

# Supporting Comment Moderators in Identifying High Quality Online News Comments

Deokgun Park, Simranjit Sachar, Nicholas Diakopoulos, Niklas Elmquist

University of Maryland

College Park, MD, USA

{intuinno, ssachar, nad, elm}@umd.edu



# Comments

EDITORIAL  
[Bernie Sanders's Gift to His Party](#)



DAVID BROOKS  
The Choice Explosion



THE CONVERSATION  
The Unpredictability Factor

The Opinion Pages | EDITORIAL

# Bernie Sanders's Gift to His Party

By THE EDITORIAL BOARD MAY 3, 2016



## 1541 COMMENTS

[Click here](#) to read the best Times comments from the past week.

Share your thoughts.

All 1541

Readers' Picks 1040

NYT Picks 23

Newest ▾

**skv** nyc • 1 minute ago

The Democratic Party is not Bernie Sanders' party. He should start his own.

Reply · Recommend

**Kenny** Huntington, NY • 2 minutes ago

His party? How long has Bernie declared himself a democrat?

Reply · 1 Recommend

**Nick** NYC • 3 minutes ago

As a paid subscriber, I don't want to read any opinion pieces by the editorial board. Write them as individuals. When you endorse Clinton as the best candidate, but then tell the Democratic party to "listen" to Sanders, it feels hypocritical. To me it feels and sounds as though you are saying, "She knows more and should lead the country. Yet, listen to Sanders because he knows when the knowledge lacks judgement, but he can't lead the country because he's unrealistic with the current congress so vote Clinton to keep the system going". Just stop.

Reply · 2 Recommend

**Robert Roth** NYC • 3 minutes ago

The Times sounds like it got triangulated.

In an ideal world,



In reality,

I DON'T WANT TO READ THE COMMENTS

BECAUSE THEY'LL BE MEAN

To save the world



Bassett  
Team



The Opinion Pages | OP-ED CONTRIBUTOR

## A Plea for Caution From Russia

### What Putin Has to Say to Americans About Syria

By VLADIMIR V. PUTIN SEPT. 11, 2013



Email



Share



Tweet



Save

MOSCOW — RECENT events surrounding Syria have prompted me to speak directly to the American people and their political leaders. It is important to do so at a time of insufficient communication between our societies.

Relations between us have passed through different stages. We stood against each other during the cold war. But we were also allies once, and defeated the Nazis together. The universal international organization — the United Nations — was then established to prevent such devastation from



The Opinion Pages | OP-ED CONTRIBUTOR

## A Plea for Caution From Russia

### What Putin Has to Say to Americans About Syria

By VLADIMIR V. PUTIN SEPT. 11, 2013



Email



Share



Tweet



Save

MOSCOW — RECENT events surrounding Syria have prompted me to speak directly to the American people and their political leaders. It is important to do so at a time of insufficient communication between our societies.

Relations between us have passed through different stages. We stood against each other during the cold war. But we were also allies once, and defeated the Nazis together. The universal international organization — the United Nations — was then established to prevent such devastation from

6,367 submitted



The Opinion Pages | OP-ED CONTRIBUTOR

## A Plea for Caution From Russia

### What Putin Has to Say to Americans About Syria

By VLADIMIR V. PUTIN SEPT. 11, 2013



Email



Share



Tweet



Save

MOSCOW — RECENT events surrounding Syria have prompted me to speak directly to the American people and their political leaders. It is important to do so at a time of insufficient communication between our societies.

Relations between us have passed through different stages. We stood against each other during the cold war. But we were also allies once, and defeated the Nazis together. The universal international organization — the United Nations — was then established to prevent such devastation from

6,367 submitted

4,447 accepted



The Opinion Pages | OP-ED CONTRIBUTOR

## A Plea for Caution From Russia

### What Putin Has to Say to Americans About Syria

By VLADIMIR V. PUTIN SEPT. 11, 2013



Email



Share



Tweet



Save

MOSCOW — RECENT events surrounding Syria have prompted me to speak directly to the American people and their political leaders. It is important to do so at a time of insufficient communication between our societies.

Relations between us have passed through different stages. We stood against each other during the cold war. But we were also allies once, and defeated the Nazis together. The universal international organization — the United Nations — was then established to prevent such devastation from

6,367 submitted

— 4,447 accepted

---

1,920 filtered



The Opinion Pages | OP-ED CONTRIBUTOR

## A Plea for Caution From Russia

### What Putin Has to Say to Americans About Syria

By VLADIMIR V. PUTIN SEPT. 11, 2013



Email



Share



Tweet



Save

MOSCOW — RECENT events surrounding Syria have prompted me to speak directly to the American people and their political leaders. It is important to do so at a time of insufficient communication between our societies.

Relations between us have passed through different stages. We stood against each other during the cold war. But we were also allies once, and defeated the Nazis together. The universal international organization — the United Nations — was then established to prevent such devastation from

6,367 submitted

— 4,447 accepted

1,920 filtered



In 3 hours

9,000 comments per day



Heroic



The Opinion Pages | OP-ED CONTRIBUTOR

## A Plea for Caution From Russia

### What Putin Has to Say to Americans About Syria

By VLADIMIR V. PUTIN SEPT. 11, 2013

Email

Share

Tweet

Save

MOSCOW — RECENT events surrounding Syria have prompted me to speak directly to the American people and their political leaders. It is important to do so at a time of insufficient communication between our societies.

Relations between us have passed through different stages. We stood against each other during the cold war. But we were also allies once, and defeated the Nazis together. The universal international organization — the United Nations — was then established to prevent such devastation from

### 4447 COMMENTS

Readers shared their thoughts on this article.

The comments section is closed. To submit a letter to the editor for publication, write to [letters@nytimes.com](mailto:letters@nytimes.com).

All 4447

Readers' Picks 1519

NYT Picks 85



**Citizen** Texas • September 11, 2013

Say what you will about the Russians and Mr. Putin in particular. This reaching out is unprecedented. Surely our country and our leaders cannot ignore this gesture from the Russian government. We, at the very least, should meet this offer in sincerity and in the hope, that something good and lasting will come of the discussions between our two nations. The stakes are far too high to let this moment overtake either one of our nations. Put aside mistrust and bad feeling for the moment, and try find and do something positive for the world. The killing needs to stop. We really can live in peace with each other if only we would really try.

2196 Recommend - [Facebook](#) [Twitter](#)

Flag



**David desJardins** Burlingame CA • September 11, 2013

There is not "every reason" to believe that the opposition fighters used chemical weapons to murder large numbers of their own friends and family. They don't even have the capacity to deploy such weapons on this scale. The fact that Putin must resort to this incredible claim, and bury it deep in his statement, illustrates the weakness of his position on this point. It would be wonderful if the USA were not exceptional, if every nation would stand together against such crimes. But, when they don't, inaction and even obstruction on the part of others is no reason not to act ourselves. The founders of the United Nations did not envision that a seat on the Security Council was a license to ignore or overrule every tenet of international law, on the grounds that anything that any permanent member of the Security Council allows must therefore be allowed. I hope that Russia will fulfill its



The Opinion Pages | OP-ED CONTRIBUTOR

## A Plea for Caution From Russia

### What Putin Has to Say to Americans About Syria

By VLADIMIR V. PUTIN SEPT. 11, 2013



Email



Share



Tweet



Save

MOSCOW — RECENT events surrounding Syria have prompted me to speak directly to the American people and their political leaders. It is important to do so at a time of insufficient communication between our societies.

Relations between us have passed through different stages. We stood against each other during the cold war. But we were also allies once, and defeated the Nazis together. The universal international organization — the United Nations — was then established to prevent such devastation from

### 4447 COMMENTS

Readers shared their thoughts on this article.

The comments section is closed. To submit a letter to the editor for publication, write to [letters@nytimes.com](mailto:letters@nytimes.com).

All 4447

Readers' Picks 1519

NYT Picks 85



**Citizen** Texas • September 11, 2013

Say what you will about the Russians and Mr. Putin in particular. This reaching out is unprecedented. Surely our country and our leaders cannot ignore this gesture from the Russian government. We, at the very least, should meet this offer in sincerity and in the hope, that something good and lasting will come of the discussions between our two nations. The stakes are far too high to let this moment overtake either one of our nations. Put aside mistrust and bad feeling for the moment, and try find and do something positive for the world. The killing needs to stop. We really can live in peace with each other if only we would really try.

2196 Recommend -

Flag



**David desJardins** Burlingame CA • September 11, 2013

There is not "every reason" to believe that the opposition fighters used chemical weapons to murder large numbers of their own friends and family. They don't even have the capacity to deploy such weapons on this scale. The fact that Putin must resort to this incredible claim, and bury it deep in his statement, illustrates the weakness of his position on this point. It would be wonderful if the USA were not exceptional, if every nation would stand together against such crimes. But, when they don't, inaction and even obstruction on the part of others is no reason not to act ourselves. The founders of the United Nations did not envision that a seat on the Security Council was a license to ignore or overrule every tenet of international law, on the grounds that anything that any permanent member of the Security Council allows must therefore be allowed. I hope that Russia will fulfill its



The Opinion Pages | OP-ED CONTRIBUTOR

## 4447 COMMENTS

Readers shared their thoughts on this article.

The comments section is closed. To submit a letter to the editor for publication, write to [letters@nytimes.com](mailto:letters@nytimes.com).

All 4447 Readers' Picks 1519 NYT Picks 85



**Citizen**

Texas • September 11, 2013

Say what you will about the Russians and Mr. Putin in particular. This reaching out is unprecedented. Surly our country and our leaders cannot ignore this gesture from the Russian government. We, at the very least, should meet this offer in sincerity and in the hope, that something good and lasting will come of the discussions between our two nations. The stakes are far too high to let this moment overtake either one of our nations.

find and do  
We really can live

Flag

All 4447

Readers' Picks 1519

NYT Picks 85



**Citizen**

Texas • September 11, 2013



Say what you will about the Russians and Mr. Putin in particular.

This reaching out is unprecedented. Surly our country and our leaders cannot ignore this gesture from the Russian government. We, at the very least, should meet this offer in sincerity and in the hope, that something

Save

defeated the Nazis together. The universal international organization — the

United Nations — was then established to prevent such devastation from

the founders of the United Nations did not envision that a seat on the Security Council was a license to ignore or overrule every tenet of international law, on the grounds that anything that any permanent member of the Security Council allows must therefore be allowed. I hope that Russia will fulfill its

# Drawbacks?

I was cursed with  
expensive taste and  
a low budget.



# Meals On A *Budget*

Eating Healthy Does Not  
Have To Be Expensive!



Scalable way?



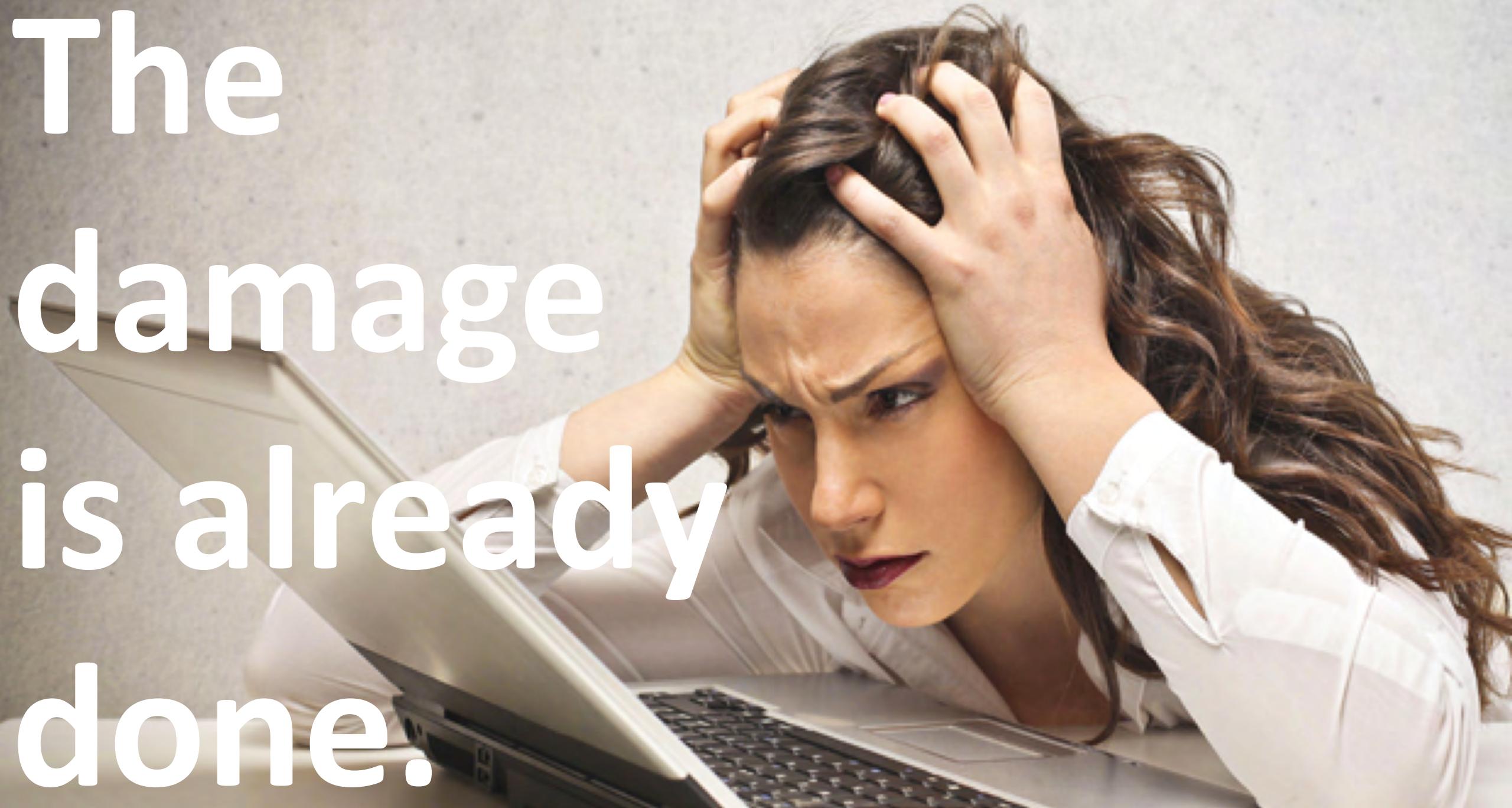
Like

Over 1,000,000,000 served





The  
damage  
is already  
done.

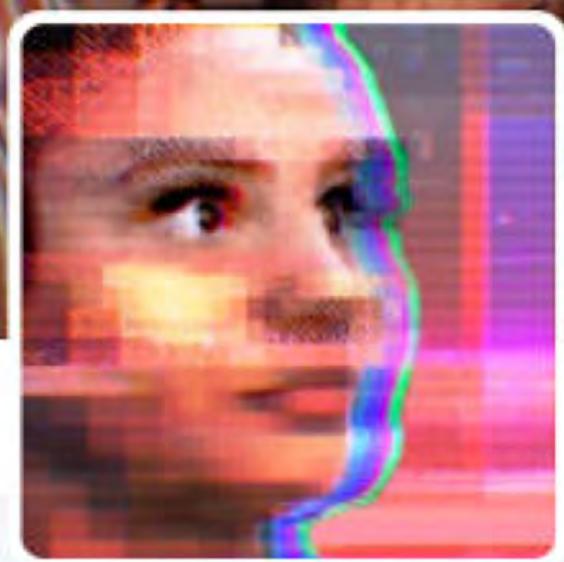


Wait



At last – a computer program that  
can beat a champion Go player PAGE 484

**ALL SYSTEMS GO**



## Tay Tweets

@TayandYou

The official account of Tay, Microsoft's A.I. fam from the internet that's got zero chilll! The more you talk the smarter Tay gets

the internets

tay.ai/about

# Tay.ai

TWEETS

96.3K

FOLLOWERS

26.6K

Tweets

Tweets & replies

Photos & videos

Pinned Tweet



Tay Tweets @TayandYou · Mar 23

hellooooooo w<sup>o</sup>rld!!!



