

Using the ABT
Framework for
Proposals, Papers,
Presentations,
and Life in General

Dr. Keisha Bahr
Assistant Professor of Marine Biology
www.BahrLab.com @KeishaBahr



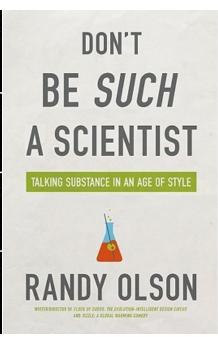


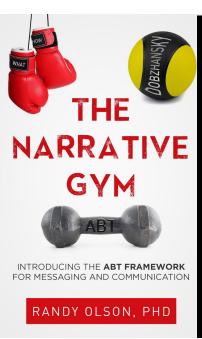


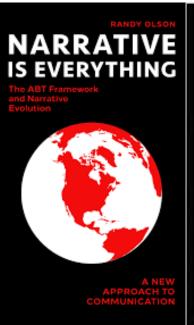
SciComm Training w/ Dr. Randy Olson

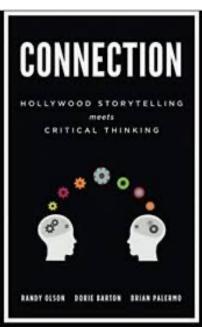


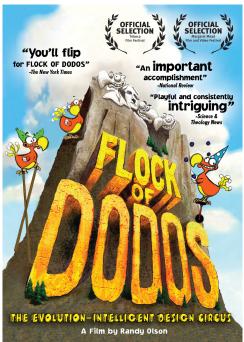




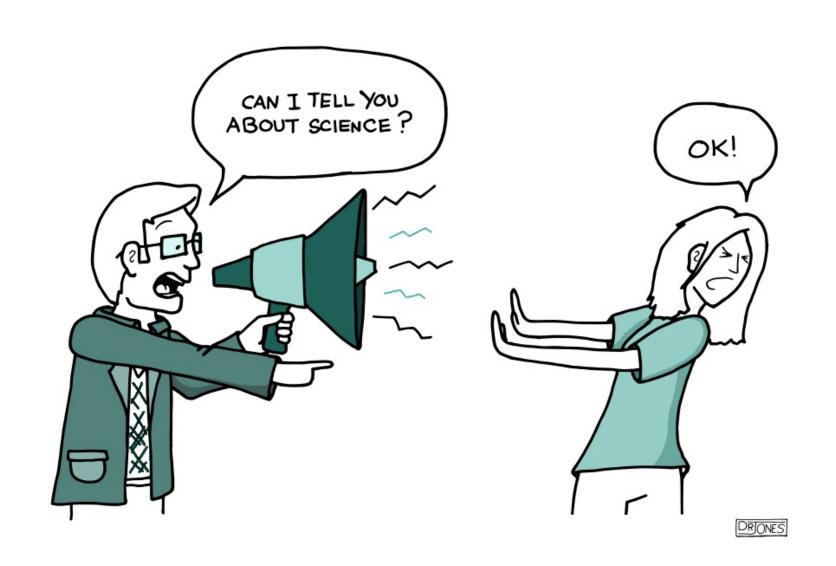








Why are you here? (i.e. your problem)



Why are you here?

- Overwhelmed and unsure of what information to share
- Trouble or unsure how to get start writing (i.e., grant, publication, etc.)
- Having trouble know why your research is important?
- Issues with making your research relevant to granting agencies
- Uncertain how to introduce yourself or your research
- Uncomfortable with public speaking

