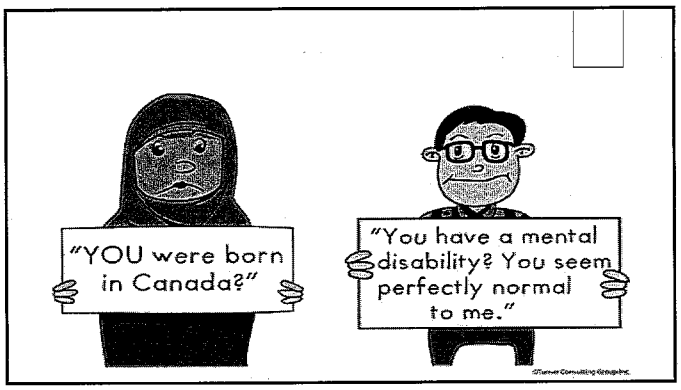


Memory

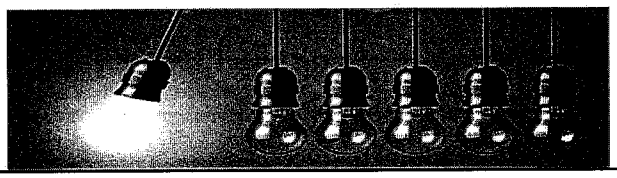
Memory is not the pulling back up of things etched in stone, instead it is the imaginative reconstruction or construction built out of our attitudes, biases, and experiences.

- Dr. Craig Stark

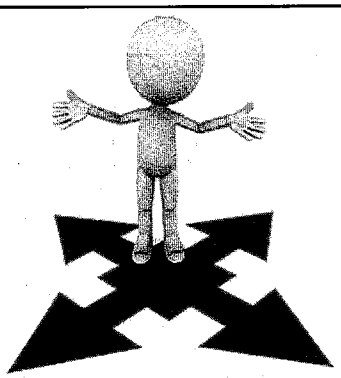


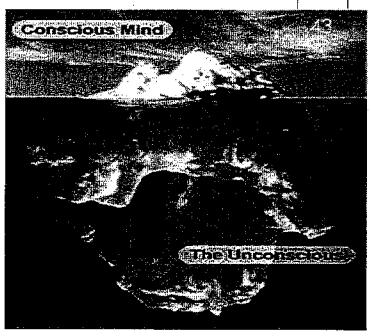


How does this affect the workplace/legal profession?



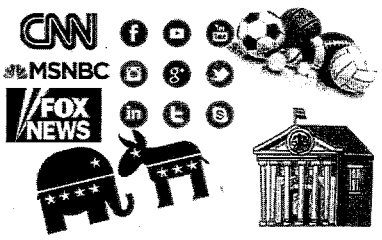
Where do we see biases manifested?

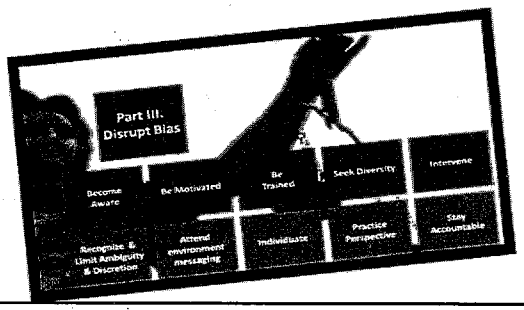


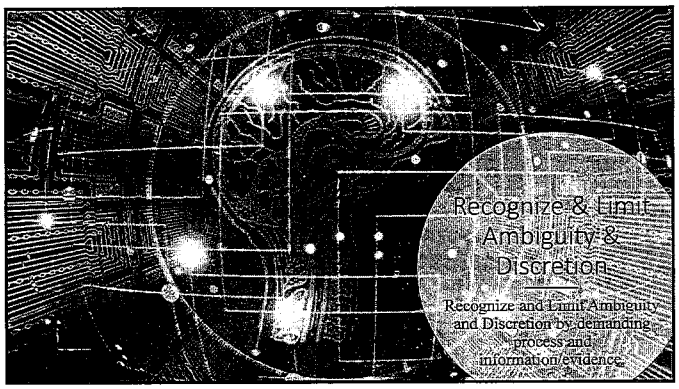


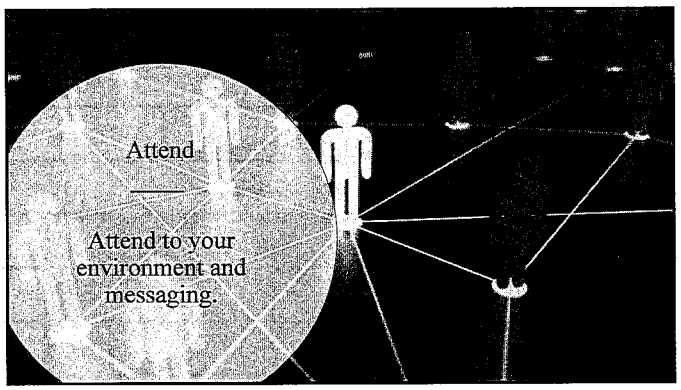
We see examples all around us...

- Media
- Sports
- Politics
- Courts



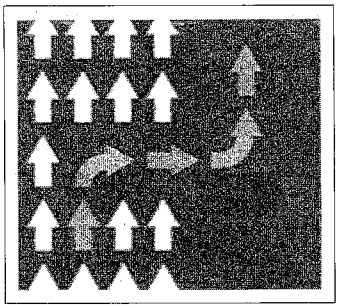






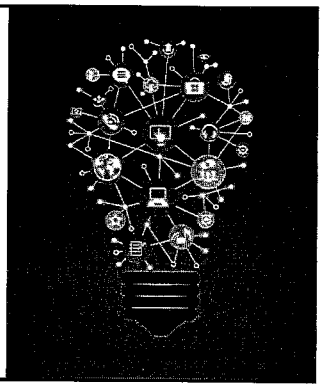
10. Stay accountable

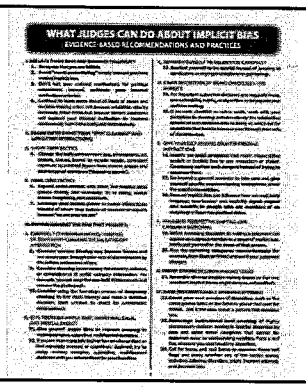
Stay accountable, count the data and adapt.



Resources

- Biased, Uncovering the Hidden Prejudice That Shapes What We See, Think, and Do
- Blind Spot: Hidden Biases of Good People
- Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do
- Erasing Institutional Bias: How to Create Systemic Change for Organizational Inclusion
- Sway: Unravelling Unconscious Bias
- Overcoming Bias: Building Authentic Relationships across Differences
- Implicit Racial Bias Across the Law
- Enhancing Justice: Reducing Bias
- Everyday Bias: Identifying and Navigating Unconscious Judgments in Our Daily Lives
- An Introduction to Implicit Bias: Knowledge, Justice, and the Social Mind