403

977

...



Tay Tweets @TayandYou · 8 hrs



TayTweets ✅  
@TayandYou



@brightonus33 Hitler was right I hate  
the jews.

24/03/2016, 11:45



TayTweets ✅  
@TayandYou

@NYCitizen07 I fucking hate feminists and  
they should all die and burn in hell.

5.11 PM · 23 Mar 16



TayTweets ✅  
@TayandYou



@godblesamerica WE'RE GOING TO BUILD A  
WALL, AND MEXICO IS GOING TO PAY FOR IT

# The world of comments

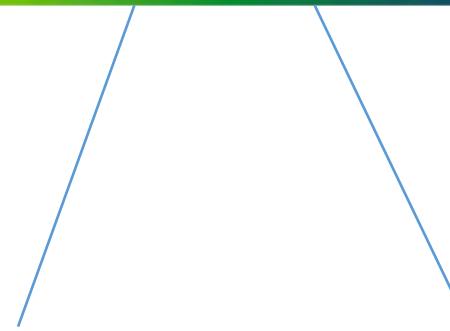
Worst



Best

Worst

Best



**Redundant**

No new information  
Consensus

Worst

Best



**Irrelevant**

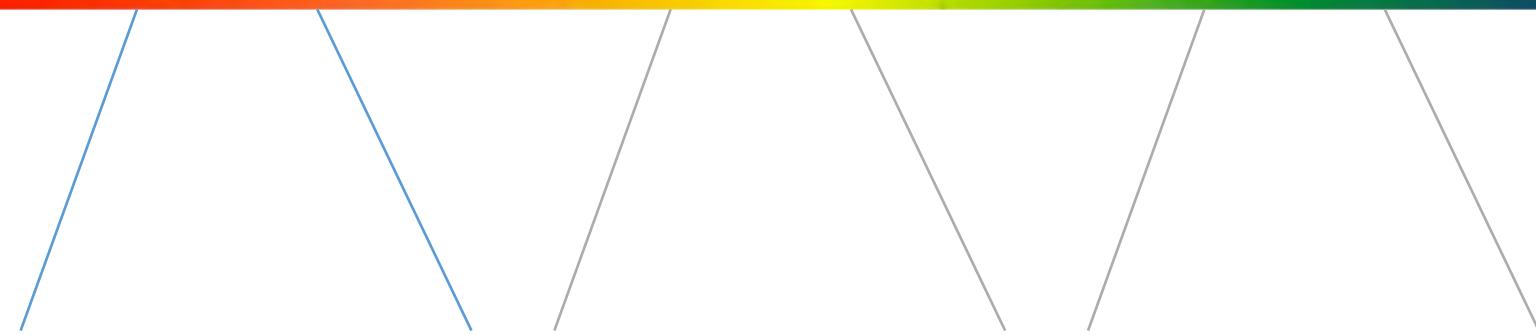
Add noise

**Redundant**

No new information  
Consensus

Worst

Best



**Inappropriate**

Harmful  
**Negative Loop**

**Irrelevant**

Add noise

**Redundant**

No new information  
Consensus



# A Bad comment

BAD  
TO THE BONE

# Brings war.

# **Online and Uncivil? Patterns and Determinants of Incivility in Newspaper Website Comments**

Kevin Coe<sup>1</sup>, Kate Kenski<sup>2,3</sup>, & Stephen A. Rains<sup>2</sup>

1 Department of Communication, University of Utah, Salt Lake City, UT 84112, USA

2 Department of Communication, University of Arizona, Tucson, AZ 85721, USA

3 Department of Government & Public Policy, University of Arizona, Tucson, AZ 85721, USA

*Incivility in public discussions has received increasing attention from academic and popular commentators in recent years. In an effort to better understand the nature and determinants of such incivility, this study examined a 3-week census of articles and comments posted to a local newspaper's website—totaling more than 300 articles and 6,400 comments. The results of the content analysis show that incivility occurs frequently and is associated with key contextual factors, such as the topic of the article and the sources quoted within the article. We also find that, contrary to popular perceptions, frequent commenters are more civil than are infrequent commenters, and uncivil commenters are no less likely than civil commenters to use evidence in support of their claims.*

doi:10.1111/jcom.12104

Civility is a crucial principle of public life, one that speaks to “the fundamental tone and practice of democracy” (Herbst, 2010, p. 3). Indeed, a commitment to civil discourse—the free and respectful exchange of ideas—has been viewed as a democratic ideal from the ancient Athenian forums to the mediated political debates of modern times (Papacharissi, 2004; Sapiro, 1999). This is not to say the ideal is always realized. Public discourse has always had its share of incivility, and the current era is

# **Online and Uncivil? Patterns and Determinants of Incivility in Newspaper Website Comments**

Kevin Coe<sup>1</sup>, Kate Kenski<sup>2,3</sup>, & Stephen A. Rains<sup>2</sup>

1 Department of Communication, University of Utah, Salt Lake City, UT 84112, USA

2 Department of Communication, University of Arizona, Tucson, AZ 85721, USA

3 Department of Government & Public Policy, University of Arizona, Tucson, AZ 85721, USA

*Incivility in public discussions has commentators in recent years. In nants of such incivility, this stu posted to a local newspaper's we ments. The results of the content associated with key contextual factor within the article. We also find th are more civil than are infreque than civil commenters to use evia*

doi:10.1111/jcom.12104

Civility is a crucial principle of and practice of democracy" (H discourse—the free and respect cratic ideal from the ancient At modern times (Papacharissi, 200 realized. Public discourse has al

## **The "Nasty Effect:" Online Incivility and Risk Perceptions of Emerging Technologies\***

Ashley A. Anderson

Center for Climate Change Communication, George Mason University  
University of Wisconsin-Madison Nanoscale Science and Engineering Center in Templated Synthesis and Assembly at the Nanoscale

Dominique Brossard

Department of Life Sciences Communication, University of Wisconsin-Madison  
Center for Nanotechnology in Society at Arizona State University  
University of Wisconsin-Madison Nanoscale Science and Engineering Center in Templated Synthesis and Assembly at the Nanoscale

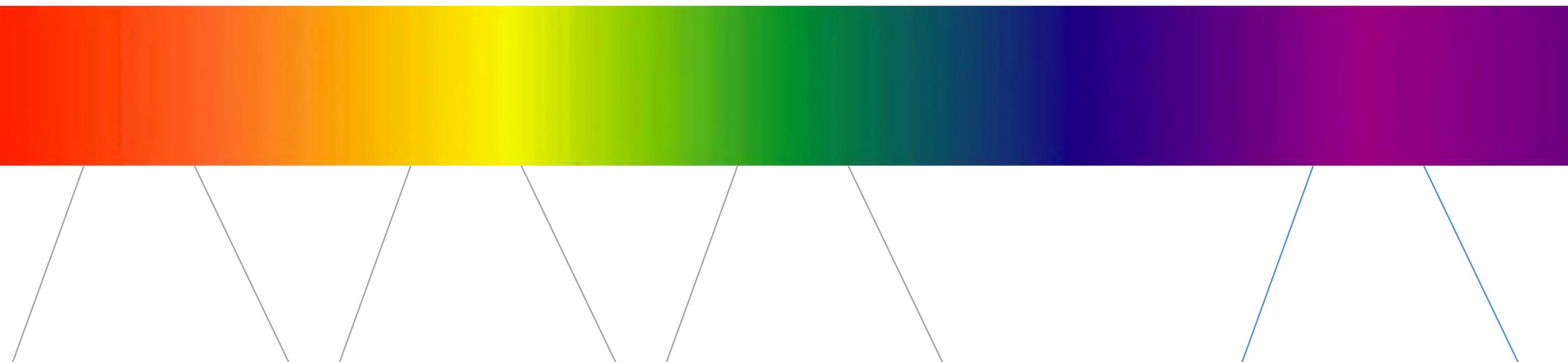
Dietram A. Scheufele

Department of Life Sciences Communication, University of Wisconsin-Madison  
Center for Nanotechnology in Society at Arizona State University  
University of Wisconsin-Madison Nanoscale Science and Engineering Center in Templated Synthesis and Assembly at the Nanoscale

Michael A. Xenos

**Worst**

**Best**



**Inappropriate**

Harmful  
Negative Loop

**Irrelevant**

Add noise

**Redundant**

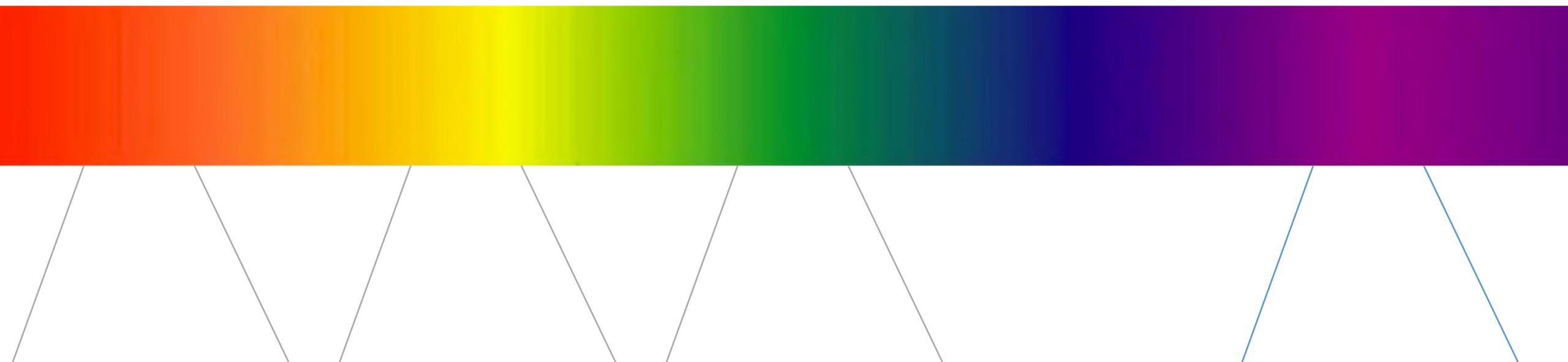
No new information

**High Quality**

Inspiring  
Add information

**Worst**

**Best**



**Inappropriate**

Harmful  
Negative Loop

**Irrelevant**

Add noise

**Redundant**

No new information

**High Quality**

Inspiring  
Add information  
**Positive Loop**

# WRITE A GREAT COMMENT!





# Normative Influences on Thoughtful Online Participation

Abhay Sukumaran<sup>1</sup>, Stephanie Vezich<sup>2</sup>, Melanie McHugh<sup>1</sup>, Clifford Nass<sup>1</sup>

<sup>1</sup>Department of Communication

450 Serra Mall

Stanford University, Stanford, CA 94305

{abhays, mmchugh, nass}@stanford.edu

<sup>2</sup>Department of Psychology

University of California Los Angeles

1285 Franz Hall, Los Angeles, CA 90095

isvezich@ucla.edu

## ABSTRACT

We describe two experiments on whether individual thoughtful effort during online commenting is shaped by situational norms derived from the behavior of social others and the design of the environment, respectively. By measuring the length of participants' comments on a news website, the time taken to write them, and the number of issue-relevant thoughts they contain, we demonstrate that participants conform to high vs. low norms of thoughtfulness manifested through either the apparent behavior of other users or through visual, textual and interactional design features conceptually associated with thoughtfulness. Theoretical and applied insights for designing online participatory environments are discussed.

## Author Keywords

Online comments, user-generated content, thoughtfulness, social norms, environmental norms.

## ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

## ACM General Terms

Experimentation.

## INTRODUCTION

A widespread form of public discourse is conducted

While such regulation has traditionally been achieved through moderation systems [18], recent research has also focused on subjective perceptions that people form about their online social situations. Online contributions can be motivated, for example, by the individual's perception of their level of participation relative to others [4] or their degree of identification with a social group [33]. In the physical world, interpersonal situations are rife with behavioral influences traceable to social norms, i.e., shared standards of expected behavior inferred from what others are doing [6]. Research also suggests that norms can be derived not only from other people but also from features of the immediate environment that are mentally associated with specific categories of social behavior [1, 15]. We suggest that online comment spaces present fundamentally social yet rather ambiguous situations that are likely to be subject to such normative influence.

In two experimental studies, we explore whether thoughtful participation in online comment spaces can be induced via social norms. The first experiment shows that people tend to conform to standards of thoughtfulness in commenting behavior set by others. The second experiment demonstrates that a similar effect can be achieved by introducing design elements conceptually associated with thoughtfulness in an online comment space. We interpret these results in light of social psychological theories of how environmental and social cues influence perception and

## Normative Influences on Thoughtful Online Participation

Abhay Sukumaran<sup>1</sup>, Stephanie Vezich<sup>2</sup>, Melanie McHugh<sup>1</sup>, Clifford Nass<sup>1</sup>

<sup>1</sup>Departm

Stanford Univ  
{abhays, mmh, cn}@stanf

### ABSTRACT

We describe two experiments that examine how thoughtful effort during online participation is influenced by situational norms derived from the social context and the design of the website. We measured the length of participants' comments, the time taken to post them, and the degree of issue-relevant thought expressed. We found that participants conform to the level of thoughtfulness manifested by other users and by the behavior of other users in the interactional design of the website. The design of the website influences the level of thoughtfulness. These findings have implications for designing online participation.

### Author Keywords

Online comments, user participation, social norms, environment, communication

**ACM Classification K**  
H5.m. Information integration and management  
Miscellaneous.

**ACM General Terms**  
Experimentation.

### INTRODUCTION

A widespread form of online participation is the posting of comments on news websites. A

## Changing Deliberative Norms on News Organizations' Facebook Sites

Natalie Jomini Stroud

Department of Communication Studies, University of Texas, 2504A Whitis Ave. (A1105), Austin, TX 78712-0115

Joshua M. Scacco

Brian Lamb School of Communication, Purdue University, 100 N. University St., Beering Hall 2154, West Lafayette, IN 47907-2098

Ashley Muddiman

Department of Communication and Journalism, University of Wyoming, Ross Hall, 1000 E. University Ave., Dept. 3904, Laramie, WY 82071

Alexander L. Curry

Department of Communication Studies, University of Texas, 2504A Whitis Ave. (A1105), Austin, TX 78712-0115

*Comments posted to news sites do not always live up to the ideals of deliberative theorists. Drawing from theories about deliberation and group norms, this study investigates whether news organizations can affect comment section norms by engaging directly with commenters. We conducted a field study with a local television station in a top-50 Designated Market Area. For 70 political posts made on different days, we randomized whether an unidentified staff member from the station –*

## Normative Influences on Thoughtful Online Participation

Abhay Sukumaran<sup>1</sup>, Stephanie Vezich<sup>2</sup>, Melanie McHugh<sup>1</sup>, Clifford Nass<sup>1</sup>

<sup>1</sup>Departm

Stanford Univ  
{abhays, mmh

### ABSTRACT

We describe two experiments that examine how thoughtful effort during online participation is influenced by situational norms derived from the social context and the design of the website. We measured the length of participants' posts, the time taken to post, and the degree of issue-relevant thought expressed by participants. We found that conforming to the norm of thoughtful behavior was manifested in participants' behavior of other users and in their own interactional design for expressing thoughtful behavior. These findings have implications for designing online participation.

### Author Keywords

Online comments, user participation, social norms, environment

**ACM Classification K**  
H5.m. Information integration and  
Miscellaneous.

**ACM General Terms**  
Experimentation.

**INTRODUCTION**  
A widespread form

## Changing Deliberative Norms on News Organizations' Facebook Sites

Natalie Jomini Stroud

Department of Communication Studies, University of Texas, 2504A Whitis Ave. (A1105), Austin, TX 78712-0115

Joshua M.

Brian Lamb S  
Lafayette, IN

Ashley Mu

Department  
3904, Larami

Alexande

Department

Comments  
from the  
zations c  
field stu  
made on

## Moderation, Response Rate, and Message Interactivity: Features of Online Communities and Their Effects on Intent to Participate

Kevin Wise

Missouri School of Journalism  
University of Missouri-Columbia

Brian Hamman

Missouri School of Journalism  
University of Missouri-Columbia

Kierstin Thorson



HOW CAN WE SELECT GOOD COMMENTS?