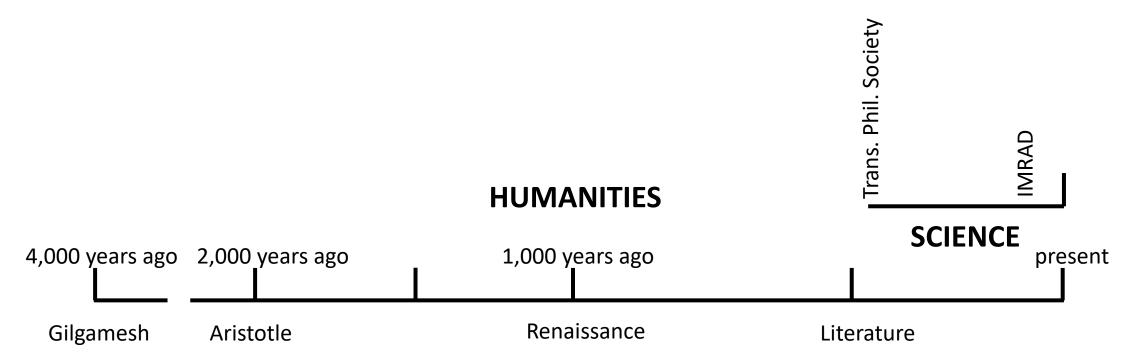








"Tell a story" Evolution of Story Telling





Cave paintings



First printed story: Epic of Gilgamesh





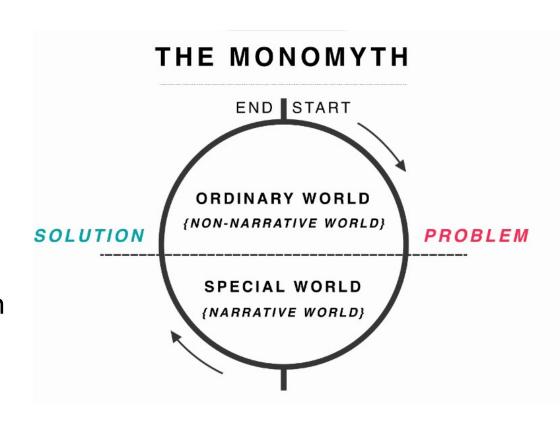
STORY VS NARRATIVE

STORY

 The complete circular journey from nonnarrative to narrative, then back to nonnarrative.

NARRATIVE

• The series of events that occur in the search for the solution to a problem.



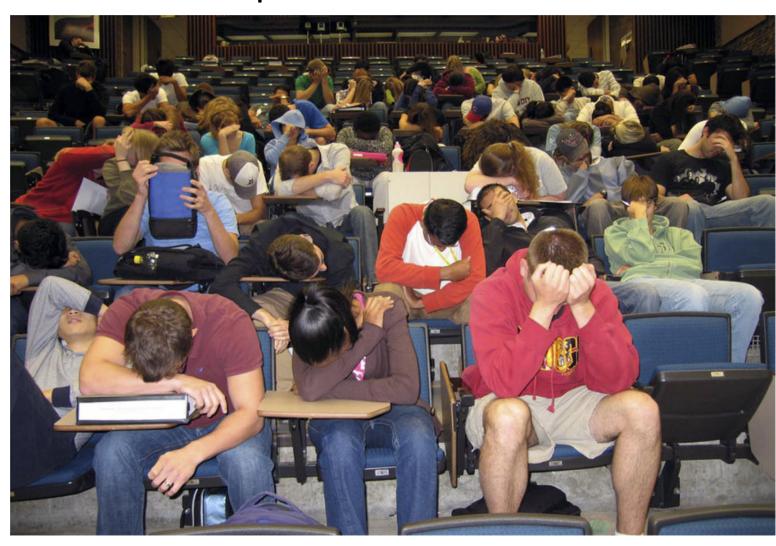
A series of events doesn't **become a story until a problem is established**, which sets up the narrative part of the journey, which is the heart of the story.



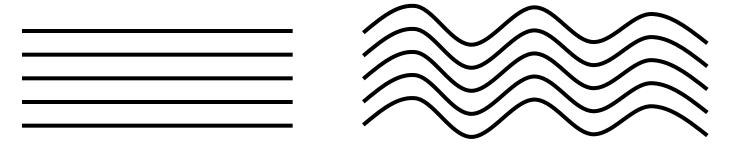
AAA (and, and)

BORING

NON-NARRATIVE



AAA ABT (and, and, and) (and, but, therefore)



BORING

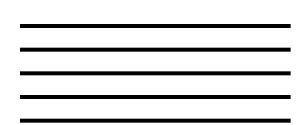
INTERESTING

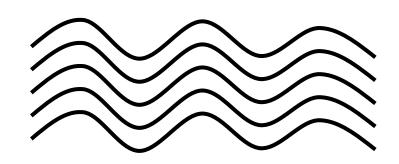
NON-NARRATIVE

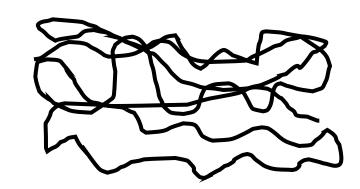
NARRATIVE

AAA (and, and, and) ABT (and, but, therefore)

DHY (despite, however, yet)







BORING

INTERESTING

CONFUSING

NON-NARRATIVE

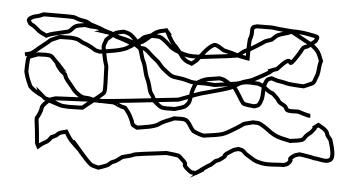
NARRATIVE

OVERLY - NARRATIVE

AAA (and, and, and)

ABT (and, but, therefore) **INTERESTING** NARRATIVE

DHY (despite, however, yet)



CONFUSING

OVERLY - NARRATIVE

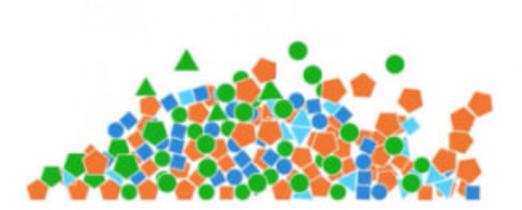
NON-NARRATIVE

BORING

Narrative Shaping: Content and Form

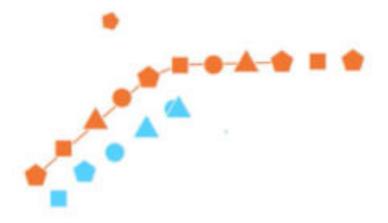
Content

Your research/message



Form

Narrative structure



New York Times

That's Fit to Print"