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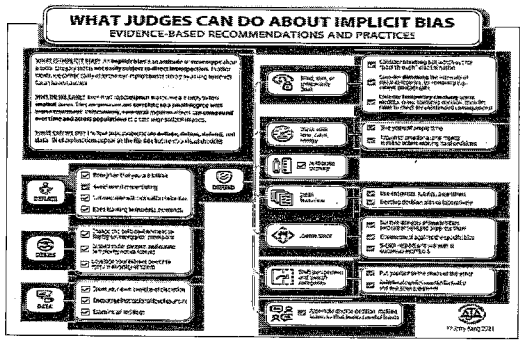
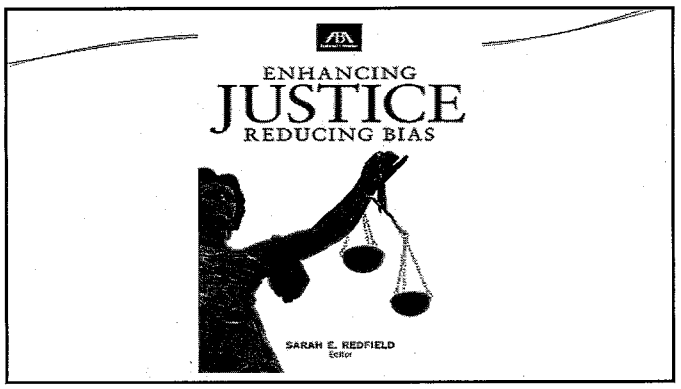
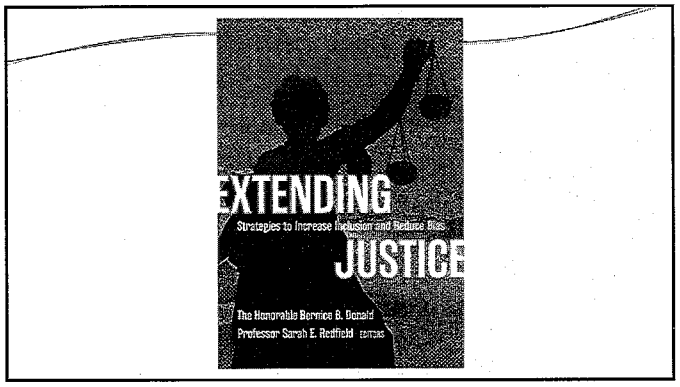
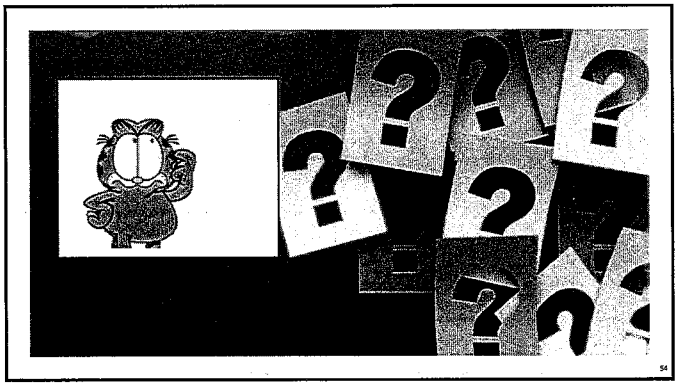



ENHANCING
JUSTICE
REDUCING BIAS
SARAH E. REDFIELD
Editor


EXTENDING
Strategies to Increase Inclusion and Reduce Bias
JUSTICE
The Honorable Bernice B. Donald
Professor Sarah E. Redfield editors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Thank you

MINDFUL LEADERSHIP

DIVIDER 10

Dr. Yvonne Stedham

OBJECTIVES:

After this session, you will be able to:

1. Define mindfulness;
2. Explain the neuroscientific foundation of mindfulness; and
3. Highlight the effect of mindfulness on leadership.

2024
Judicial Leaders in Climate Science

THE NATIONAL JUDICIAL COLLEGE

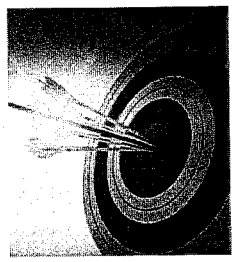
Mindful Leadership

Dr. Yvonne Stedham

THE NATIONAL JUDICIAL COLLEGE

Learning Objectives

1. Define "mindfulness"
2. Explain why it is important for leaders to become mindful
3. Apply mindfulness to your leadership behaviors
4. Describe how mindfulness works



Mindfulness

↓

??????

↓

Trust
Perceived ability + perceived integrity + perceived benevolence

↓

Transformational Leadership Practices

↓

Leader Effectiveness

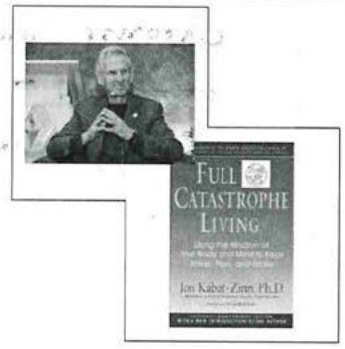
What is mindfulness?

Mindfulness is an attention focusing practice .....

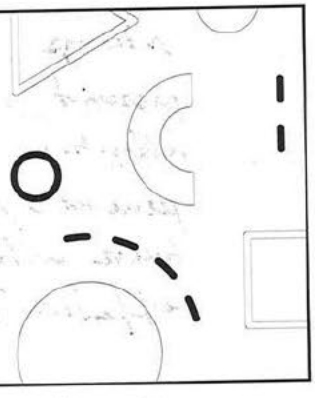
[redacted]

[redacted]

Jon Kabat-Zinn, Ph.D.

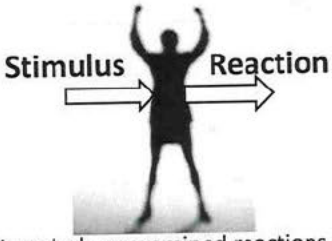


When we are <u>mindless</u> ...



... we are trapped in rigid mindsets,
oblivious to context
or perspective.

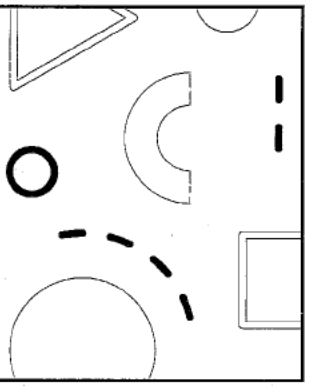
<u>On automatic pilot!</u>



Knee-jerk, unexamined reactions, automatic.

[redacted]

When we are mindful ...

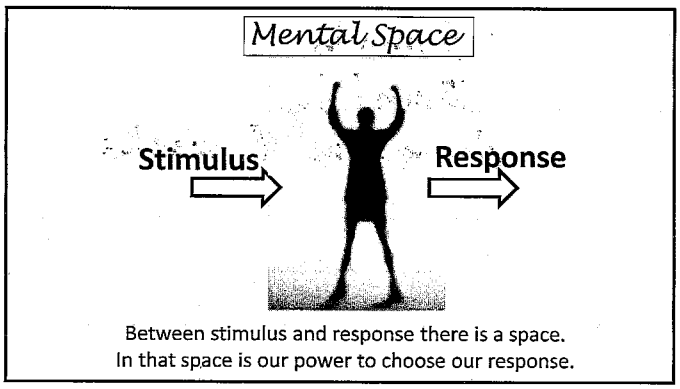


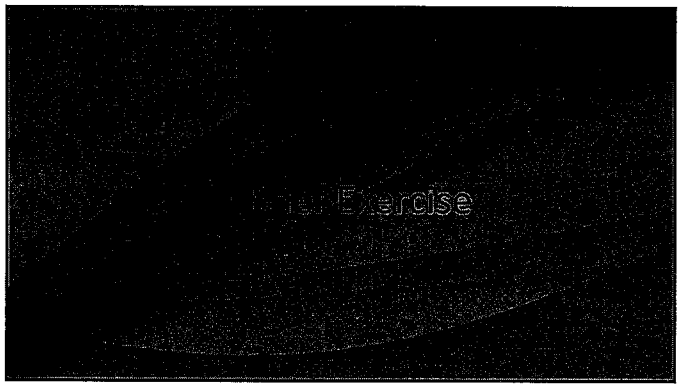
[redacted]

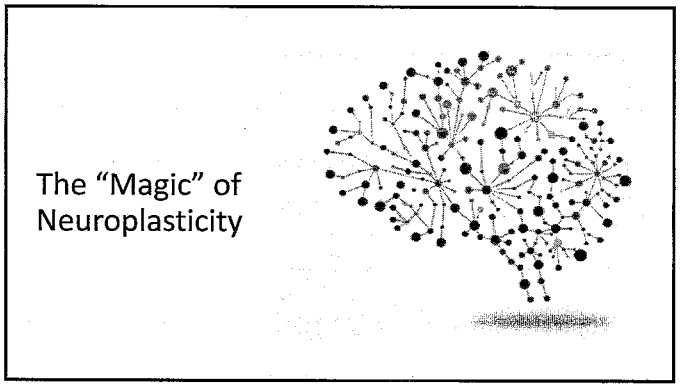
... we are actively drawing novel distinctions,

... we are seeing clearly what is happening right now, in this moment -

- rather than relying on distinctions drawn in the past.