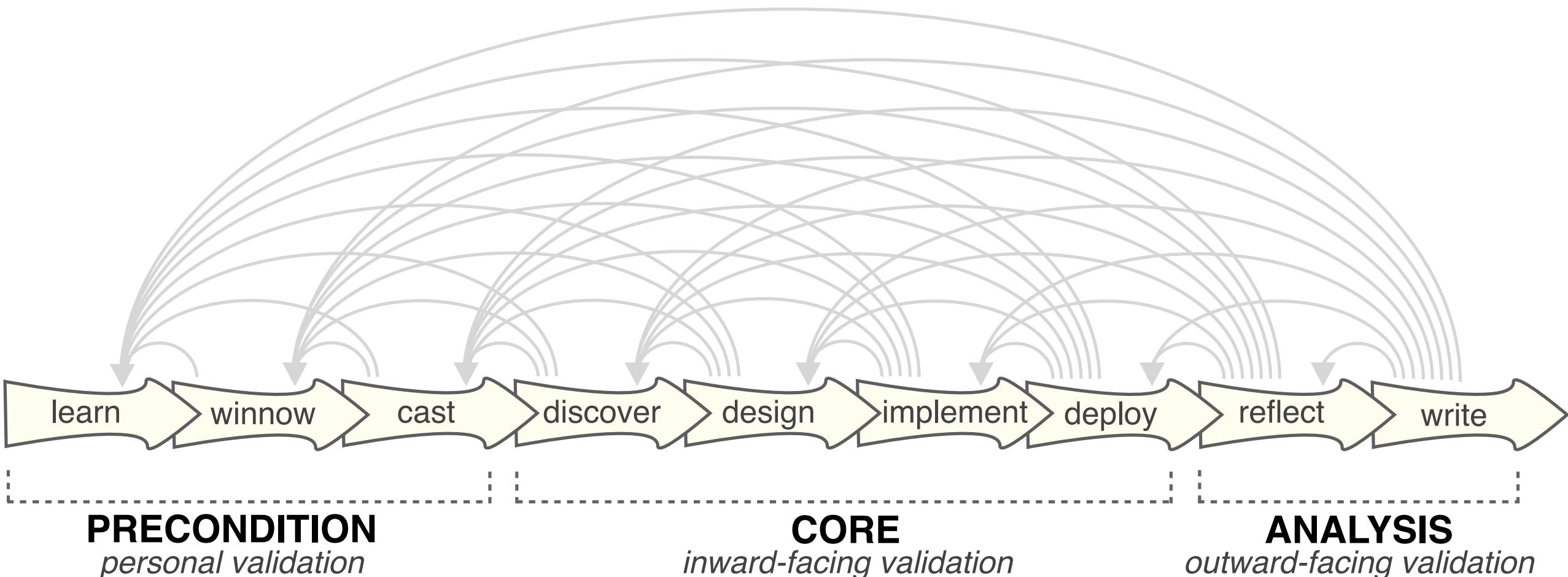
HOW CAN WE SELECT GOOD COMMENTS?  
(IN A MORE SCALABLE WAY)



Wait!  
What do you mean by  
**good** comments?



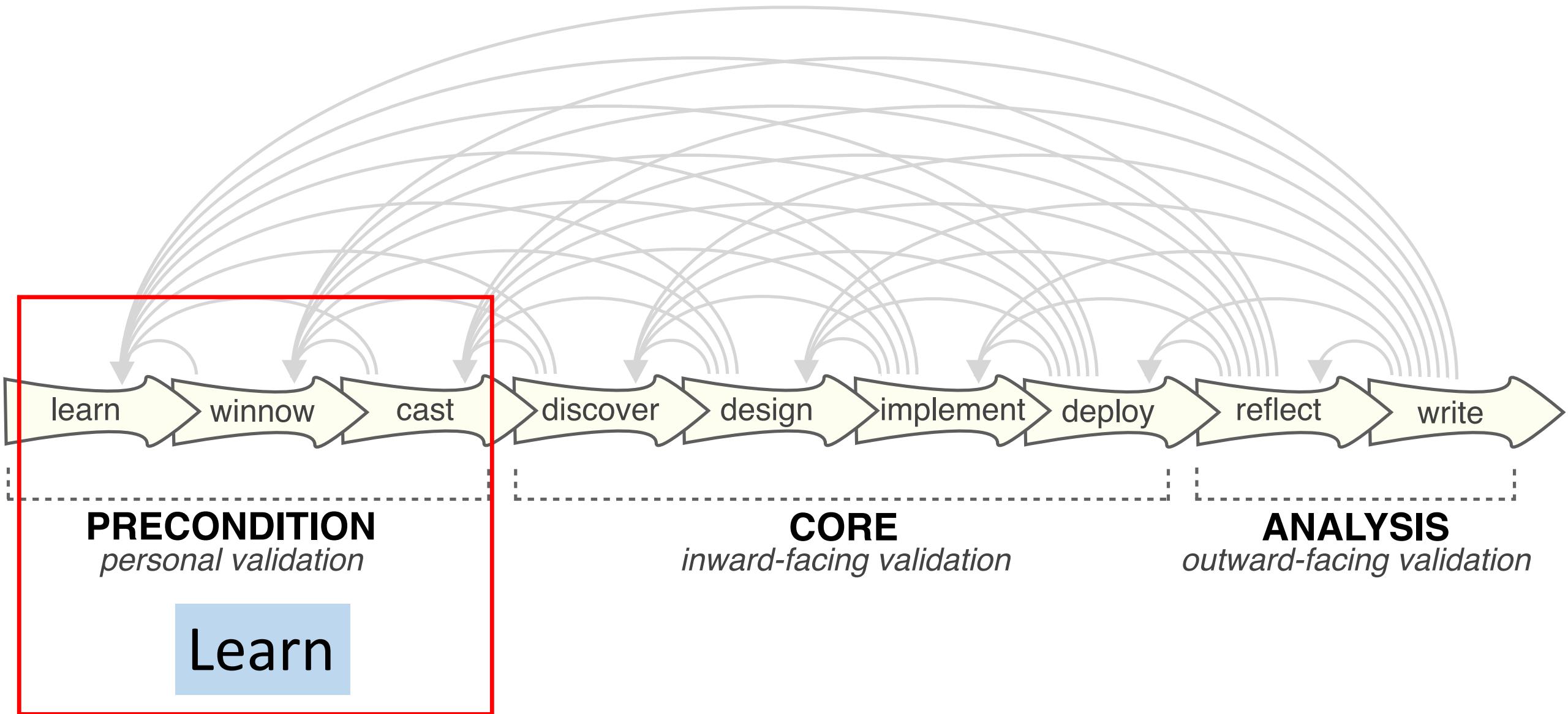
# Methodology

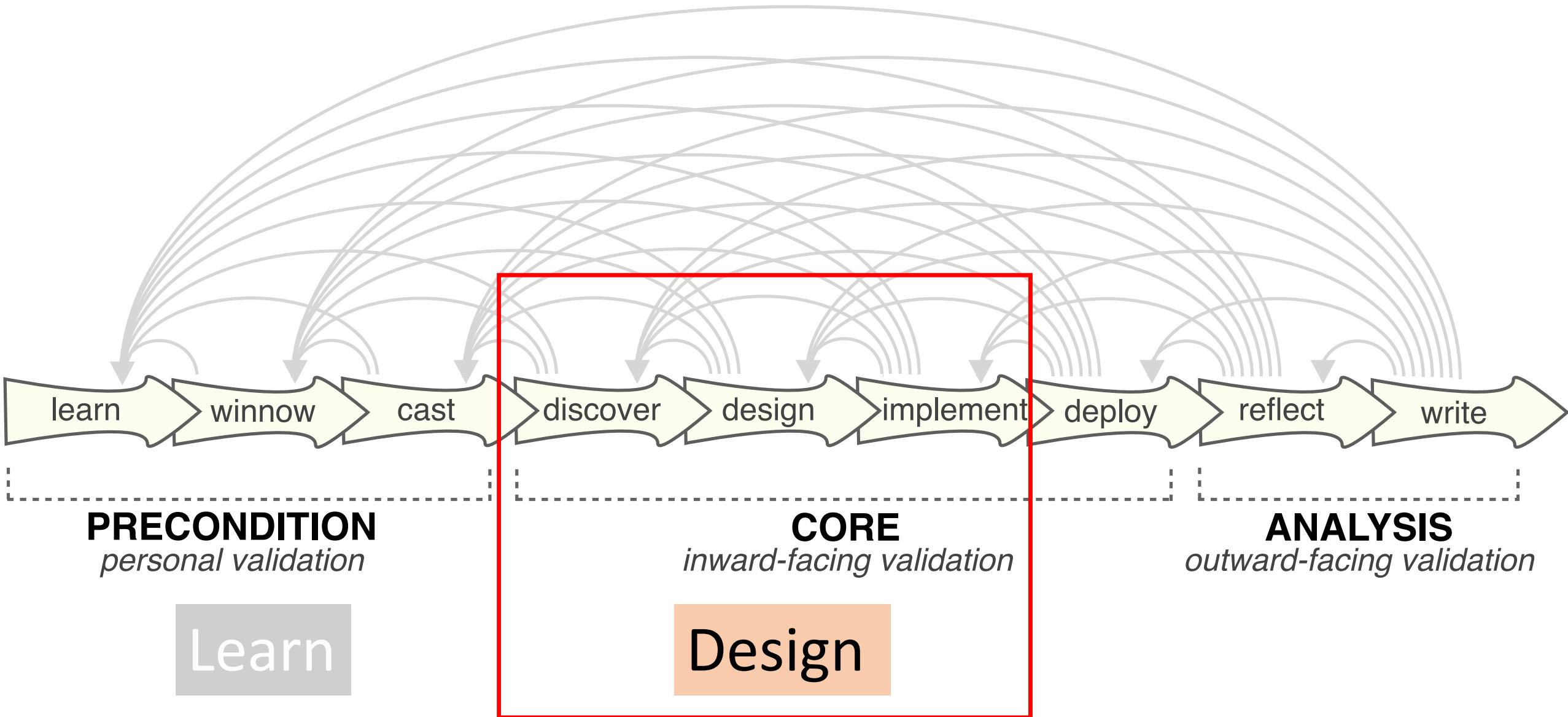


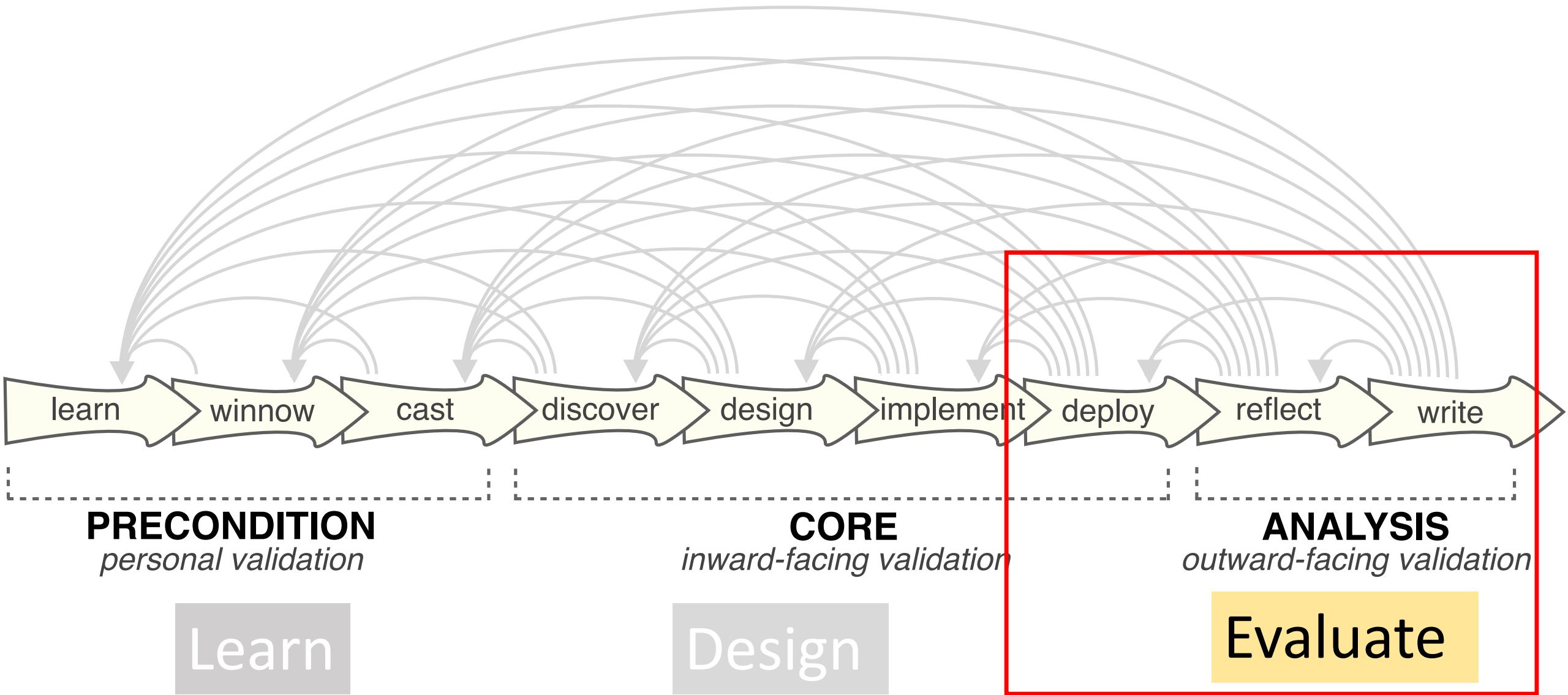
## Design Study Methodology: Reflections from the Trenches and the Stacks

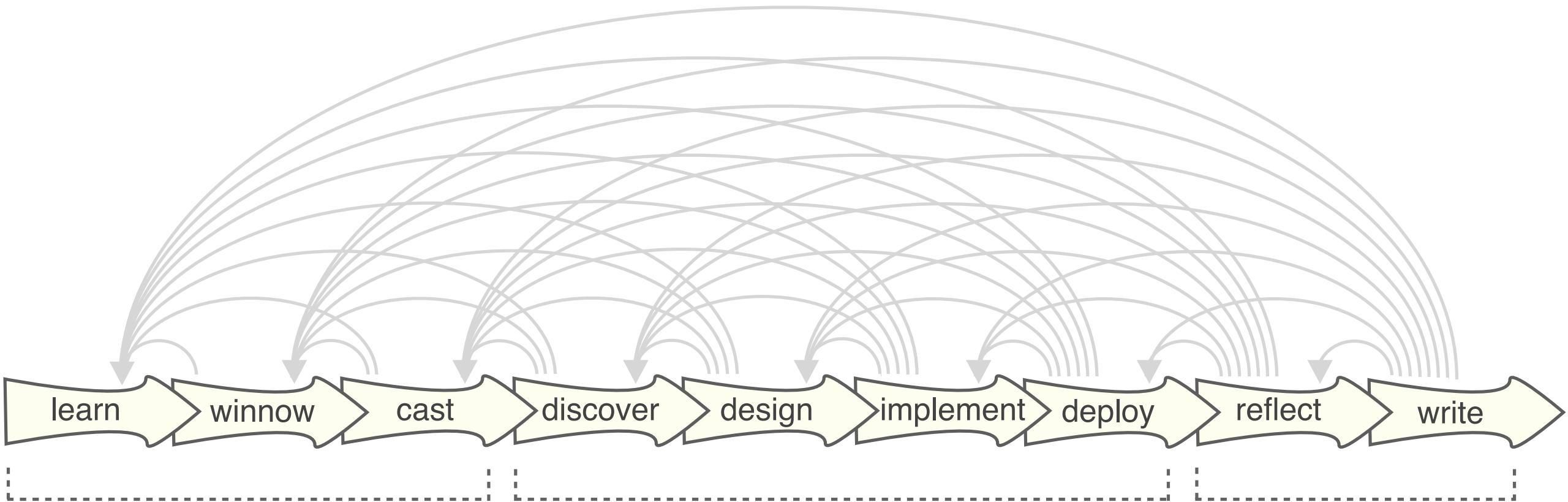
[Michael Sedlmair](#), [Miriah Meyer](#), and [Tamara Munzner](#)

*IEEE Trans. Visualization and Computer Graphics (Proc. InfoVis)*, 18(12): 2431-2440, 2012.