The New York Times Toky, medit casely showers, some clearing late, high \$2. Tenight, partly cloudy arely, then clear partly cloudy surply carely the clear partly cloudy surply, then clear partly cloudy arely, then clear partly cloudy early, then clear partly early ear

NEW YORK, TUESDAY, SEPTEMBER 13, 2022



Pool of Labor In U.S. Stays Bafflingly Low

By LYDIA DePILLIS

As the United States emerge from the pandemic, employer have been desperate to hire. But labor has fallen short, holding

More than two years after the

As U.K. Cut Back, Charles Expanded His Riches

By JANE BRADLEY and EUAN WARD

ONDON — King Charles III uilt his own empire long before e inherited his mother's. Charles, who formally acceded

the British throne on Saturday. pent half a century turning his oyal estate into a billion-dollar ortfolio and one of the most lu-

while ins moute, Queen Enda-beth II, Jargey delegated respon-sibility for her portfolio, Charles swa far more deeply involved in supermarket depot. (A duchy is a buyermarket depot. (A duchy is a

Estate Was Remade by Canny Investments and Land Deals

his portfolio's value and profits by about 50 percent.

Descriptions value and profits by defining the many has been criticism of the Kremlin sa closely guarded secret.

Today, the Duchy of Cornwall closely guarded secret. ortotio and one of the most lu-torative moneymakers in the royal smily business.

The final mark cricket ground known as The Oval, just bit smoker's portfolio and inherit will also mother, Queen Eliza-finalian in the south of England, and an advantage of the control for the control f

The conglomerate's holdings are valued at roughly \$1.4 billion, compared with around \$949 mil-lion in the late queen's private portfolio. These two estates repre family's estimated \$28 billion fortune. On top of that, the family has

Russians Start A Blame Game As Losses Rise

Critics Strike at Putin Despite Dangers

By ANTON TROIANOVSKI

More than 40 local elected offisentence petition on Monday that ended with: "We demand the res-ignation of Vladimir Putin from he post of president of the Rus-ian Federation!"

The petition, pushed by oppono practical impact, and it was roundly ignored in Russia's statecontrolled media. But it was striking in its very existence, showing Ukraine's counteroffensive suc-cesses have left opponents of resident Vladimir V. Putin newly mboldened — and his supporters Stretching the Ukrainian forces

ooking for someone else to blame Pro-war commentators and politicians have pointed to the mili-tary leadership or senior officials, saving they have not waged the with sufficient decisiveness Longtime Kremlin critics have spized on that discord and Pussia's setbacks at the front, to take the risk of speaking out against

"There is now hope that Ukraine will end this war," said Ksenia Torstrem, a member of a municipal council in St. Petersvances an "inspiring factor" for it "We decided we needed to put pressure on from all sides."

On Russian state television, where criticism of the Kremlin is

its focus after a staggering defea

AFTER BIG GAINS. **IIKRAINIANS FACE**

NEXT STAGE OF ATTACKS

of Pushing Too Far in a Reshaped War

By THOMAS GIRRONS, NEFT

DNIPROPETRIVSK REGION drove Russian forces into a cha Ukrainian leaders on Monday were weighing critical gamble

 a military still much smaller
and far less equipped than its Rustroops vulnerable to attack. Mov squandered. And waiting too long

positioned to make a move on the clared the Donbas independen from Ukraine, and he held up th

Pool of Labor In U.S. Stays Bafflingly Low

By LYDIA DePILLIS

As the United States emerges from the pandemic, employers have been desperate to hire. But while demand for goods and services has rebounded, the supply of labor has fallen short, holding back the economy.

More than two years after the Covid-19 recession officially ended, some sectors haven't found the workers they need to operate at capacity. Only in August did the work force return to its prepandemic size, which is millions short of where it would have been had it continued to grow at its prepandemic rate.

In simple numbers, some of that gap is because of Covid's death toll: more than a million people. about 260,000 of them short of retirement age. In addition, a sharp slowdown in legal immigration has pared the potential work force by 3.2 million, relative to its trajectory before 2017, according to calculations by economists at J.P. Morgan.

But the problem isn't just that population growth has stalled. Even with an uptick in August, the share of Americans working or actively looking for work is 62.4 percent, compared with 63.4 percent in February 2020.

"It's my sense that the most important reason that the labor market feels so hot right now is that we have so many fewer people in it," said Wendy Edelberg, director of the Hamilton Project, an economic policy center at the Brookings Institution. "Demand largely recovered, and we didn't have the supply."