Mental Space
Stimulus
Response
Between stimulus and response there is a space.
In that space is our power to choose our response.


Your Exercise

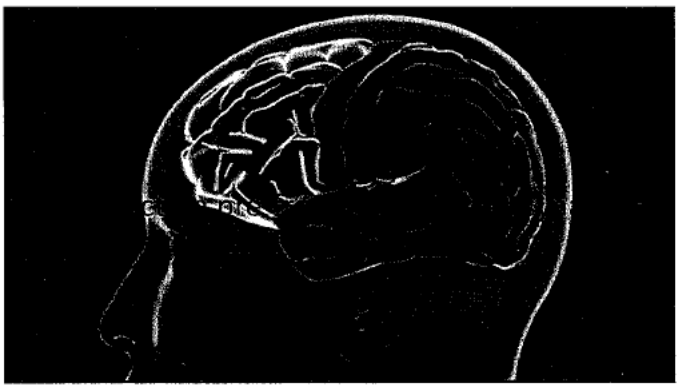

The "Magic" of
Neuroplasticity

The ability of the brain to form and reorganize synaptic connections, especially in response to learning or experience.

Creating new neuropathways.

Triune Brain Theory

Brain stem & cerebelum	Limbic System	Neocortex
Fight or flight	Emotions, memories, habits	Language, abstract thought, imagination, consciousness
Autopilot	Decisions	Reasons, rationalizes



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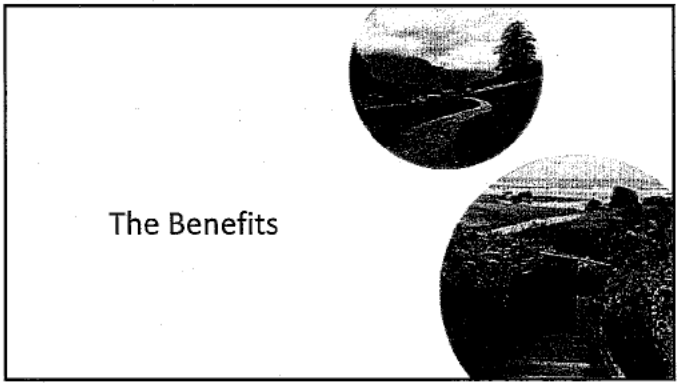
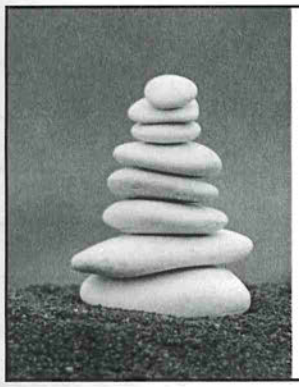
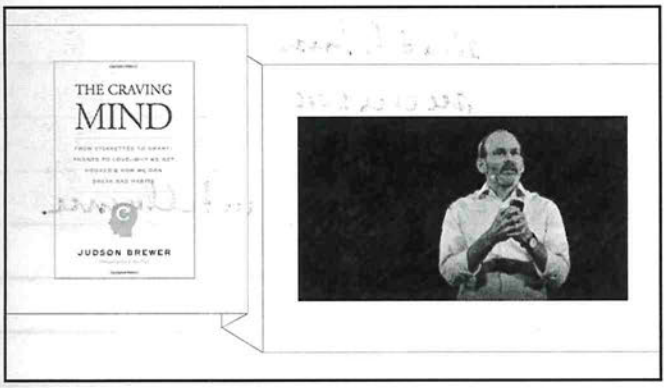
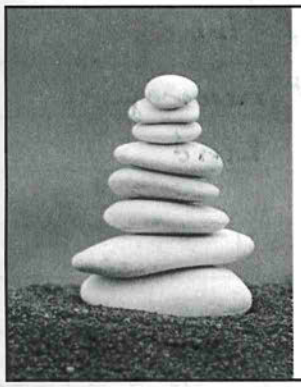




Physical Health

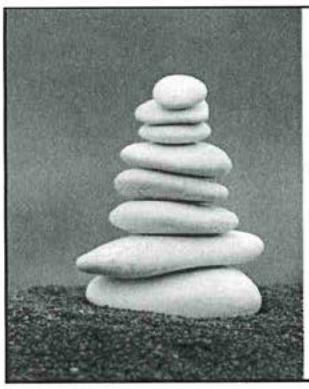
Cardiac Diseases
Healthy Diet
Weight Maintenance
Smoking
Addiction





Mental Health

Depression
Anxiety
Acceptance and Commitment Therapy (ACT)
PTSD
Veterans
Borderline personality disorder



Work Related

- Self awareness
- Social awareness
- Self-regulation of emotion + behavior
- Emotional intelligence
- Communication
- Time management
- Judgment and decision-making
- Ethics
- Stress management
- Leadership

Mindfulness

↓

Self awareness; social awareness; emotion regulation; focus & attention

↓

Trust

Perceived ability + perceived integrity + perceived benevolence

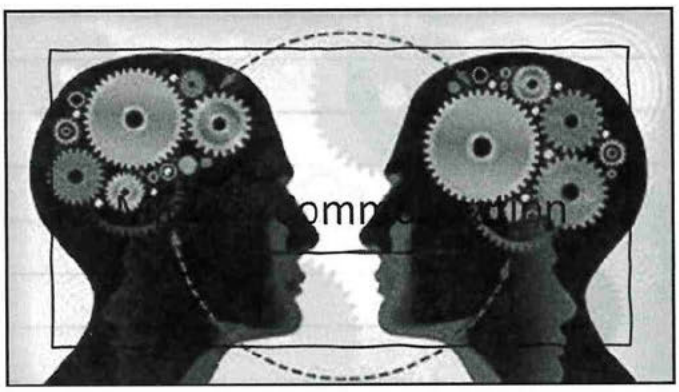
↓

Transformational Leadership Practices

↓

Leader Effectiveness

[redacted]