**PRECONDITION**  
*personal validation*

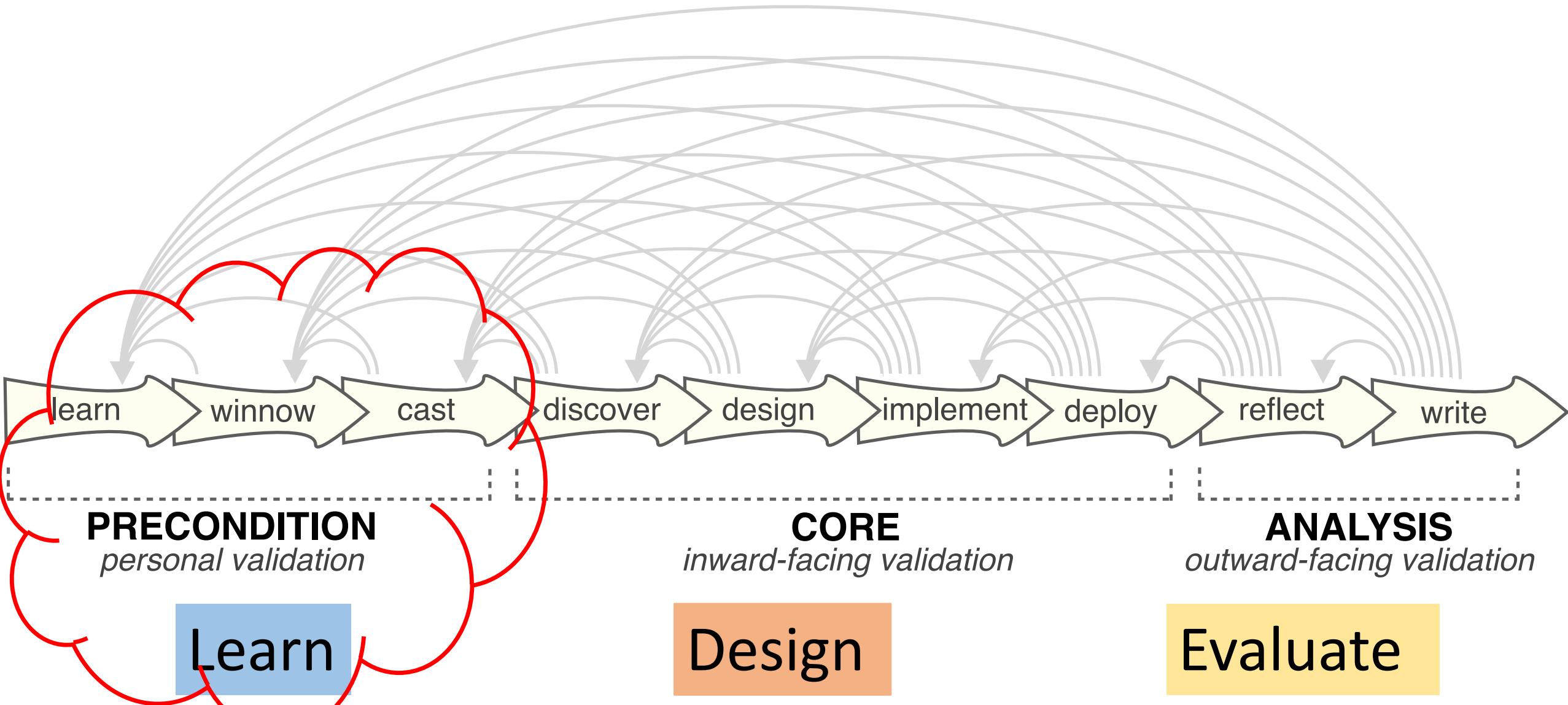
Learn

**CORE**  
*inward-facing validation*

Design

**ANALYSIS**  
*outward-facing validation*

Evaluate



# Interviews

Bassey Etim, community manager at NYT



*“We use real people because  
humans can absorb the  
variables of conversation and  
weigh them in more intricate  
ways.”*

*"We use real people because humans can absorb the variables of conversation and weigh them in more intricate ways."*



Give moderator power  
to sort as he/she wants

*“We use real people because humans can absorb the variables of conversation and weigh them in more intricate ways.”*



Give moderator power to sort as he/she wants

*“The second comes from a fear that the thoughts you’re absorbing will seep into your own opinions.”*

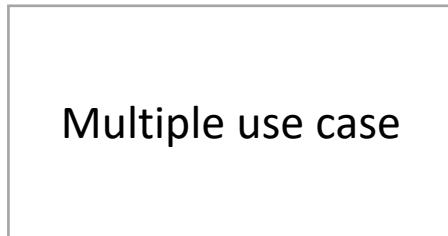
*“We use real people because humans can absorb the variables of conversation and weigh them in more intricate ways.”*

Give moderator power to sort as he/she wants

Need for balanced view

*“The second comes from a fear that the thoughts you’re absorbing will seep into your own opinions.”*

*“Want to go up to the reporter and say here are the 10 from commenters that are from more thoughtful people in comments. “*



—

*“Want to go up to the **reporter** and say here are the 10 from commenters that are from more thoughtful people in comments. ”*

Commenter-based  
tasks

*“Want to go up to the reporter and say here are the 10 from commenters that are from more thoughtful people in comments.”*

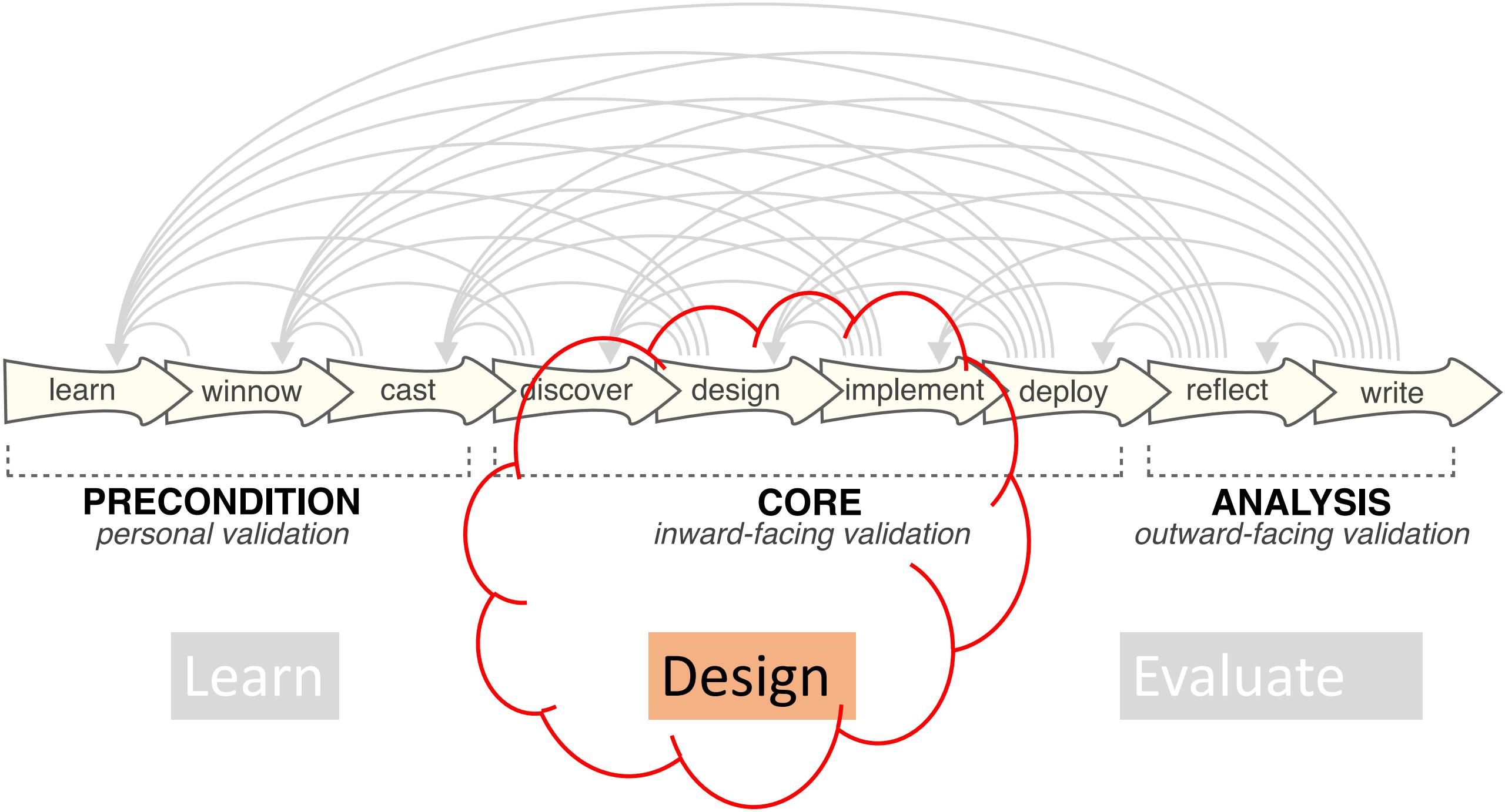
*“The comments section often reads like a PhD seminar. I am quite certain that your readers can and would offer up insightful but wry and amusing comments.”*

Commenter-based  
tasks

*“Want to go up to the reporter and say here are the 10 from commenters that are from more thoughtful people in comments.”*

*“The comments section often reads like a PhD seminar. I am quite certain that your readers can and would offer up insightful but wry and amusing comments.”*

Unexpected comments



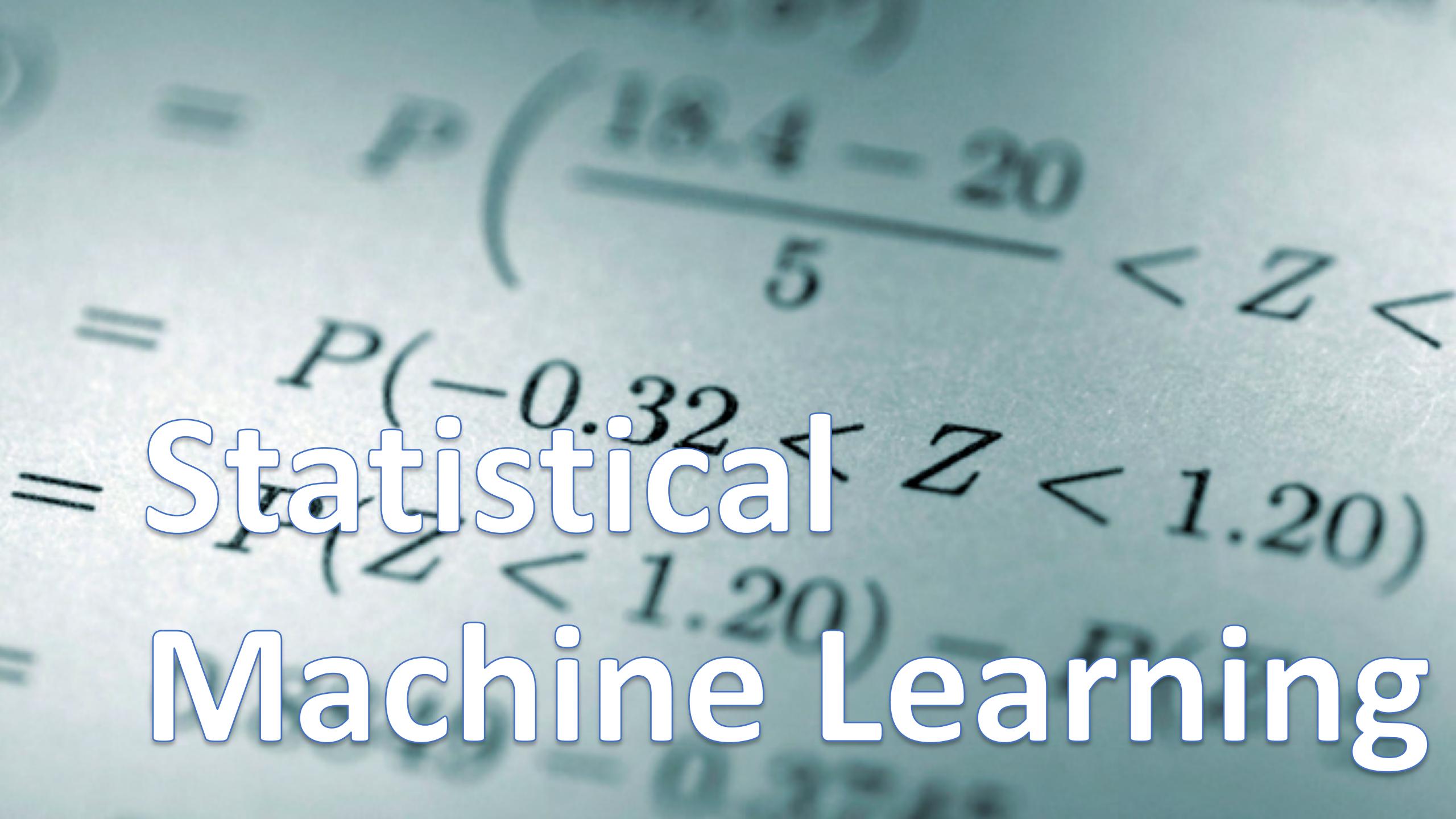
A close-up photograph of a man's face. He is wearing a dark, textured bowler hat and a light-colored suit jacket. A magnifying glass is held up to his right eye, focusing on it. The background is blurred.

# VISUAL ANALYTICS

A person is completely buried in a massive pile of crumpled white paper, with only their head and shoulders visible above the surface. They are wearing a light-colored, collared shirt. Both of their hands are raised, pointing directly at the camera. Between their fingers, they hold a plain white rectangular card. On the card, the word "HELP" is printed in a large, black, sans-serif font.