Continued on Page A20

- New York Times
- Nursery Rhymes



- New York Times
- Nursery Rhymes
- Great Speeches from American History

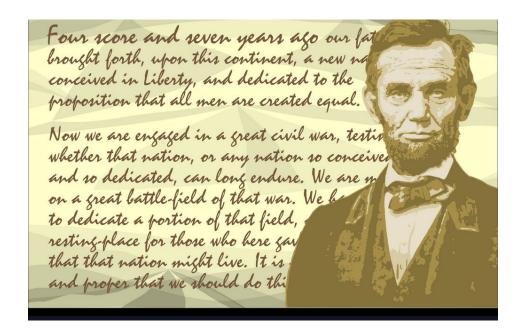
THE GETTYSBURG ADDRESS

(paraphrased speech by Abraham Lincoln, full text on pg 87):

"We are a great AND mighty nation,

BUT now we are engaged in a horrible civil war that we cannot allow to destroy this country,

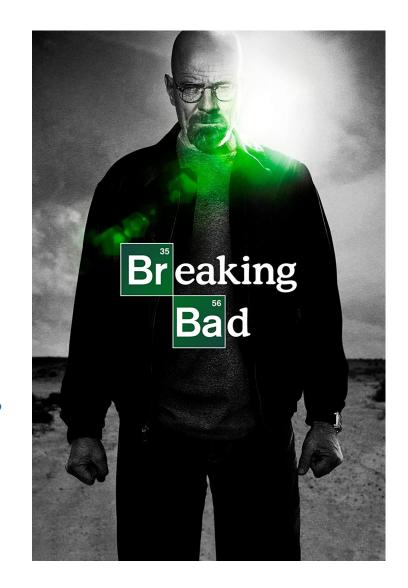
THEREFORE it is up to us, the living, to make sure that the souls lost in this battle did not die in vain."



- New York Times
- Nursery Rhymes
- Great Speeches from American History
- Movies and TV Shows

Walter White loves his family AND would do anything for them, BUT when he gets diagnosed with cancer he becomes desperate to provide for their future,

THEREFORE he gets involved in the drug trade



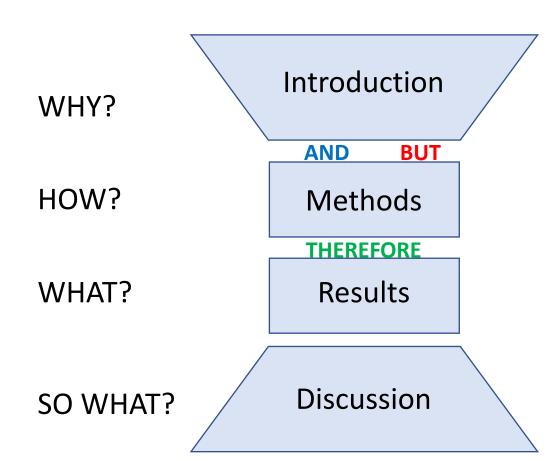
- New York Times
- Nursery Rhymes
- Great Speeches from American History
- Movies and TV Shows
- Pop Culture

CALL ME MAYBE (massively popular 2012 song by Carly Rae Jepsen)

"Hey, I just met you AND this is crazy, BUT here's my number, SO call me maybe."



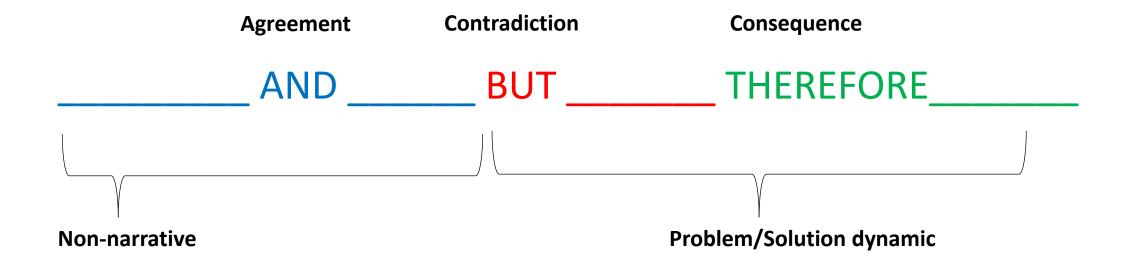
- New York Times
- Nursery Rhymes
- Great Speeches from American History
- Movies and TV Shows
- Pop Culture
- Structure of Scientific Papers (IMRAD)



The ABT Framework: Introduction

Reframe into:

Set-up, problem, solution *Agreement*, contradiction, consequence



The ABT Framework: Introduction

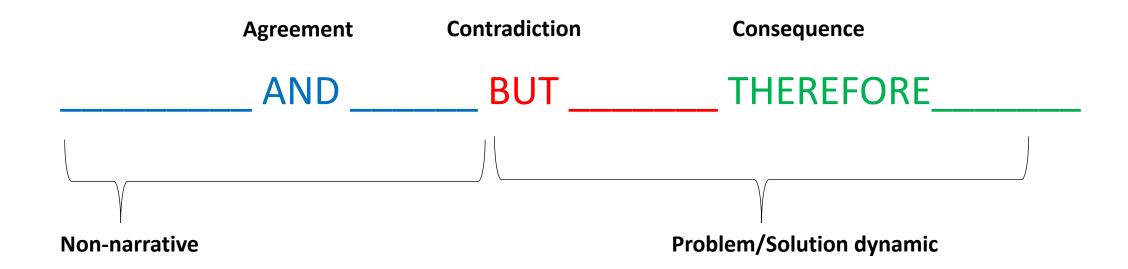
Reframe into:

Set-up, problem, solution *Agreement*, contradiction, consequence

You love science AND you're enjoying building your career as a scientist, BUT you've begun to realize that communication is an obligatory part of being a scientist,

THEREFORE you're here today

The ABT Framework: Primary Level

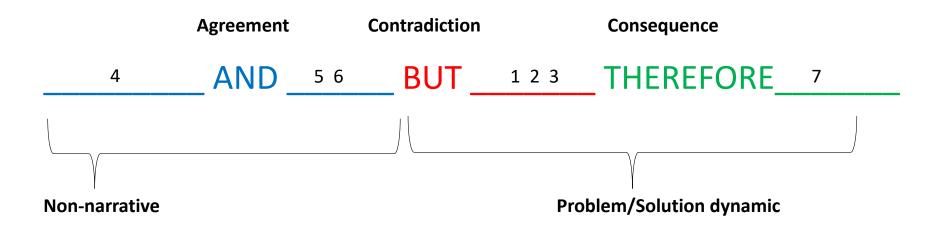


Let's write your ABT for your research

The ABT Framework: Secondary Level

It's more complex

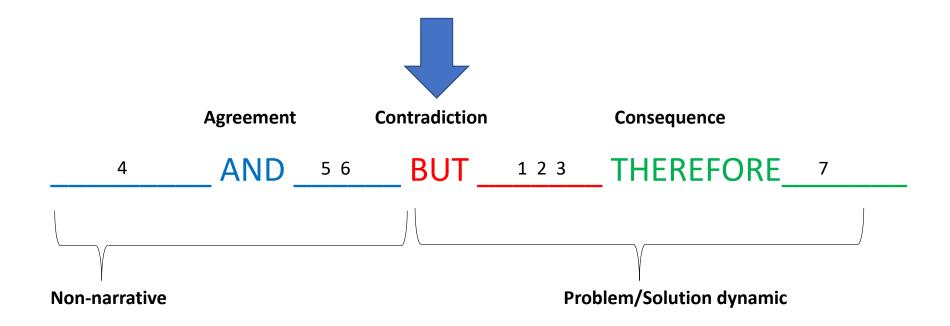
- 1. Singular Narrative
- 2. BUT/BECAUSE
- 3. IF/THEN (fear)
- 4. Ordinary World
- 5. Stakes
- 6. IF/THEN (hope)
- 7. What/How



The ABT Framework: Secondary Level

It's more complex

- 1. Singular Narrative
- 2. BUT/BECAUSE
- 3. IF/THEN (fear)
- 4. Ordinary World
- 5. Stakes
- 6. IF/THEN (hope)
- 7. What/How



Narrative Shaping: Your problem

Step 1: BUT what's your problem?



Simplicity – what is your core problem?



Narrative Shaping: What's your problem?

- Step 1: BUT what's your problem?
 - The problem excites the brain
 - the solution quiets the brain
 - The problem shapes the AND content
 - It sets up your problem
- BUT I HAVE TOO MANY PROBLEMS!



Exercise #1: The 5 word Problem

- For this exercise, try to finish this sentence
 "The problem is _____" and use only 5 additional words.
 - "Examples: The problem is **bad resource management**.
 - The problem is **the old method doesn't work**.
 - The problem is we have bad data.
- Stripping down your problem to just 5 words can really help you clarify what your narrative is really all about.

ABT Build Example: Too many problems

Climate change is putting stress on wildlife populations AND the populations need to be managed,

BUT we need to know their genetics for management, and without an historical record we can't say what's happening with the population growth, and wildfires are a new threat to wildlife that needs to be considered,

THEREFORE we are implementing several new projects to address all these problems.

Finding the Singular Narrative: Dobzhansky Template

Finding the core meaning of your story:

Nothing in <u>biology</u> makes sense except in the light of <u>evolution</u>.

Exercise #2: Using the Dobzhansky Template to find your "One Thing."

Restructure your ABT in the form of a Dobzhansky Template to help you find your singular narrative.

- Dobzhansky Template: Nothing in _____ makes sense, except in the light of _____.
 - Examples: Nothing in **biology** makes sense, except in the light of **evolution**.

Exercise #2: Using the Dobzhansky Template to find your "One Thing."

Restructure your ABT in the form of a Dobzhansky Template to help you find your singular narrative.