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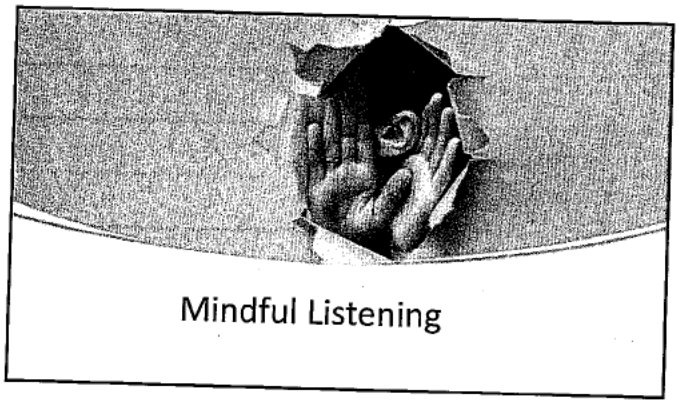
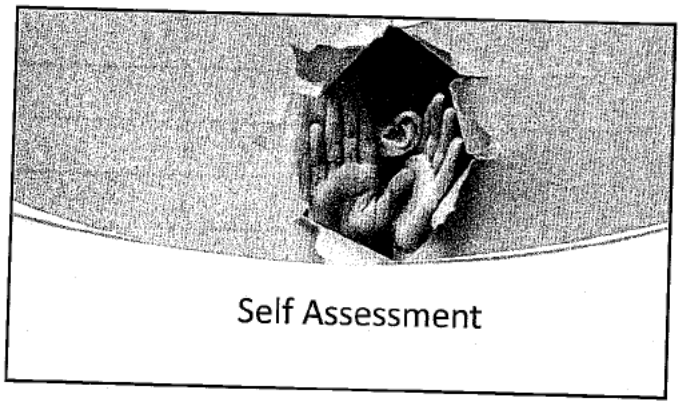
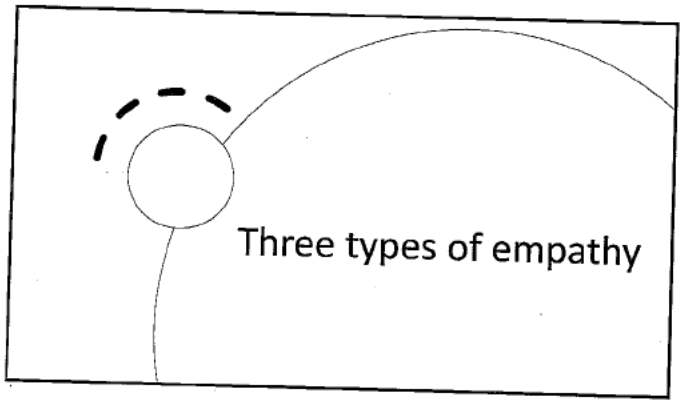


Mindful Listening

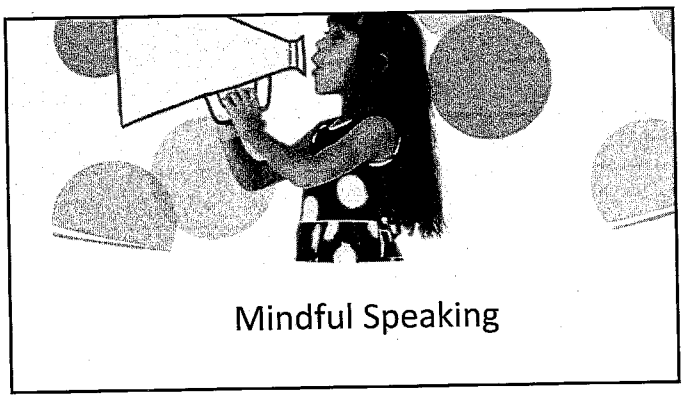


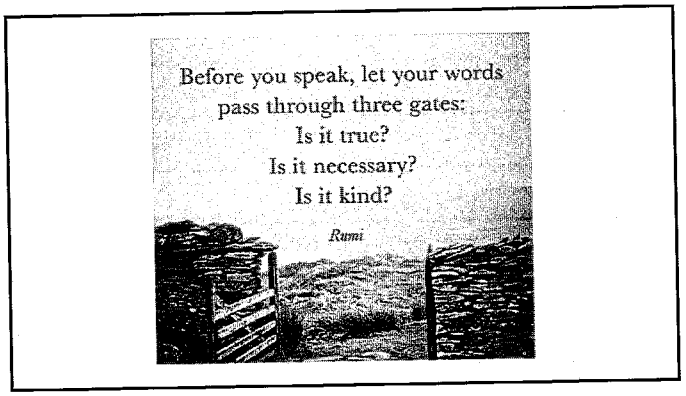
Self Assessment

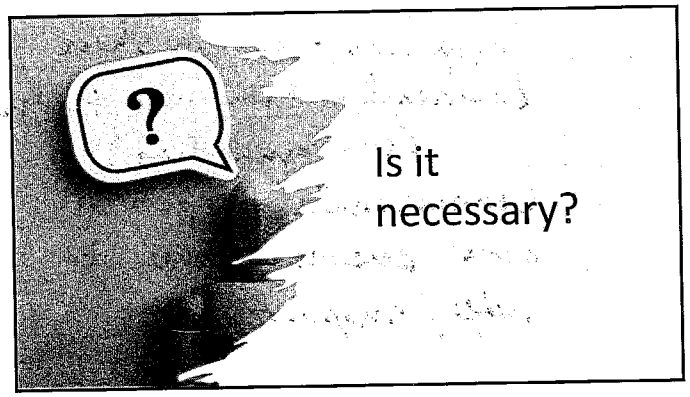


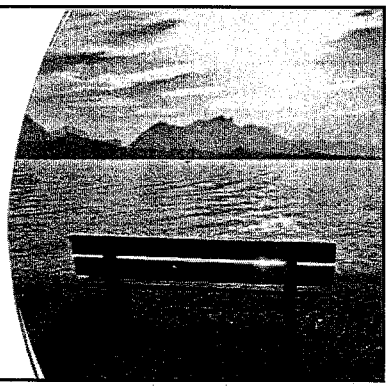
Three types of empathy

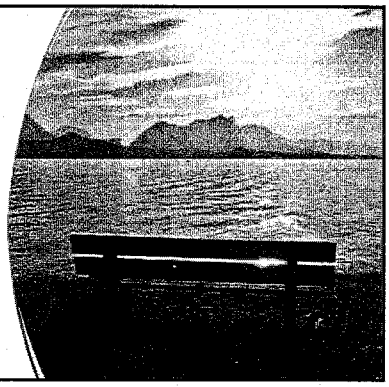
[redacted]

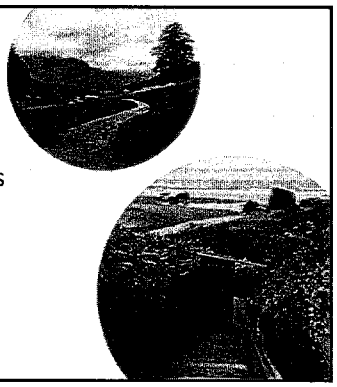

Mindful Speaking


Before you speak, let your words
pass through three gates:
Is it true?
Is it necessary?
Is it kind?
Rumi

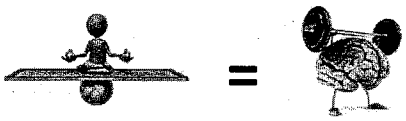

Is it
necessary?


WAIT


Why
Am
I
Talking?


Practice Recommendations
and Resources

Mindfulness Practices



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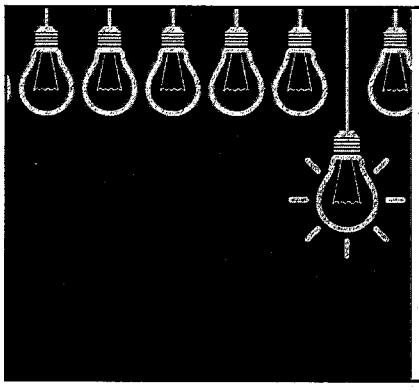
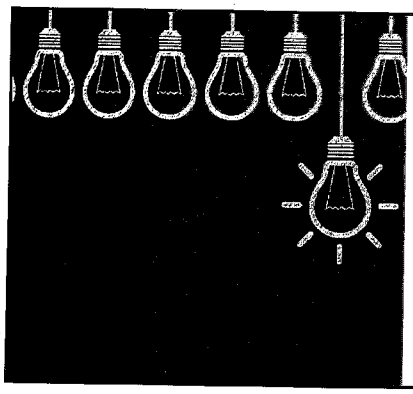


Formal Practices

- Sitting Meditation
- Body Scan
- Mindful Movement
- Walking Meditation
- Loving Kindness Meditation

Mindfulness at any age



Informal Practices

- Daily activities like washing dishes, walking, driving, cooking – cutting vegetables etc.
- When you are talking with others, mindful speaking and listening.
- Mindfully eating.
- Awareness of body sensations.
- Notice your breath.
- Awareness of the sounds that surround you.