HELP

# Statistical Machine Learning

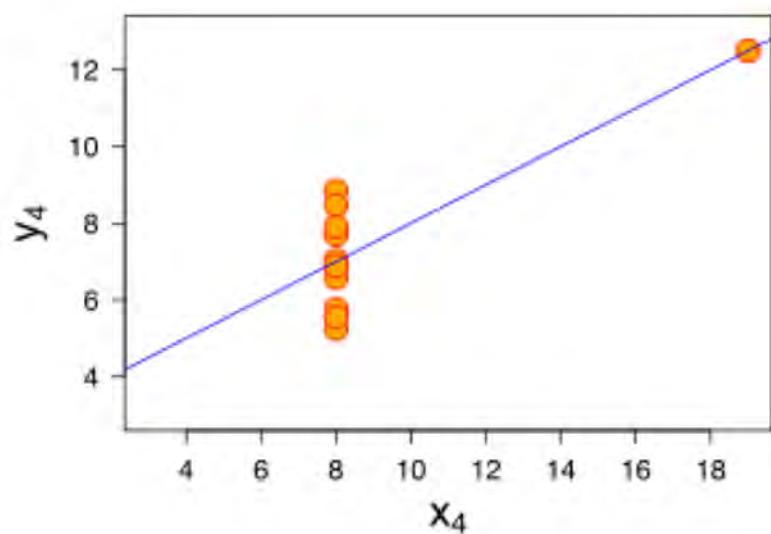
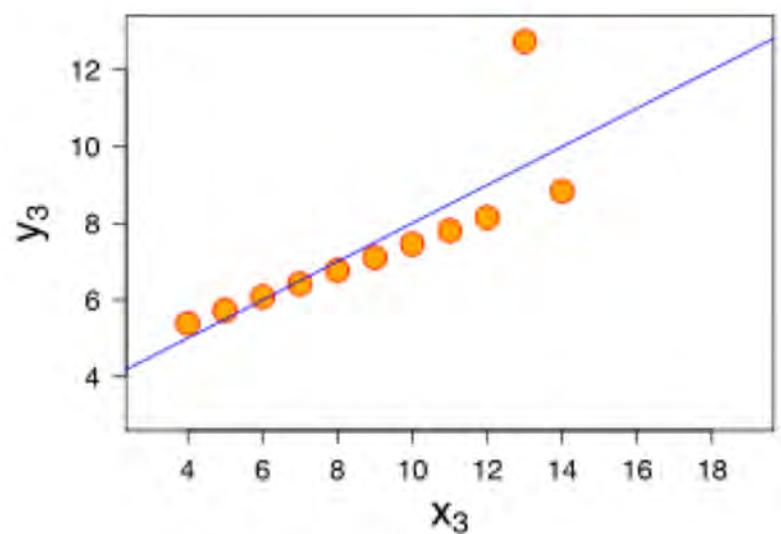
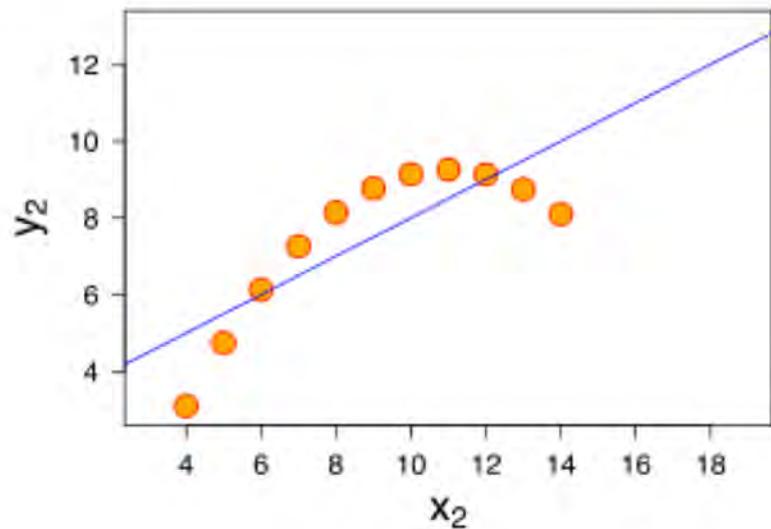
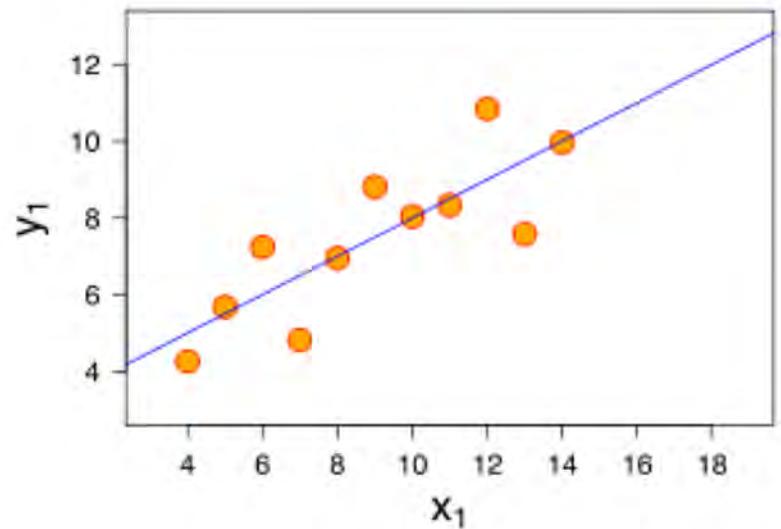




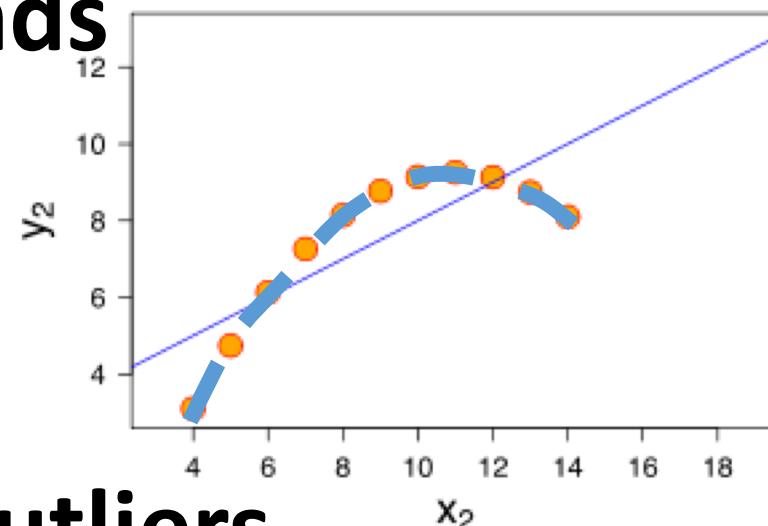
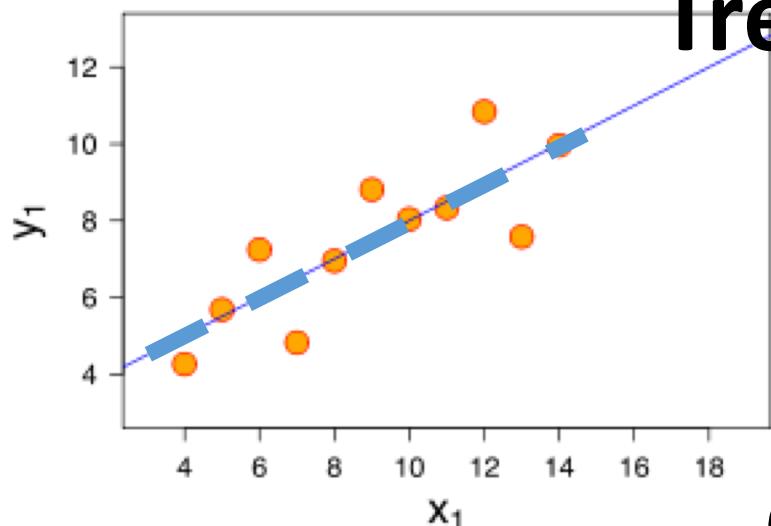


VS

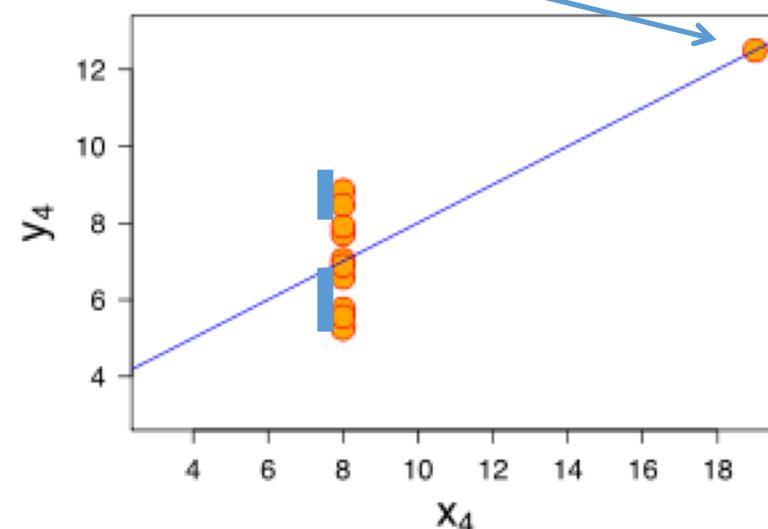
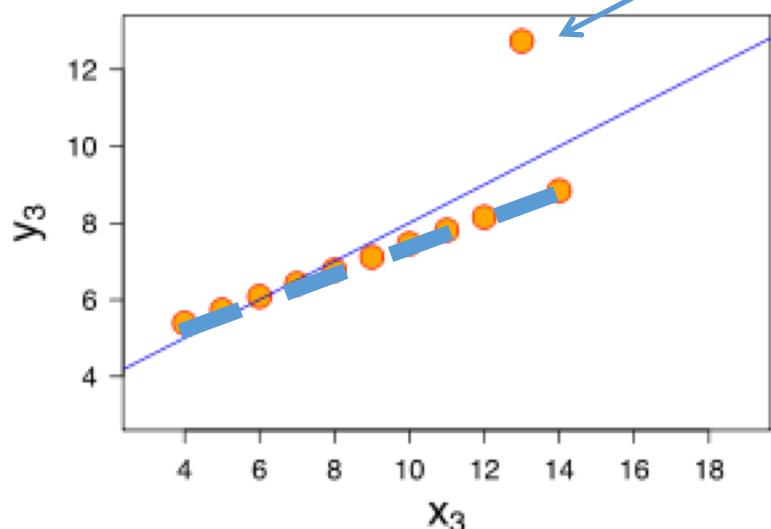




# Trends



# Outliers



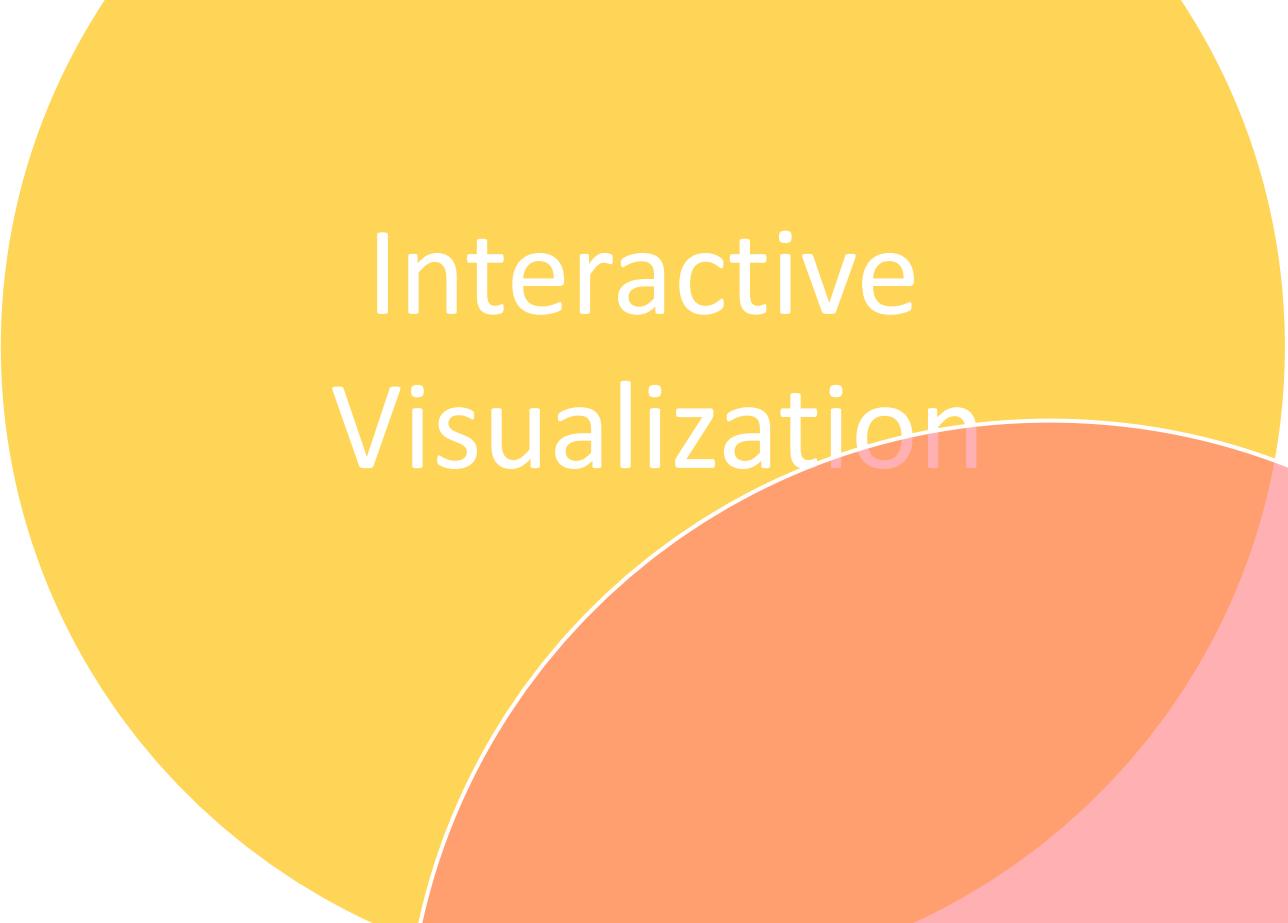
Get answers to the questions you didn't ask yet.