- Dobzhansky Template: Nothing in _____ makes sense, except in the light of _____.
 - Examples: Nothing in **biology** makes sense, except in the light of **evolution**.
 - Nothing in geology makes sense, except in the light of plate tectonics.
 - Nothing in the **management of mule deer** makes sense except in the light of **correctly estimating abundance**.
 - Nothing in the challenge of teaching human anatomy makes sense except in the light of time management

Finding the Singular Narrative: Dobzhansky Template

Finding the core meaning of your story:

Nothing in <u>biology</u> makes sense except in the light of <u>evolution</u>.

Nothing in wildlife management makes sense, except in the light of genetic population structure.

The 3 Forms of the ABT

1 Informational

2 Conversational

3 Keeper



CONCISE COMPELLING

CONCISE COMPELLING

CONCISE COMPELLING

the CONVERSATIONAL is just the STORY

The 3 Forms of the ABT

• Example:

iABT: In my lab we model moderate sleep apnea in rats with a chronic intermittent hypoxia protocol in order to investigate the physiological mechanisms of sustained diurnal blood pressure, BUT we have realized the importance of molecular pathways within the central nervous system contributing towards blood pressure control, THEREFORE we have begun exploring novel molecular pathways that develop as a result of our sleep apnea model.

The 3 Forms of the ABT

• Example:

cABT: We were looking at X one way but realized there's another way therefore we're looking at that way.

The 3 Forms of the ABT

• Example:

kABT: In my lab we're studying sleep apnea using rats as our model system, AND we've been focused on physiological mechanisms, BUT lately we've realized the real controls may lie at the molecular level in the central nervous system, so AS A RESULT we've begun exploring novel molecular pathways.

Exercise #3: cABT – Starting from simplicity

- The cABT should have all specifics stripped off of it.
- Use nothing but generic words, like "thing" and "stuff." For example, if your ABT dealt with a new way to clean junk from the ocean that's an improvement and the old system is outdated.
- cABT: "We had a thing we were using for a while, but it's not working that great, so now we want to use a better thing."

ABT Build Example: Too many problems

Climate change is putting stress on wildlife populations AND the populations need to be managed, BUT we need to know their genetics for management, and without an historical record we can't say what's happening with the population growth, and wildfires are a new threat to wildlife that needs to be considered,

THEREFORE we are implementing several new projects to address all these problems.

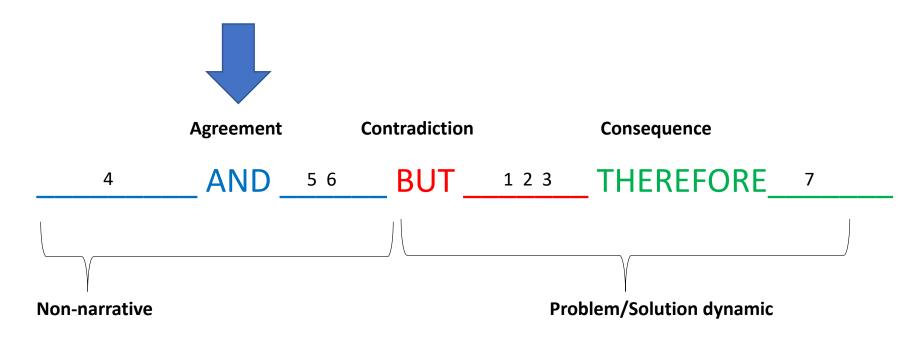
Climate change is putting stress on wildlife populations AND the populations need to be managed,

BUT without knowing the genetic population structure it is difficult to make management decisions,

The ABT Framework: Secondary Level

It's more complex

- 1. Singular Narrative
- 2. BUT/BECAUSE
- 3. IF/THEN (fear)
- 4. Ordinary World
- 5. Stakes
- 6. IF/THEN (hope)
- 7. What/How



Narrative Shaping: The Ordinary World

THE MATT TEMPLATE







Narrative Shaping: Relatability

- MAKE YOUR STORY RELATABLE
- Establish common ground with the audience
 - Opens up a channel of communication with something relatable
- Lead with relatable material



"Really? I don't like sitting down on a cold toilet seat either."

Narrative and Character Relatability

By beginning with <u>shared values</u> (Agreement, "Yes and...")



Katharine Hayhoe – Climate Scientist/Evangelical

Start with "You love the West Texas landscape (where she now lives) AND so do I".

Only then move on to "BUT we can also see that climate is changing and harming our way of life.

THEREFORE we need to make changes so things don't get worse."

Narrative Shaping: The Ordinary World

Lay the groundwork for the impact of the contradiction (the BUT)

Two elements:

- WHAT: Ordinary world
- WHY: What's at stake? Why is it important? Why should we care?

AND _____ BUT ____ THEREFORE_____

- WHAT: Ordinary world
 - simple opening description
 - "This is material that even a climate skeptic would agree with you about."

Example: "There are 50 acres of woods next to my house"



Dr. Wenowdis

- WHAT: Ordinary world
- WHY: What's at stake? Why is it important? Why should we care?
 - Power of story telling rests in specifics.
 Try to make what's at stake as specific as possible.
 - This is how important the subject is

 AND

Example:

"I have 17 vacuum cleaners in my house, BUT one of them is broken."