Popular Mindfulness Apps

1. Headspace Free app for iPhone and Android https://www.headspace.com/
2. Insight Timer Free app for iPhone and Android https://insighttimer.com/
3. Calm Meditation Techniques for Sleep and Stress Reduction https://www.calm.com/

Mindfulness for Judges Retreat

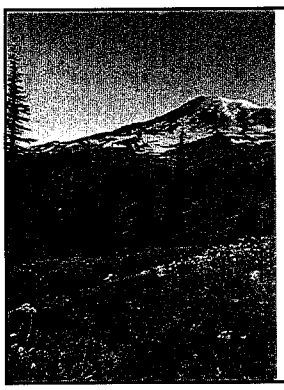
Santa Fe, New Mexico

November 18-21, 2024

https://www.judges.org/courses?form=course&s=Mindfulness

My Website

https://www.yvonnestedham.com



Mindfulness

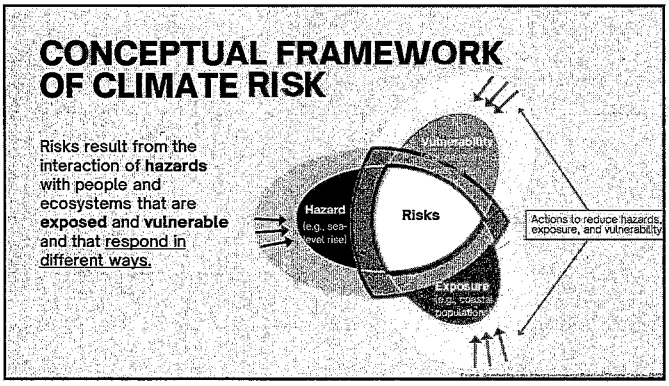
Is that quality that every human being already possesses, it's not something you have to conjure up, you just have to learn how to access it (Pal et al., 2020).

CLIMATE IMPACTS

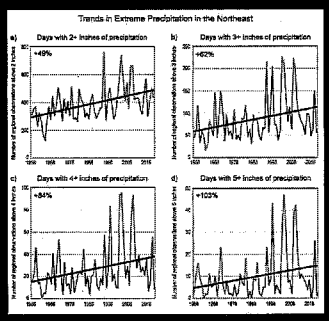
DIVIDER 11

Dr. John M. Doherty


ENVIRONMENTAL LAW INSTITUTE
CJP CLIMATE JUDICIARY PROJECT
JUDICIAL LEADERS IN CLIMATE SCIENCE 2024
A SURVEY OF CLIMATE IMPACTS
MARCH 13, 2024
John M. Doherty, Ph.D.


CONCEPTUAL FRAMEWORK OF CLIMATE RISK
Risks result from the interaction of hazards with people and ecosystems that are exposed and vulnerable and that respond in different ways.
Hazard
(e.g., sea-level rise)
Vulnerability
Risks
Exposure
(e.g., coastal populations)
Actions to reduce hazards, exposure, and vulnerability


1
NORTHEAST



EXTREME PRECIPITATION IS INCREASING

Figure Credit: USDA Forest Service, Drexel University, NOAA NCEI, and CISESS NC.

OCEAN TEMPERATURES ARE INCREASING AS IS THE FREQUENCY OF MARINE HEATWAVES

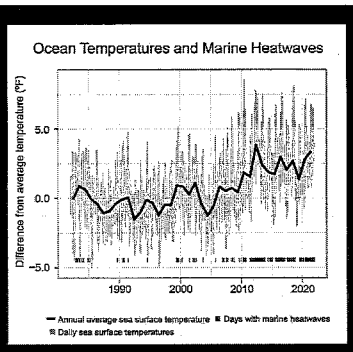
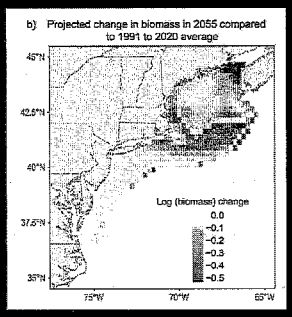


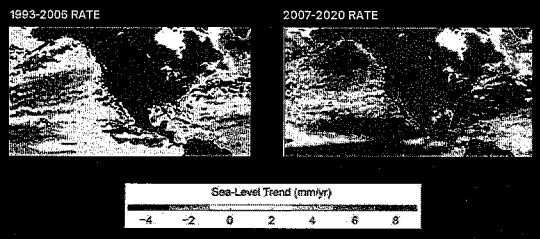
Figure Credit: Drexel University and USDA Forest Service.



PROJECTED DECLINES IN FISHERY RESOURCES (LOBSTER)

Adapted from Alloy et al. 2020079 [CC0 1.0].

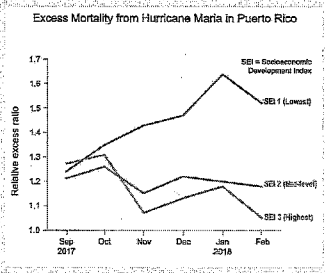
SATELLITE OBSERVATIONS AND TIDE GAUGES INDICATE THAT SEA LEVEL RISE HAS ACCELERATED



Adapted from NOAA 2022 Sea Level Rise Technical Report

2

U.S. CARIBBEAN



HURRICANE MARIA'S IMPACTS ON PUERTO RICO'S MOST IMPOVERISHED RESIDENTS

Adapted from Santos-Burgoa et al. 2018,115

ECOSYSTEM SERVICES OF CORAL REEFS IN THE U.S. CARIBBEAN

Preventing flooding to more than **4,200** people

Preventing direct flood damages to more than **4,600** buildings

Preventing indirect damages of more than **$143 million** in economic activity of individuals

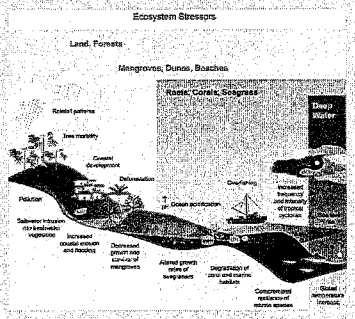
Preventing direct flood damages of more than **$184 million**

Preventing flooding to at least **8** critical infrastructure facilities

Preventing indirect damages of more than **$58 million** in business interruption annually

Figure credit: Caribbean Coastal Ocean Observing System.

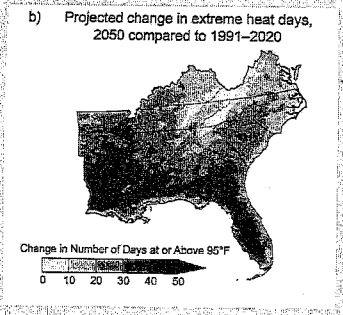
CLIMATE CHANGE AS A THREAT MULTIPLIER TO ECOSYSTEMS



Adapted with permission from Fitzpatrick and Giovas 2021.

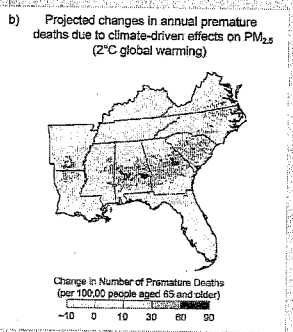
3

SOUTHEAST



AN INCREASE IN EXTREME HEAT DAYS

Figure credit: NOAA NCEI and CISESS NC.