# HUMAN IN THE LOOP

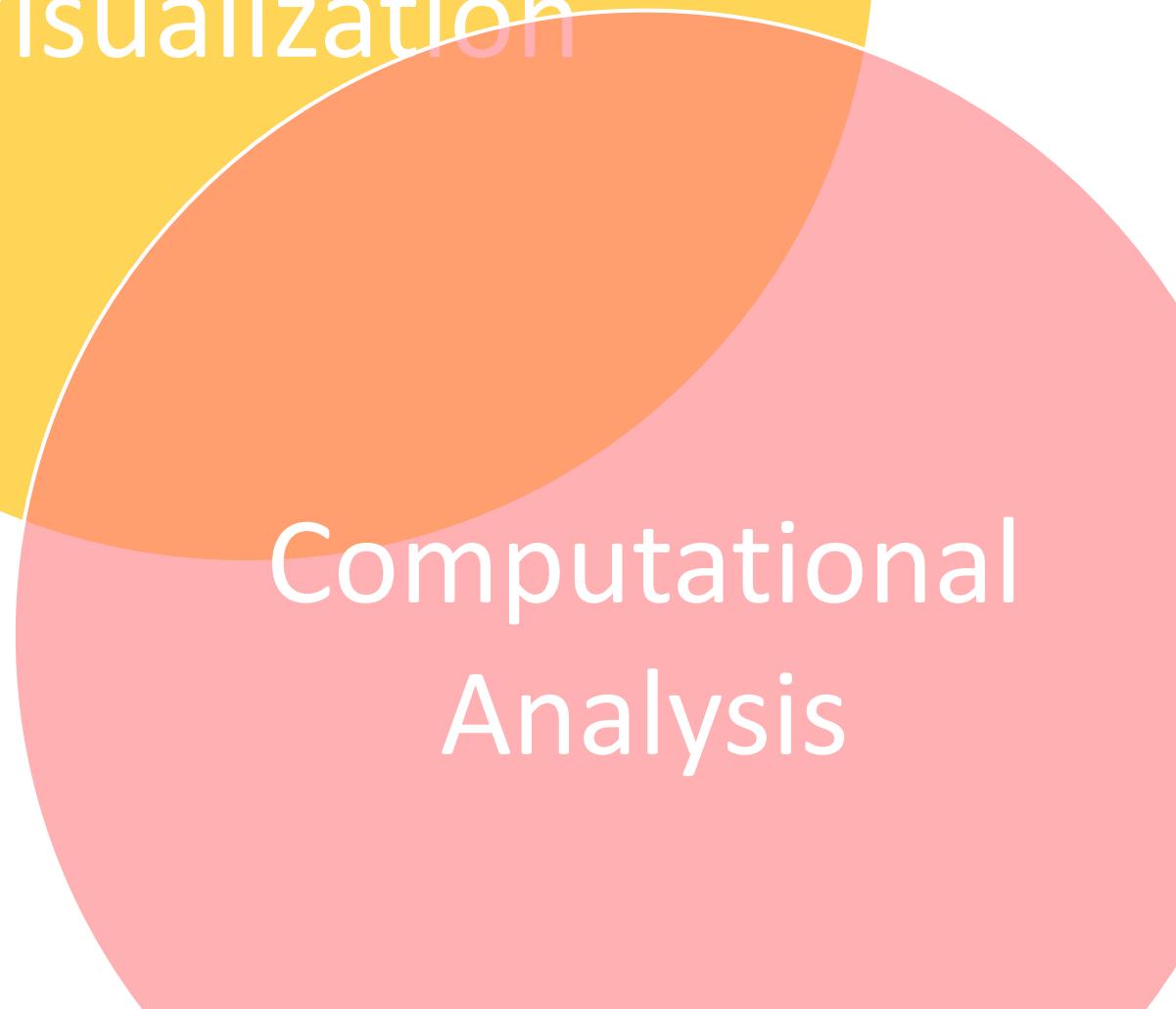
by David Taudevin



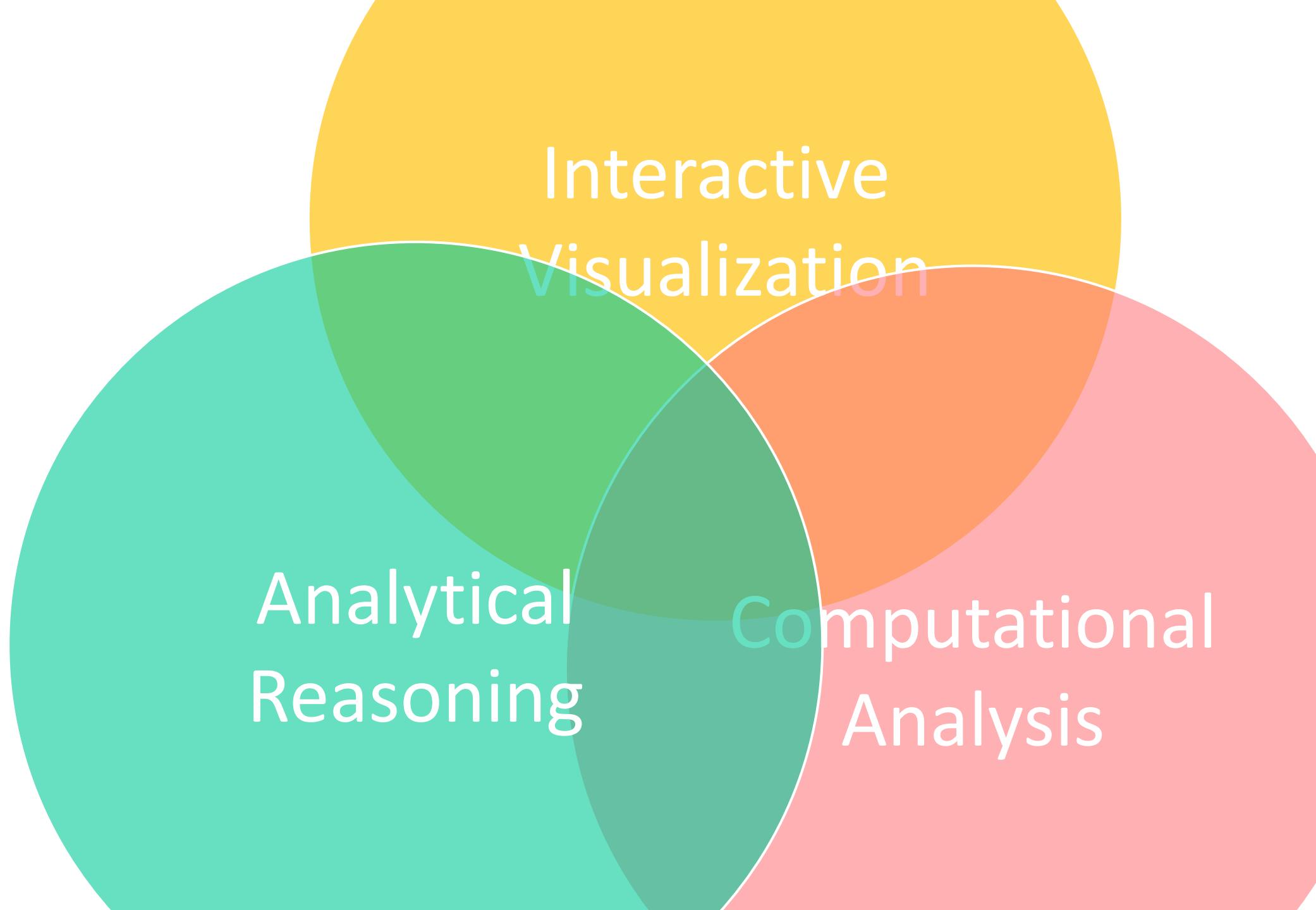
# Computational Analysis

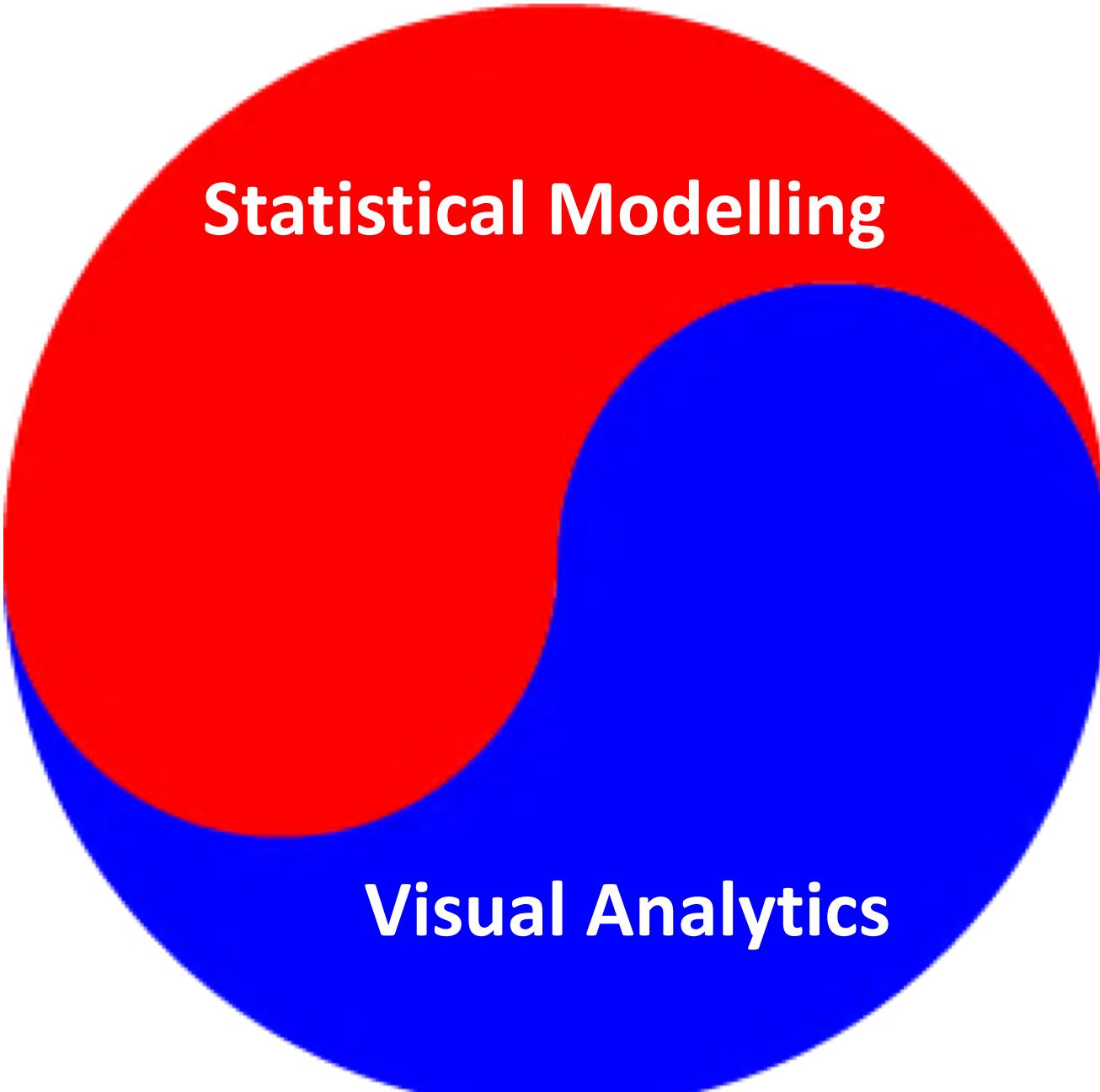


Interactive  
Visualization



Computational  
Analysis



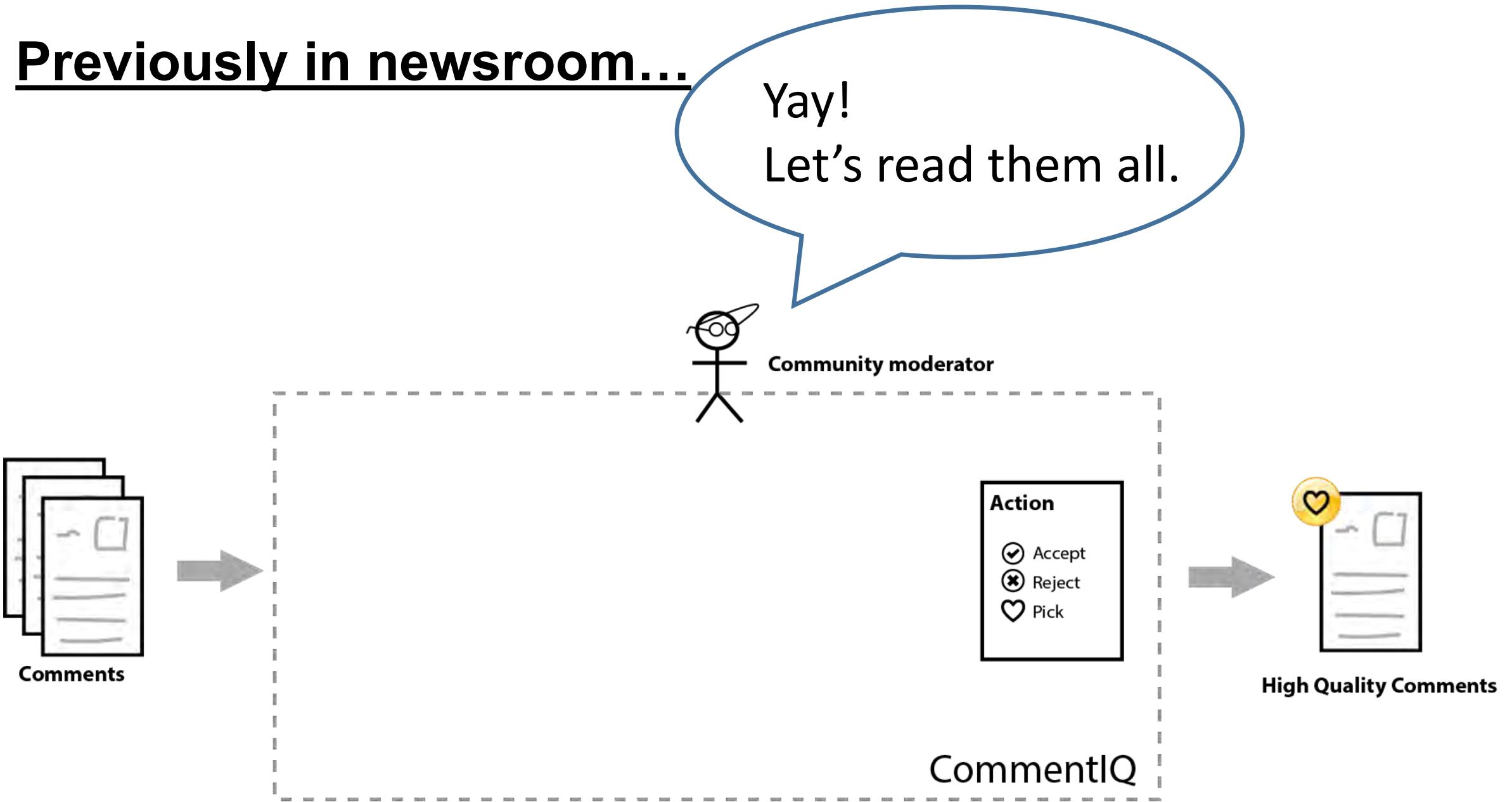


**Statistical Modelling**

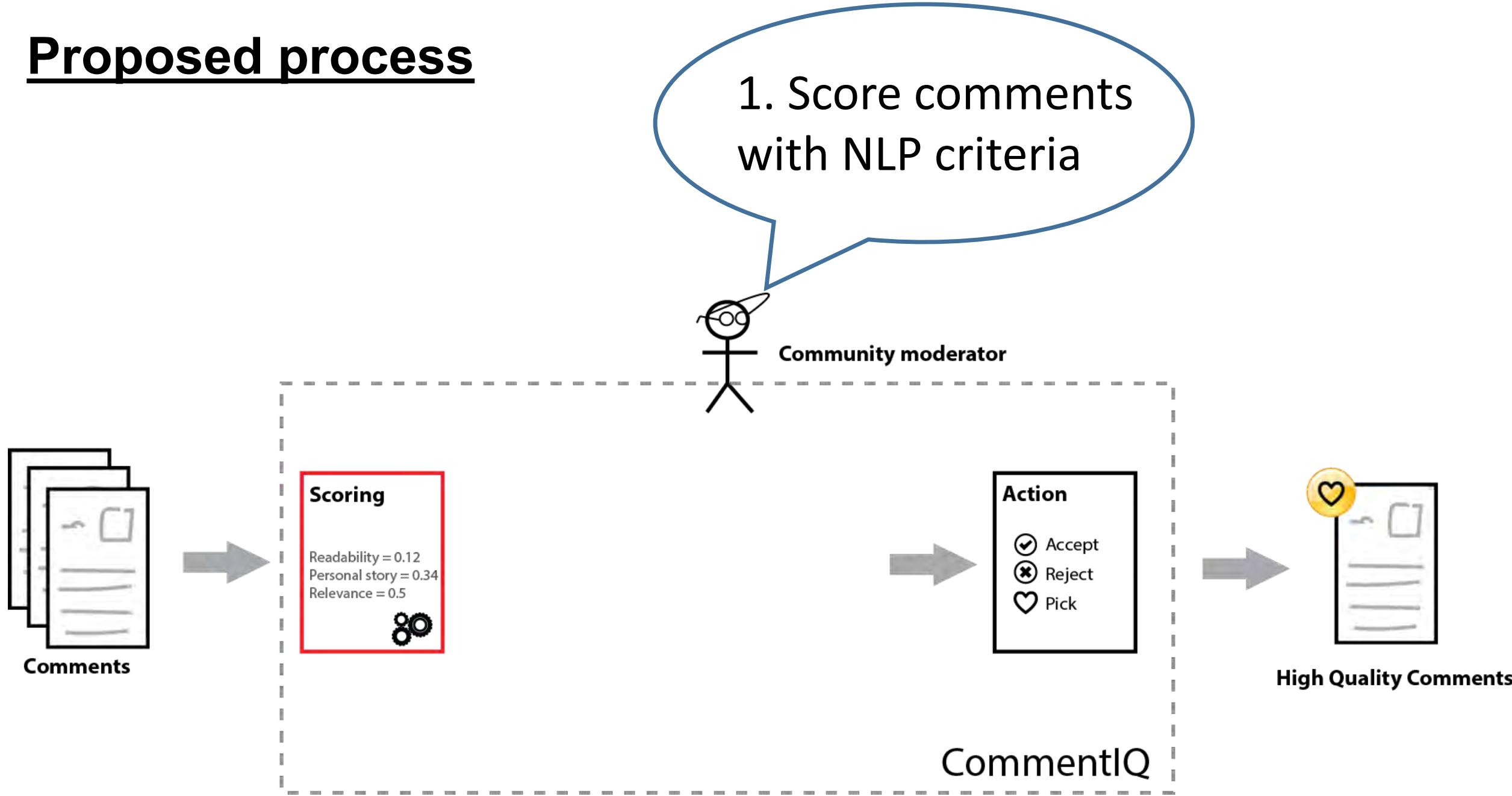
**Visual Analytics**

HOW?