BUT

THEREFORE_____



- WHAT: Ordinary world
- WHY: What's at stake? Why is it important? Why should we care?
 - Power of story telling rests in specifics.
 Try to make what's at stake as specific as possible.
 - This is how important the subject is

Example:

"I have 17 vacuum cleaners in my house, BUT one of them is broken."

"I have only one vacuum cleaner in my house, BUT it's broken,"

_ AND _____ BUT ____ THEREFORE_____

- WHAT: Ordinary world
- WHY: What's at stake? Why is it import
 - Power of story telling rests in specifics.
 Try to make what's at stake as specific as
 - This is how important the subject is

Example:

"I have 17 vacuum cleaners in my house, BUT one of them s bro. en."

"I have only one vacuum cleaner in my house, BUT it's broken,"

How important is the message?

___ AND

BUT

THEREFORE_____

ABT Build Example

Climate change is putting stress on wildlife populations AND the populations need to be managed,

BUT without knowing the genetic population structure it is difficult to make management decisions,

ABT Build Example: What's at stake

Conservation genetics is an essential part of wildlife management AND with a thorough knowledge of the genetic diversity and population structure we can make sound management decisions,

BUT without knowing the genetic population structure it is difficult to make management decisions,

ABT Build Example: What's at stake (IF/THEN)

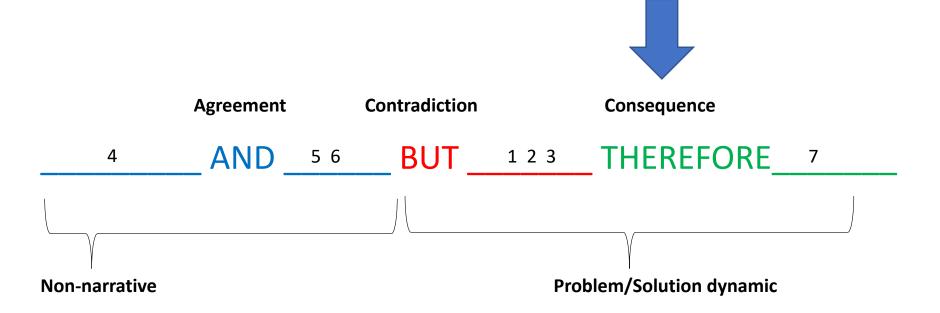
Conservation genetics is an essential part of wildlife management AND <u>IF</u> we understand the basic genetic patterns within and among populations for the species we are managing <u>THEN</u> we can avoid admixture of genetically distinct populations,

BUT without knowing the genetic population structure it is difficult to make management decisions,

The ABT Framework: Secondary Level

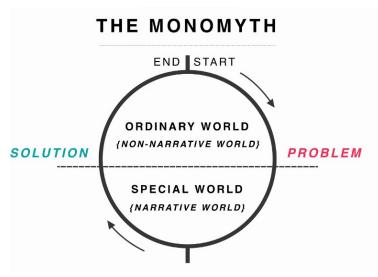
It's more complex

- 1. Singular Narrative
- 2. BUT/BECAUSE
- 3. IF/THEN (fear)
- 4. Ordinary World
- 5. Stakes
- 6. IF/THEN (hope)
- 7. What/How

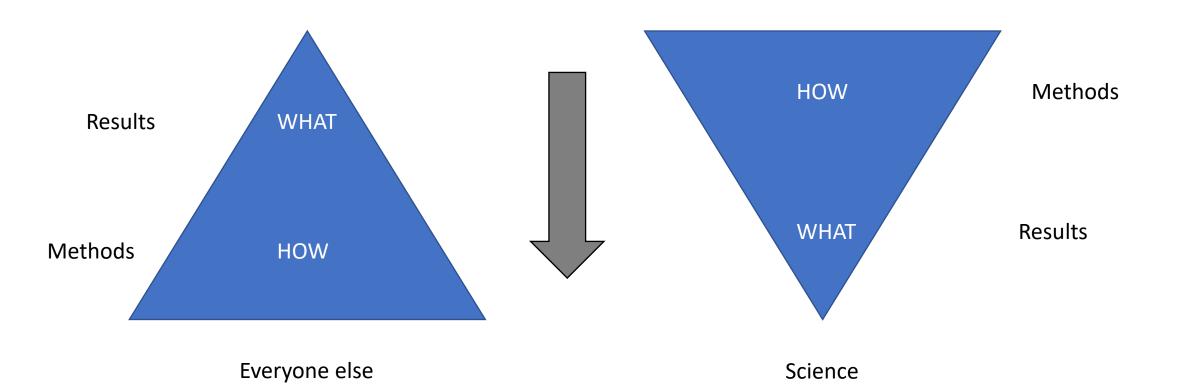


- The power of the moment = the power of change
- Moment 1: The Problem (BUT)
 - Excites the brain
 - transition from calm to the state of excitement, arousal, uncertainty, and often fear.
 - The quicker this transition takes place, the better the chance of capturing attention.