AIR POLLUTION AND PREMATURE ELDERLY DEATHS DUE TO PM2.5 AIR POLLUTION

Figure credit: Adapted from EPA 2021

AGRICULTURE: SOME WINNERS, BUT MOSTLY LOSERS

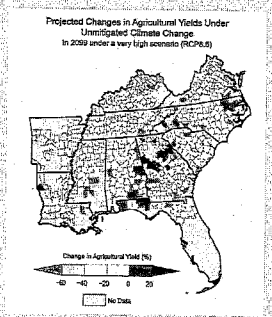
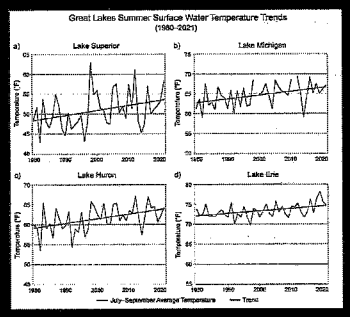


Figure credit: Adapted from Hsiang et al. 2017.

4

MIDWEST



WARMING OF THE GREAT LAKES SINCE 1980

Figure credit: University of Minnesota Duluth, NOAA NCEI, and CISESS NC

ICE-COVERED WATERS ARE CULTURALLY IMPORTANT

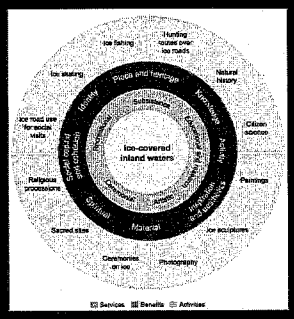


Figure credit: adapted from Knott et al. 2019

DELAYED LAST-FREEZE DATES FOR SPRING (MI)

Figure credit: Adapted with permission from the Midwestern Regional Climate Center's Freeze Date Too

LYME DISEASE ON THE RISE

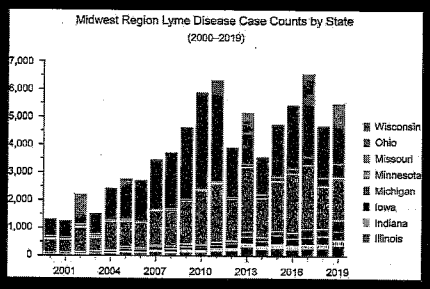


Figure credit: University of Minnesota Climate Adaptation Partnership, NOAA RCEI, and CISESS NC

5

NORTHERN GREAT PLAINS

MORE WARMING IN NEBRASKA

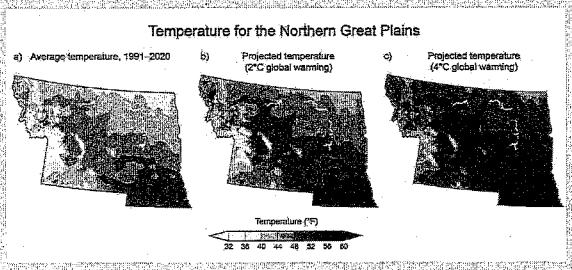


Figure credit: USGS, NOAA NCEI, CISESS NC, and University of Wyoming

DECLINING SOIL MOISTURE IN THE WEST

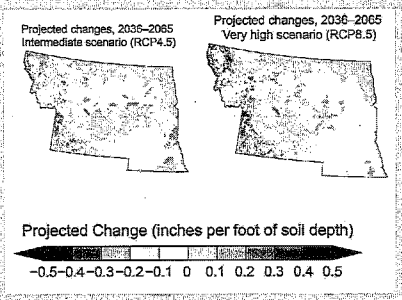


Figure credit: USDA Forest Service, NOAA NCEI, and CISESS NC

FLOODING: THE OTHER WATER PROBLEM

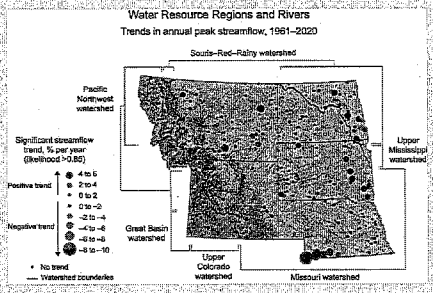


Figure credit: The Nature Conservancy, NOAA NCEI, and CISESS NC

6

NORTHWEST

HEALTH IMPACTS OF EXTREME HEAT

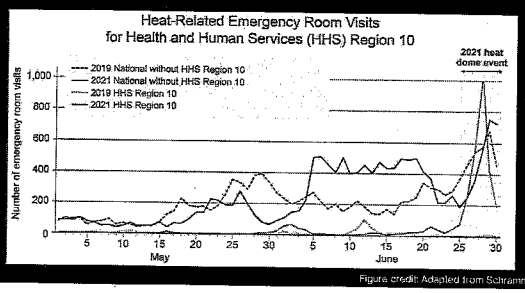
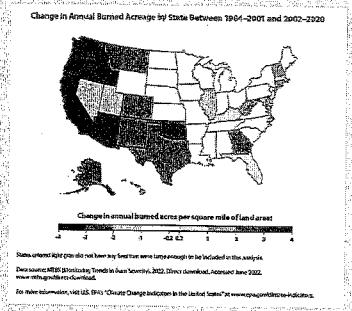


Figure credit: Adapted from Schramm et al. 2021.



WILDFIRE IN THE WEST HAS INCREASED SINCE THE 1980S

Figure credit: EPA, https://www.epa.gov/climate-indicators/climate-change-indicators-wildfires#ref28

ANOTHER PERSPECTIVE

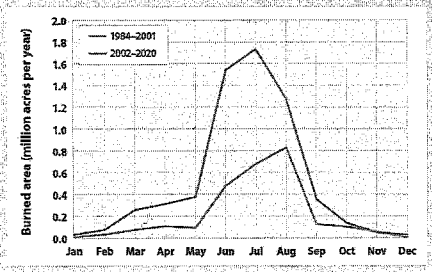


Figure credit: EPA, https://www.epa.gov/climate-indicators/climate-change-indicators-wildfires#ref26

DECLINES IN AIR QUALITY DUE TO WILDFIRES AND INCREASED ASTHMA

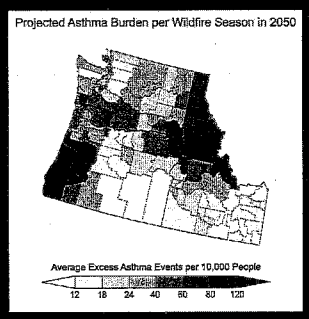


Figure credit: Adapted from Stowell et al. 2022338 [CC BY 4.0]

MORE PEOPLE IN THE WILDLAND-URBAN INTERFACE

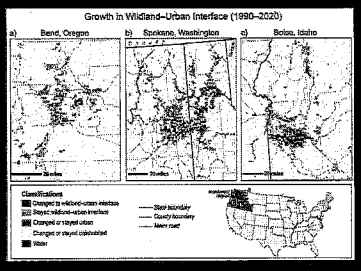


Figure credit: USDA Forest Service, NOAA NCEI, and CISESS NC.