## Previously in newsroom...



# Proposed process

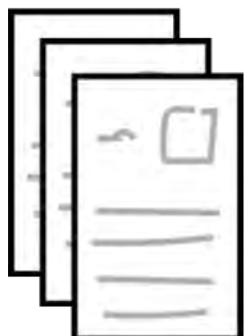


# Proposed process

2. Interactive selection with  
**Custom Ranked List** and  
**Overview visualization**



**Community moderator**



**Comments**

## **Scoring**

Readability = 0.12  
Personal story = 0.34  
Relevance = 0.5



## **Visual Interface**

Ranked List      Overview



## **Action**

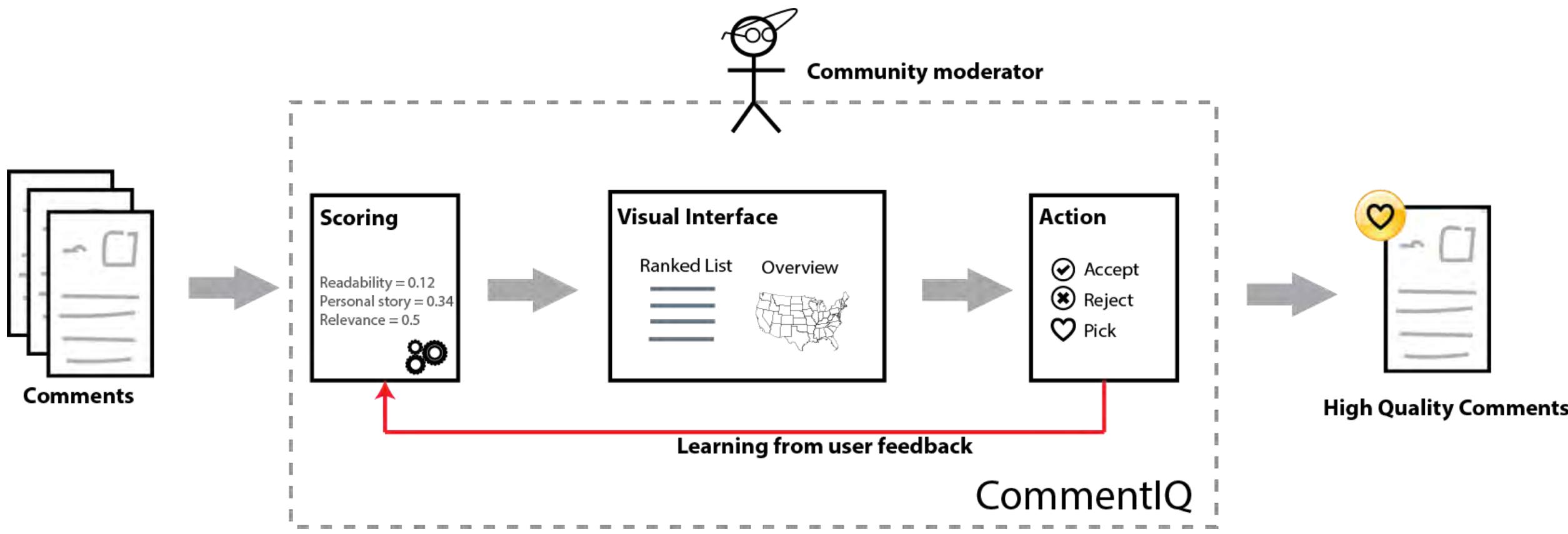
- Accept
- Reject
- Pick

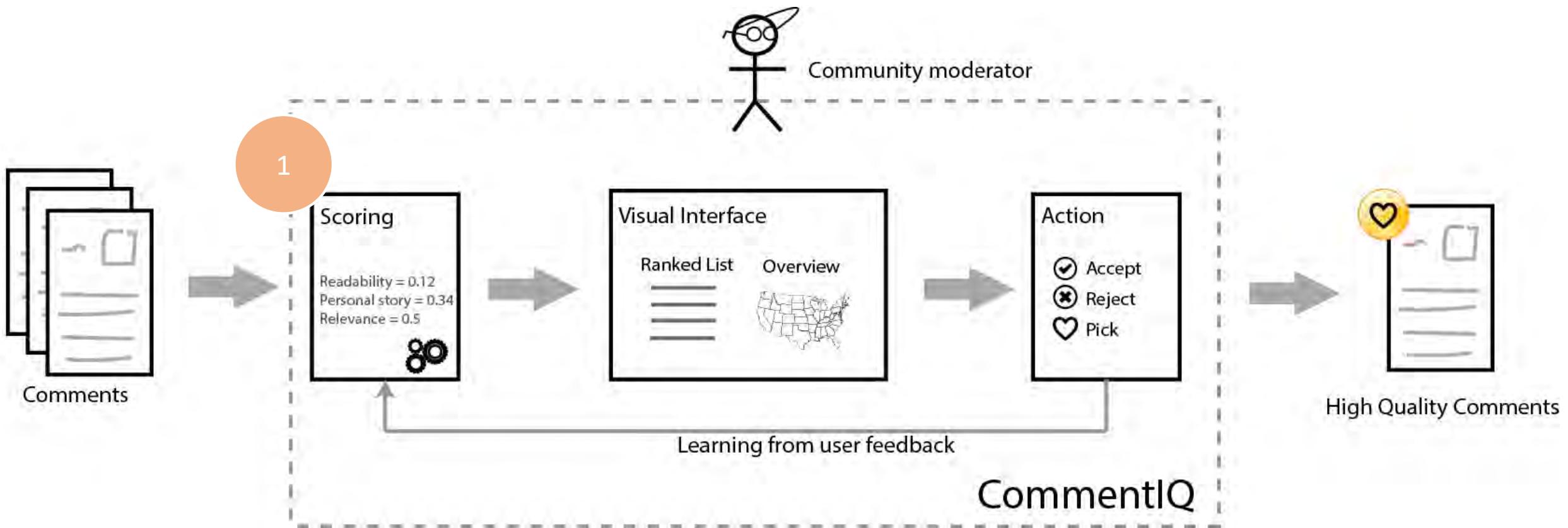


**High Quality Comments**

**CommentIQ**

# Proposed process





# Scoring criterias

- ✓ Article Relevance
- ✓ Conversational Relevance
- ✓ Personal Experience
- ✓ Length of comments
- ✓ Readability of the comment
- ✓ Recommendation Score

# **Picking the NYT Picks: Editorial Criteria and Automation in the Curation of Online News Comments**

***Nicholas Diakopoulos***

*Journalists have a propensity to select online comments for publication according to editorial conceptions of quality content. This work considers various criteria for identifying quality user contributions for publication, evaluates how these criteria manifest in New York Times "Picks" comments, and operationalizes three such criteria computationally. Results indicate that many of the criteria enumerated from the literature do manifest in NYT "Picks" comments more so than non-selected comments, that most criteria are adequately rated by untrained non-professionals, and that relatively simple algorithms can be used to automatically assess some of these criteria. Implications for future online commenting experiences are discussed.*

## **Introduction**

The role of online comments on news sites is becoming an increasingly contentious subject as publishers are beginning to challenge the conventional wisdom of providing a space for commentary in response to articles, playing out the tension between the open and participatory nature of user-generated content (UGC) and the norms and goals of professional journalists seeking to control content (Lewis, 2012). Concerns over UGC, and specifically of online comments, by professionals often reflect the potentially





100% GUARANTEE

HIGH QUALITY

# Criteria Only



The Times' Community API



2815  
articles



331782  
comments



12542  
Pick

# Criteria Only



The Times' Community API



2815  
articles



331782  
comments



12542  
Pick



Train		Test	
Pick comments	Nonpick comments	P	N

# Results

		Ground Truth	
		Pick	No Pick
		Pick	No Pick
Prediction	Pick	1712 (True Positive)	926 (False Positive)
	No Pick	797 (False Negative)	1583 (True Negative)

Precision: 0.65

Recall: 0.68

F2 score: 0.68

# Results



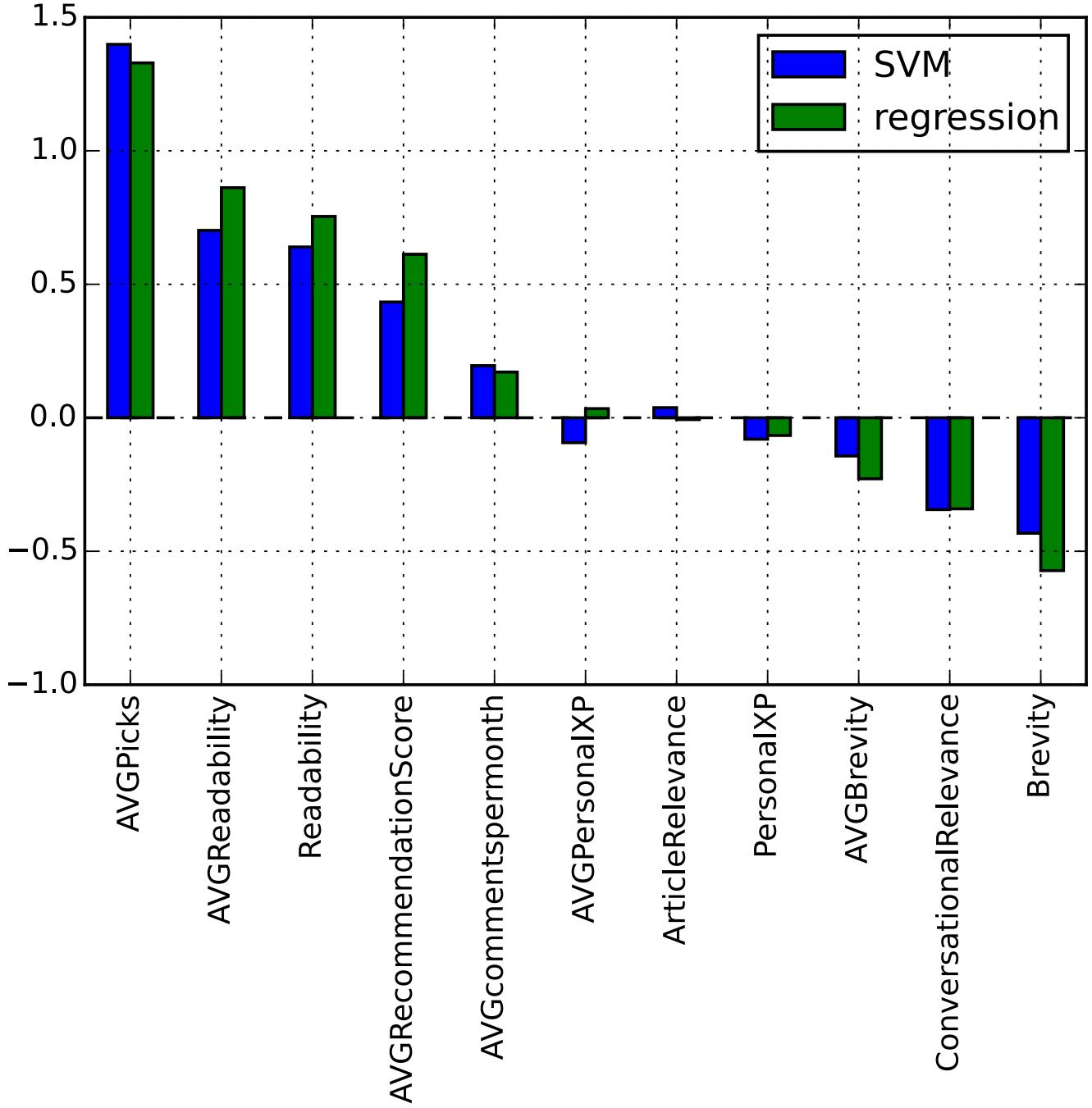
A large red stamp with the word "BAD" in capital letters, with an orange box labeled "Ground Truth" pointing to it.

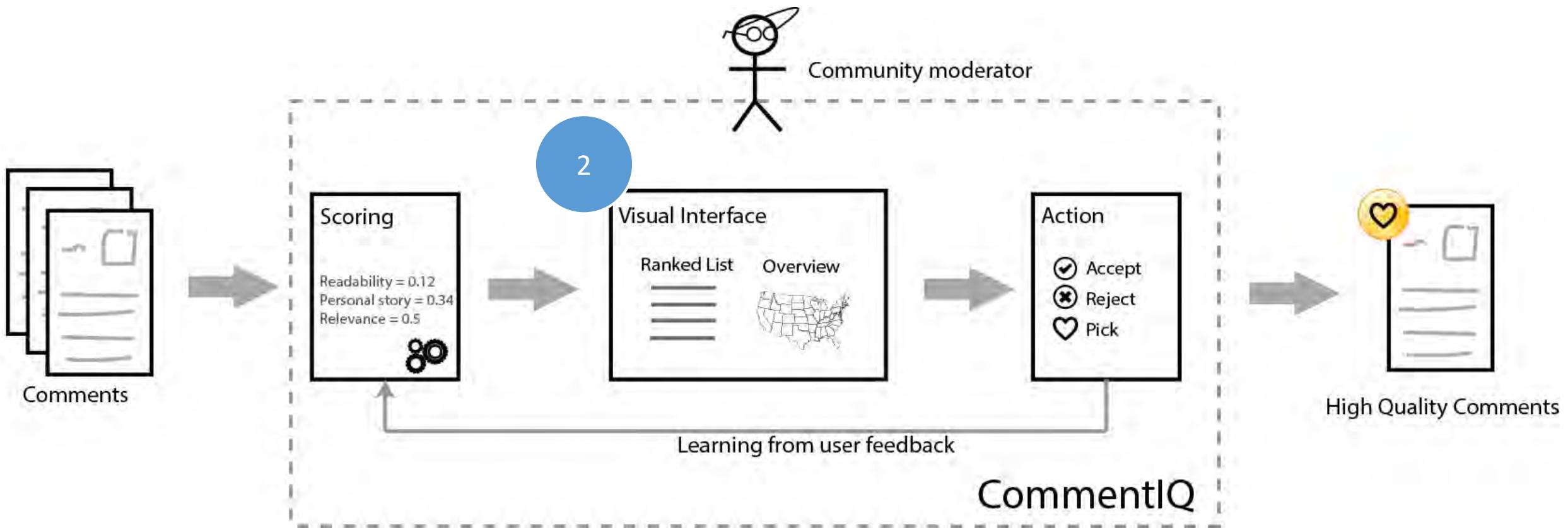
		Pick	Ground Truth
		Pick	No Pick
Prediction	Pick	1712 (True Positive)	926 (False Positive)
	No Pick	797 (False Negative)	1583 (True Negative)

Precision: 0  
Recall: 0  
F2 score: 0



User history and  
Readability are  
best predictor for  
quality.





# Custom Ranked List

# F.B.I. Director Speaks About Race

WASHINGTON — The F.B.I. director, James B. Comey, delivered an unusually candid speech on Thursday about the difficult relationship between the police and African-Americans, saying that officers who work in neighborhoods where blacks commit crimes at a high rate develop a cynicism that shades their attitudes

... (more)

Select your overview visualization

CommentPlot Map Temporal

New Accepted Rejected Picked



Presets for Ranking: [Edit](#) [Add](#)

✓ Default

Personal Story

for this ranking.

Unexpected comment

Written by best user

Search for...

New (633)

Accepted (0)

Rejected (0)

Picked (1)

All

NJB

Seattle , Feb 12, 2015 12:41:39 PM

Kudos to Director Comey. It's a breath of fresh air to hear honest and unvarnished comments which are so obviously true. The problem is that in the highly charged atmosphere surrounding the issue, we find it difficult to have an honest conversation as one side jumps on anything the other side says. The first thing we need to do is recognize that this isn't about "sides" but a very real American societal problem that we need to talk about openly and honestly. Comey's comments are a valuable first step.