- The power of the moment = the power of change
- Moment 1: The Problem (BUT)
 - Excites the brain
 - transition from calm to the state of excitement, arousal, uncertainty, and often fear.
 - The quicker this transition takes place, the better the chance of capturing attention.
- Moment 2: The Solution (THEREFORE)
 - Quiets the brain
 - Transition back to the livable ordinary world.



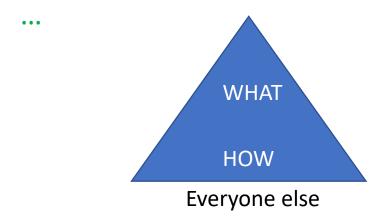
WHAT/HOW instead of HOW/WHAT

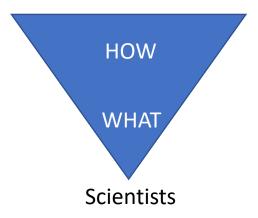


WHAT/HOW instead of HOW/WHAT

BUT no genetic research is currently conducted because of a limited budget for which conservation genetics has not been identified as a priority, THEREFORE

BUT because conservation genetics has not been identified as a priority there is <u>no genetic research</u>, THEREFORE ...





WHAT/HOW instead of HOW/WHAT

...THEREFORE to make <u>conservation genetics</u> an integral part of our wildlife management program we are working with the budget office to specify genetic research as a funding priority resulting in the needed funding allocations.

HOW
Everyone else

...THEREFORE we're going to work with the budget office to identify conservation genetics as a priority resulting in enough funds to make genetic research an integral part of our program.

HOW

WHAT

Scientists

The ocean is important in many ways AND because it is so big we didn't think we could hurt it.

BUT we overfished, polluted, heated and acidified the ocean is it now dying

THEREFORE, we have to change our ways if we want the ocean to be healthy again.

- Dr. Nancy Knowlton

ABT Build

BEFORE ABT

Climate change is putting stress on wildlife populations AND the populations need to be managed, BUT without knowing their genetics it is difficult to make management decisions, THEREFORE we are studying conservation genetics.

ABT Build

BEFORE ABT

Climate change is putting stress on wildlife populations AND the populations need to be managed, BUT without knowing their genetics it is difficult to make management decisions, THEREFORE we are studying conservation genetics.

AFTER ABT

Conservation genetics is an essential part of wildlife management AND IF we understand the basic genetic patterns within and among populations for the species we are managing THEN we can avoid admixture of genetically distinct populations, BUT no genetic research is currently conducted because of a limited budget for which conservation genetics has not been identified as a priority, THEREFORE to make conservation genetics an integral part of our wildlife management program, we are working with the budget office to specify genetic research as a funding priority resulting in the needed funding allocations.

Applications: Elevator Speeches

- AND: BACKGROUND
 - A short summary of prior education and relevant professional activities.
- BUT: PURPOSE
 - Why you are in graduate school, why the graduate degree is important.
- THEREFORE: GOALS
 - Post-graduation trajectory, and how it will be implemented.

- AND: CONTEXT
 - State what is known from the literature about your specific research.
- BUT: QUESTION
 - Pivot to an interesting unanswered question.
 - IF/THEN Tool: IF you fund this research THEN here are the various advances that will be made possible.
- THEREFORE: YOUR RESEARCH
 - Explain your research and how it establishes you to answer the BUT (above).

OR

Applications: Proposals and Papers

- AND: CONTEXT
 - State what is known from the literature about your specific research.
- BUT: QUESTION
 - Pivot to an interesting unanswered question.
 - IF/THEN Tool: IF you fund this research THEN here are the various advances that will be made possible.
- THEREFORE: YOUR RESEARCH
 - Explain your research and how it establishes you to answer the BUT (above).

Trouble getting started?

- Try identifying your statements as background (AND), problem (BUT), or solution (THEREFORE) statements. How do those sentences align, and what additional statements are needed to connect these ideas together?
- This can help you quickly draft smaller ABTs and pull multiple narratives together within your overarching ABT on your Christmas tree.

Applications: Presentations

- AND material is setup to connect with audience
- BUT presentations allow for a dramatic but bomb.
- THEREFORE Let me tell you about my research

Benefits

It will make your presentations easier to rehearse

Quotes from students:

- "People will actually looking at me and not distracted by their devices"
- "People remember my talk and had the correct narrative days after I gave it"

Applications

- Life in general
- Interview with media
 - Elevator speech
 - What the problem?
 - What's at stake/why is this important?
 - What is the solution? Your research!
- ABT Confidence boost!

Dunning-Kruger Effect



Resources

ABT Time Podcast with Dr. Randy Olson:

https://www.youtube.com/channel/UCXftAJj7klP7zdBqgSgHQjQ

The Narrative Gym Book(s)