7

SOUTHWEST

IMPACTS OF WILDFIRE

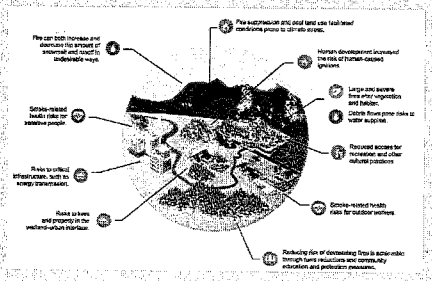


Figure Credit: USDA ARS, USDA Forest Service, University of Washington, and Montana Health Professionals for a Healthy Climate

FUTURE WATER CONDITIONS

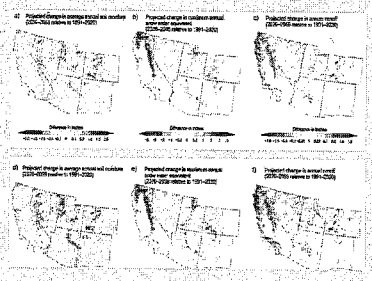


Figure credit: New Mexico State University; Arizona State University; University of Nevada, Reno; NOAA NCEI; and CISESS NC.

MARINE HEATWAVES OFF CA

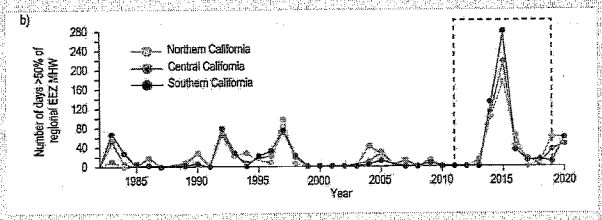


Figure credit: University of California, Santa Barbara; California Department of Transportation; NOAA NCEI; and CISESS NC

CONCLUDING THOUGHTS

1. Climate change is more than an increase in "global mean surface temperature"
2. Different regions of the country will experience different and diverse impacts
3. These impacts can result in climate litigation. How?

LEADERSHIP AND MANAGING CHANGE

DIVIDER 12

Professor Kelly Tait

OBJECTIVES:

After this session, you will be able to:

1. Discuss why change is challenging;
2. Summarize how to use aspects of thinking, feeling, and behaving to make it more likely that change efforts will be successful;
3. Explain the Growth Mindset and suggestions for fostering it; and
4. Explore strategies for overcoming potential resistance to your efforts as a Judicial Leader in Climate Science.

Leadership and Managing Change

Professor Kelly Tait
UNR, KT Consulting

Overview:

- ✓ Why change is hard
- ✓ Address thinking, feeling, and behaving aspects of a change
- ✓ Cultivate a growth mindset in yourself and others
- ✓ How to have difficult conversations

Many best practices for leading and managing change connect directly to good leadership practices in groups.

[redacted]

"Challenge is the crucible for greatness."

Kouzes and Posner
The Leadership Challenge

Kouzes and Posner (continued)

"Every single personal-best leadership case involved a change from the status quo. Not one person achieved a personal best by keeping things the same. Regardless of the specifics, they all involved overcoming adversity and embracing opportunities to grow, innovate, and improve."

Reactions to Change

- ✓ Active support
- ✓ Acceptance
- ✓ Ambivalence
- ✓ Passive resistance
- ✓ Active Resistance

Reasons for resistance to change...

[redacted]

Fears Often Underlies Resistance ~ People are often afraid:

- ✓ Their concerns won't be heard
- ✓ We don't really understand their concerns
- ✓ We don't really value their ideas
- ✓ Change will be too "expensive" for them
- ✓ Change will leave them behind
- ✓ If someone else wins, they will lose

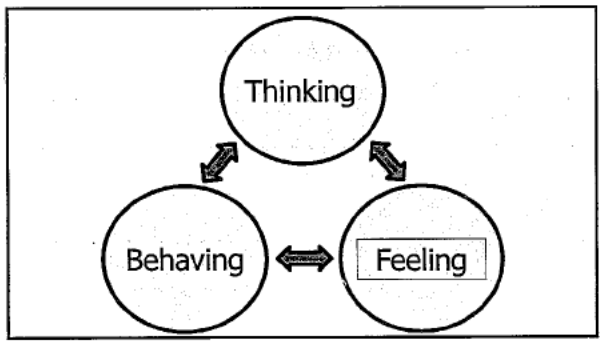
Resistance to Change from a Psychological Perspective:

> "All change is loss, and all loss must be mourned."
> ~Psychologist Henry Levinson

Change Takes Energy

- ✓ For anything to change, someone has to start acting differently ... often many someones.
- ✓ Change efforts come down to whether you can get people to start behaving in a new way.
- ✓ Lasting change requires addressing all three levels: **thinking**, **feeling**, and **behaving**.

[redacted]



Consider Reactions in All Domains:

- ✓ **Thinking**
  - ❑ What do others think about the change?
- ✓ **Feeling**
  - ❑ How do others feel about the change?
- ✓ **Behaving**
  - ❑ How easily can we act on the change?

~ Address all three ~

Consider Reactions in All Domains:

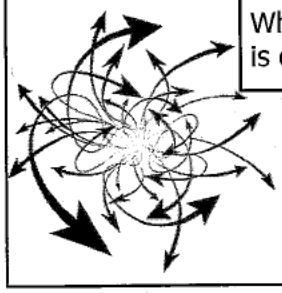
"If you wish to persuade me, you must think my thoughts, feel my feelings, and speak my words."

~Cicero, Roman Statesman

[redacted]

Framework:
Switch: How To Change Things When Change Is Hard

Chip Heath and Dan Heath



What looks like resistance is often a lack of clarity.

Thinking: Analytical, Rational

- ✓ Follow the bright spots
  - ❑ Find what is working, adopt and adapt it
- ✓ Point to the destination; make it clear:
  - ❑ Where you're going and why it's worth it
- ✓ Script the critical moves
  - ❑ Get granular: specific behaviors

[redacted]

Feeling: Emotional, Instinctive

- ✓ Remind them of your common purpose by focusing on the **feelings** it inspires
  - ❑ Cultivate sense of identity, belonging (again)
- ✓ Encourage a **growth mindset**
  - ❑ Focus on psychological safety (again)
- ✓ **Shrink the change** – "chunk" it so it doesn't feel as overwhelming

Growth Mindset vs Fixed Mindset

Mindset: Set of attitudes or beliefs we hold that affects what we feel, think, experience, & do

Fixed Mindset: talents, intelligence, etc. are fixed traits that cannot grow

Growth Mindset: Believing that abilities can be developed through dedication and hard work

The power of "yet" ~ Carol Dweck, Professor of Psychology at Stanford

How To Cultivate a Growth Mindset in Yourself and Others

⇒ Rewarding yourself and others for **effort** improves performance versus rewarding based on identity labels which hinder performance

Huberman Lab 7-21-23: "How To Enhance Performance & Learning By Applying A Growth Mindset"

In addition: Stress as enhancing mindset

[redacted]

[redacted]

What looks like a people problem is often a situation problem.

University of Warwick

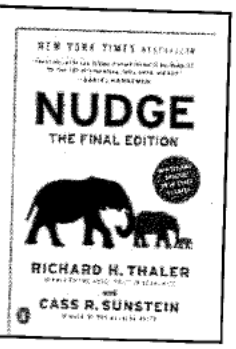
[redacted]

Behaving: A Clear Path for Action

- ✓ Change the environment
  - ❑ Choice architecture
- ✓ Help build habits
  - ❑ Be sure people have needed tools & training
  - ❑ Break into small steps; make first step easy
- ✓ Model the behavior(s) and reward it

Choice Architecture

Purposeful design of how choices are presented



[redacted]

[redacted]

Presenting Choices

- ✓ Impact of how choices are presented on decision-making
  - ❑ Number of choices presented
  - ❑ Manner in which attributes are described
  - ❑ Presence of a default
- ✓ Design to "nudge" toward better choice

"Avoiding Failures of Implementation"

Center for Court Innovation (2009)

Why Implementation Sometimes Fails

- ✓ Lack of vision – no definition of success or how to determine success, nor communication of it
- ✓ Failure of leadership/lack of champions
- ✓ Errors in stakeholder engagement strategy
- ✓ Failure to formalize the plan
- ✓ Failure to get staff onboard
- ✓ Failure to adapt to developments

"Avoiding Failures of Implementation" CCI (2009)

[redacted]

The Continuing Importance of Perspective...

"No behaviour is irrational, when you factor in the *feelings* that drive it, and the *deep context* within which that behaviour occurs."

~Dr. Jacqueline Kennedy

The best advice I ever got:

"Whatever anybody says or does, assume positive intent. You will be amazed at how your whole approach to a person or problem becomes very different."

~ Indra Nooyi

Former CEO, Pepsico

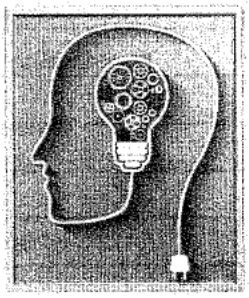
What to Do: Conflict and Disagreement

- ✓ **Be Proactive ~** For instance:
  - ❑ If anticipate resistance, give clear rationale
  - ❑ Emphasize common goal(s)
- ✓ **Be Responsive ~** For instance:
  - ❑ Acknowledge positive intent
  - ❑ Use active listening
  - ❑ Return to common ground
- ✓ **Remember conflict can be constructive!**

[redacted]

"Progress is impossible without change. And those who cannot change their minds cannot change anything."

~George Bernard Shaw



Framework for Working with Others to Create a Major Change

Adapted from *SWITCH: How to Change Things When Change Is Hard*
by Chip Heath and Dan Heath (2010)

For things to change, somebody somewhere has to start acting differently. Maybe it's you, maybe it's your team.

Picture that person (or people). Each has an emotional side and a rational side. You've got to reach both. And you've also got to clear the way for them to succeed. In short, you must do **three things:**

1. DIRECT the Rational Part of People's Brains *(Thinking)*

- FOLLOW THE BRIGHT SPOTS. Investigate what's working and clone it.
- SCRIPT THE CRITICAL MOVES. Don't think big picture, think in terms of specific behaviors.
- POINT TO THE DESTINATION. Change is easier when you know where you're going and why it's worth it.

2. MOTIVATE the Emotional Part of People *(Feeling)*

- FIND THE FEELING. Knowing something isn't enough to cause change. Make people feel something.
- SHRINK THE CHANGE. Break down the change until it's no longer intimidating.
- GROW YOUR PEOPLE. Cultivate a sense of identity and instill the growth mindset.

3. SHAPE the Path *(Behaving)*

- TWEAK THE ENVIRONMENT. When the situation changes, the behavior changes. So change the situation.
- BUILD HABITS. When behavior is habitual, it's "free"—it doesn't tax the rational part of your brain (decision fatigue). Look for ways to encourage habits.
- RALLY THE GROUP. Behavior is contagious. Help it spread.

(For more free resources related to this, go to http://www.heathbrothers.com/resources/)

Key Takeaways from "How To Enhance Performance & Learning by Applying a Growth Mindset." Andrew Huberman: Hubermanlab.com, 7-21-2023.
Https://podcastnotes.org/huberman-lab/how-to-enhance-performance-learning-by-applying-a-growth-mindset-huberman-lab/

- Rewarding yourself (and others) for effort improves performance versus reward based on identity labels which hinder performance.
- Parents, teachers, and coaches: be careful when giving feedback to people – feedback praising effort versus labeling someone (e.g., smart, talented) will lead to more success and greater growth in the long run.
- Shifting the narrative toward effort instead of the label can help you get better and prevent you from getting worse at something you're already good at by detaching identity.
    - Instead of being smart, you're someone who works hard – you can apply this to any setting instead of shying away from a challenge you might not be 'smart' at.
- Rewarding effort will shift performance in current tasks and future tasks.
- Focus on what you can control: we can all control level of persistence and effort.
- "When identity is attached to a sense of ability to engage in an ongoing effort, especially when you receive signals that you are getting wrong or not performing well that is tied to elevated performance." – *Dr. Andrew Huberman*
- You can shift from a fixed mindset to a growth mindset response: it's ok to take a moment to have an emotional response to underperformance in the seconds to minutes after but then it's critical to devote resources to understanding and improving through effort.
- There's bad messaging that stress is debilitating, bad, and should be avoided but in reality – stress puts us in forward motion and propels us toward action which can improve a growth mindset.
- Benefits of embracing stress as enhancing mindset: shifts focus to understanding why something is going wrong and allocating resources accordingly, physiological processes shift (shorter duration of cortisol, increased stroke volume), takes brain and body away from negative state and toward the positive state, improves the ability to deal with future stressors.
    - Learning about stress as enhancing mindset and growth mindset can allow you to shift physiology and psychology.

Leadership and Managing Change Resources

Compiled by Professor Kelly Tait

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2. Cissner, Amanda B., and Donald J. Farole, Jr. "**Avoiding Failures of Implementation: Lessons from Process Evaluations.**" Center for Court Innovation (2009). Best practices for avoiding pitfalls in implementing a new initiative, with case studies. https://www.courtinnovation.org/publications/avoiding-failures-implementation-lessons-process-evaluations
3. Creately Blog, "**The Ultimate List of Change Management Tools to Drive Change Like a Pro**" (updated 1/25/2021). Brief overview of well-known tools for assessing and implementing change measures. https://creately.com/blog/diagrams/change-management-tools-list/
4. Crum, Alia. "**Empowering Mindsets to Optimize Health and Human Performance.**"14 minute video from The Brain-Mind Summit on the power of mindset. https://www.youtube.com/watch?v=xlwEXuOqoj8
5. Duhigg, Charles. ***The Power of Habit: Why We Do What We Do in Life and Business*** Random House, 2012. Excellent book on how habits form and how to change them.
6. Heath, Chip, and Dan Heath. ***Switch: How to Change Things when Change Is Hard.*** Broadway Books, New York, NY (2010). Very useful, readable book with citations to studies to support points. Also see authors' website http://www.heathbrothers.com/resources/ for resources related to Switch (and their other books), including a one page overview, short podcasts on applying the framework, and an outline for teams' change efforts.
7. Huberman, Andrew. "**How To Enhance Performance & Learning By Applying a Growth Mindset.**" Podcast: Hubermanlab.com, 7-21-2023. A deep dive into the research and suggestions for increasing a growth mindset. Https://podcastnotes.org/huberman-lab/how-to-enhance-performance-learning-by-applying-a-growth-mindset-huberman-lab/
8. National Center for State Courts. **Leadership/Change Management Resource Guide.** Numerous links to articles and other sources. https://www.ncsc.org/topics/court-management/leadership-and-change-management/resource-guide January 23, 2022
9. Thaler, Richard H., and Cass R. Sunstein. ***Nudge: The Final Edition*** (previous subtitle: *Improving Decisions about Health, Wealth, and Happiness*). Penguin Group, 2021. Excellent book about "choice architecture" drawing on long-term and recent research and examples.
10. Thaler, Richard H., Cass R. Sunstein, and John P. Balz. "**Choice Architecture.**" 2010. Analyzes some tools for nudging people toward better choices. https://www.sas.upenn.edu/~baron/475/choice.architecture.pdf
11. Yale Program on Climate Change Communication. ***Climate Change in the American Mind: 2023 Reports.*** Surveys public opinion twice a year with nationally representative surveys regarding public climate change knowledge, risk perceptions, policy support and behavior. https://climatecommunication.yale.edu/about/projects/climate-change-in-the-american-mind/

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APPLYING LEADERSHIP PRINCIPLES THROUGH CASE STUDIES

DIVIDER 13

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