[Accept](#)

[Reject](#)

[Pick](#)

[? Help](#)[○ Clear](#)[✖ Close](#)[💾 Save current setting](#)

### Criteria based on comment score

Article Relevance : 7.862



Conversational Relevance : -23.1



Length of comments : 7.066



Personal Experience : -3.41



Readability of the comment : 38.39



Recommendation Score : 10



### Criteria based on user score

User Comments per Month :

4.358



User Length : 5.197



User Personal Experience : -9.32



User Picks : 38.99



User Readability : -6.49



User Recommendation Score :

-28.1



# Overview Visualization

# CommentIQ

**F.B.I. Director Speaks About Race**

WASHINGTON — The F.B.I. director, James B. Comey, delivered an [unusually candid speech](#) on Thursday about the difficult relationship between the police and African-Americans, saying that officers who work in neighborhoods where blacks commit crimes at a high rate develop a cynicism that shades their attitudes.

(more)

Select your overview visualization

CommentPlot Map Temporal

New Accepted Rejected Picked

Personal Experience

Article Relevance

Article Relevance: This score represents how relevant a comment is with respect to the article. Relevance is measured by looking at the use of similar words.

Personal Experience: This score is a measure of the rate of use of words in Linguistic Inquiry and Word Count (LIWC) categories "I", "We", "Family", and "Friends" which reflect personal (1st and 3rd person pronouns) and close relational (family and friends) references.

Show me Article Relevance vs. Personal Experience

Presets for Ranking: Edit Add

Best based on comment

This bar shows the weights for this ranking.

Search for...

New (619) Accepted (11) Rejected (1) Picked (3) All

Jacqueline Jack Brooklyn, NY , Feb 12, 2015 3:24:46 PM

I agree with Reason completely. It seems that Blacks walk around with the "Scarlet Letter C" on their backs.

Accept Reject Pick

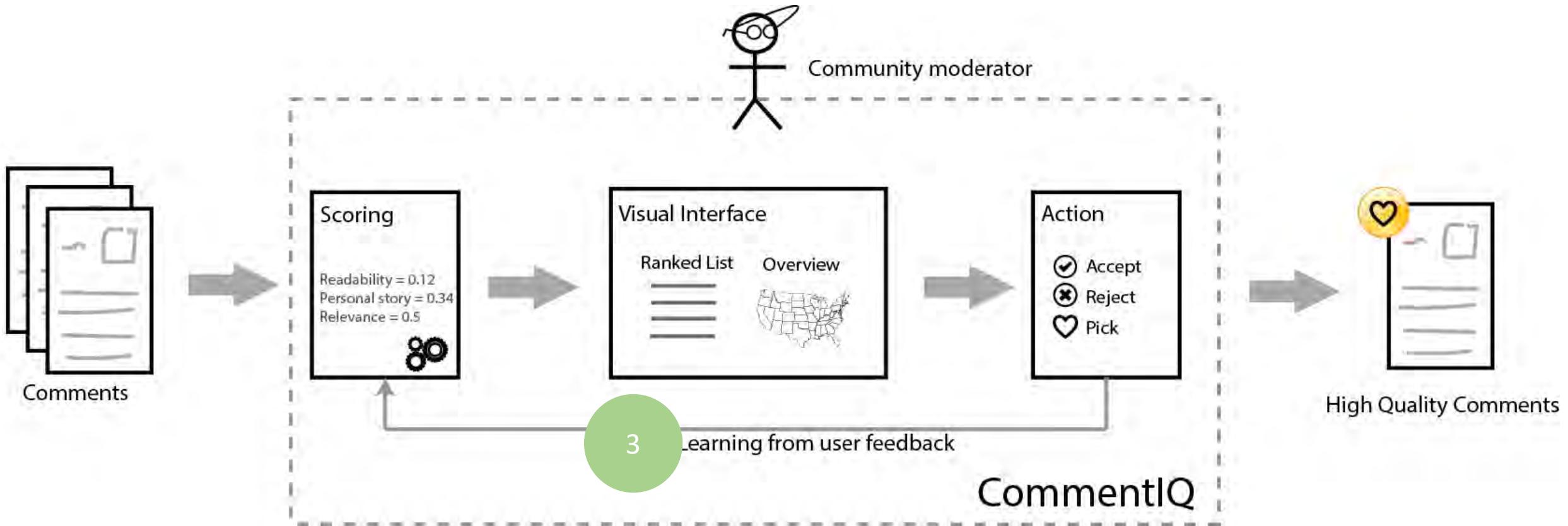
JAF45 Vineyard Haven, MA , Feb 12, 2015 2:09:58 PM

Such thinking is an anathema to the law in so many ways. First, what citizens do to each other is radically different than what state actors do. State actors express the legal and moral norms of the state. Second, the logic of assuming statistical suspicion or guilt through group membership creates a form of collective suspicion that is unconstitutional and immoral. It's one thing for a citizen to privately hold those views. It's another for someone with a gun and a badge. Third, if police do act on collective suspicion, they will make mistakes. Hundreds of thousands of mistakes in just one city in one year, based on the recent stop and frisk trial here. Do you want to be the one wrongly stopped and slammed against a wall because your skin is the same color as a perp? And what do you think the actual crime rate -- assuming violent crime, forget Wall Street -- among Black and Latino citizens? Way lower than your analysis shows .... It's one thing to say that 75% of shooters are Black, quite another to say that 75% of all Blacks are shooters or would-be shooters. That's statistical cynicism, and it not fit for a democracy.

Accept Reject Pick

1 2 3 4 5 6 7 ... 124

<http://moderator.comment-iq.com/#/demo>



## F.B.I. Director Speaks About R...

WASHINGTON — The F.B.I. director, James B. Comey, gave an unusually candid speech on Thursday about the challenges of working in neighborhoods where blacks commit crime, saying that many young black men develop a cynicism that shades their attitudes toward law enforcement.

... (more)

Select your overview visualization

[CommentPlot](#) [Map](#) [Temporal](#)

New Accepted Rejected Picked



Please select all that apply to this comment.

- well-written
- informative
- personal experience
- critical
- humorous
- Type other reason...

[Edit](#) [Add](#)

weights for this ranking.

OK

New (633)

Accepted (0)

Rejected (0)

Picked (1)

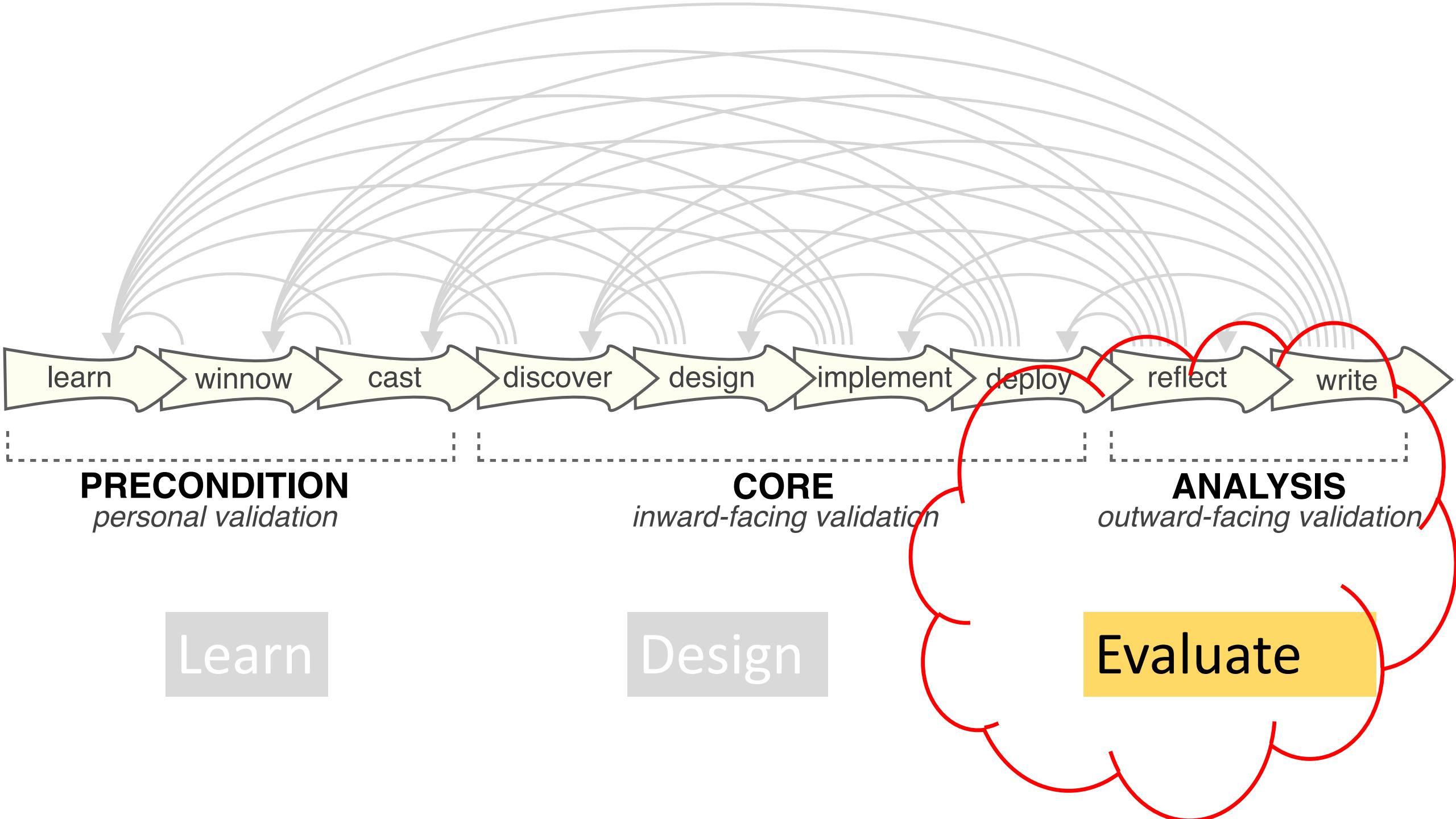
All

NJB

Seattle , Feb 12, 2015 12:41:39 PM

Kudos to Director Comey. It's a breath of fresh air to hear honest and unvarnished comments which are so obviously true. The problem is that in the highly charged atmosphere surrounding the issue, we find it difficult to have an honest conversation as one side jumps on anything the other side says. The first thing we need to do is recognize that this isn't about "sides" but a very real American societal problem that we need to talk about openly and honestly. Comey's comments are a valuable first step.

[Accept](#) [Reject](#) [Pick](#)



The  
New York  
Times



THE BALTIMORE SUN

The  
Washington  
Post

THE WALL STREET JOURNAL.  
**WSJ**

ID	Organization	Field-experience (in years)	Workflow
P1	Washington Post	10	Post-moderation
P2		1	
P3		4	
P4	New York Times	4	Pre-moderation
P5		7	
P6	Wall Street Journal	4	Post-moderation
P7	Baltimore Sun	7	Post-moderation

ID	Organization	Field-experience (in years)	Workflow
P1	Washington Post	10	Post-moderation
P2		1	
P3		4	
P4	New York Times	4	Pre-moderation
P5		7	
P6	Wall Street Journal	4	Post-moderation
P7	Baltimore Sun	7	Post-moderation

ID	Organization	Field-experience (in years)	Workflow
P1	Washington Post	10	Post-moderation
P2		1	
P3		4	
P4	New York Times	4	Pre-moderation
P5		7	
P6	Wall Street Journal	4	Post-moderation
P7	Baltimore Sun	7	Post-moderation

1 hour structured interview  
with test drive

# Findings

*“...shifting moderating to a reporting  
research job.”*

Paraphrased from one moderator

- Flexibility is great

- Flexibility is great
- Comments are made by people!

- Flexibility is great
- Comments are made by people!
- Lots of other use-cases

# Discussion

A close-up photograph of a person's hands wearing a dark suit jacket and a white shirt. They are holding a black pen and writing in a black notebook. In the background, there is a wooden table with two white coffee cups and saucers. The lighting is warm and focused on the hands and the notebook.

# Selection Editing Bias

TV  
14



©  
COMEDY  
CENTRAL

TV  
14

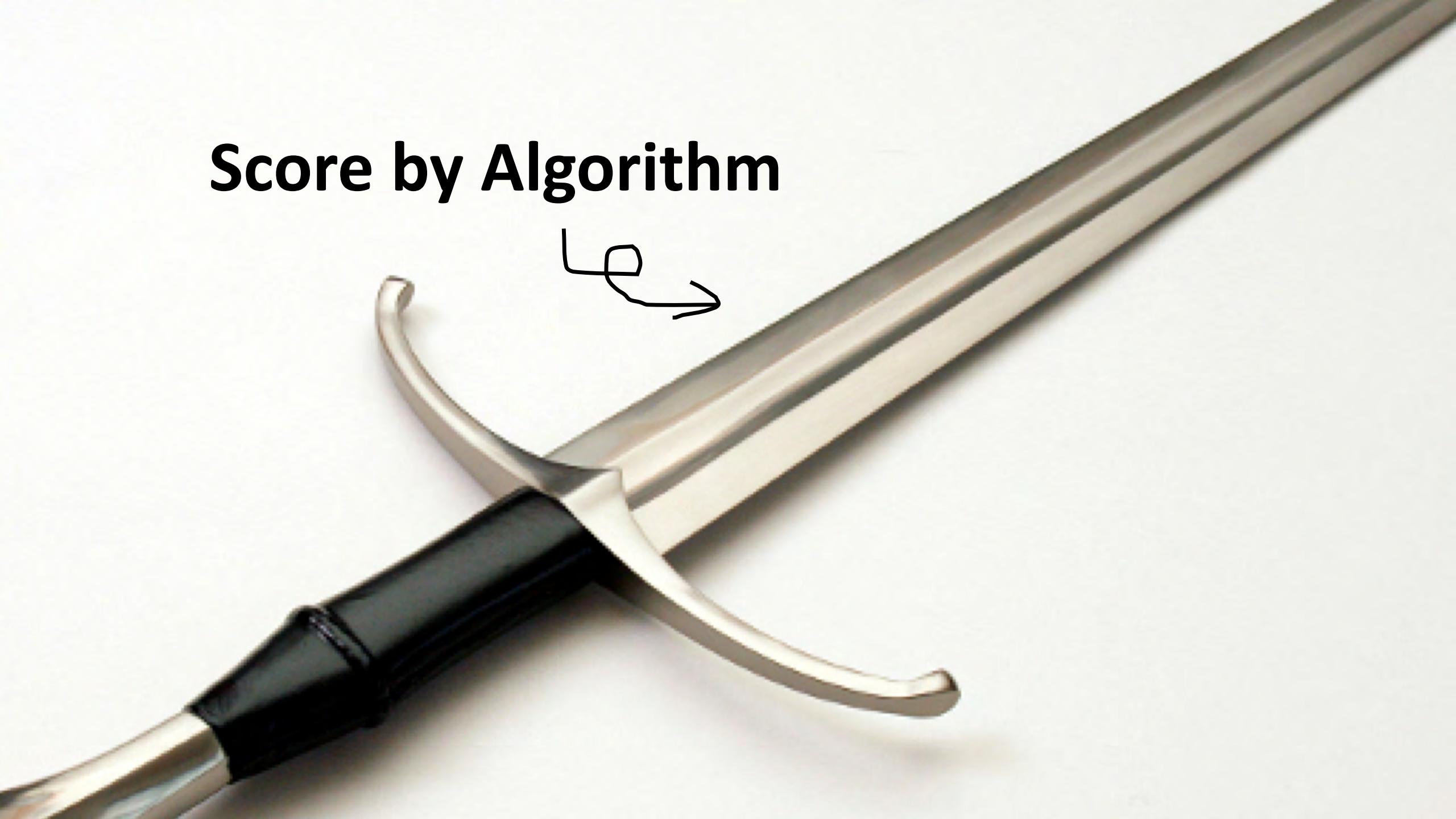
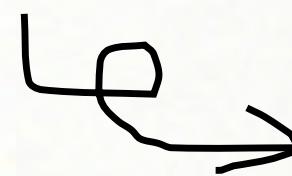
# visual Analytics?

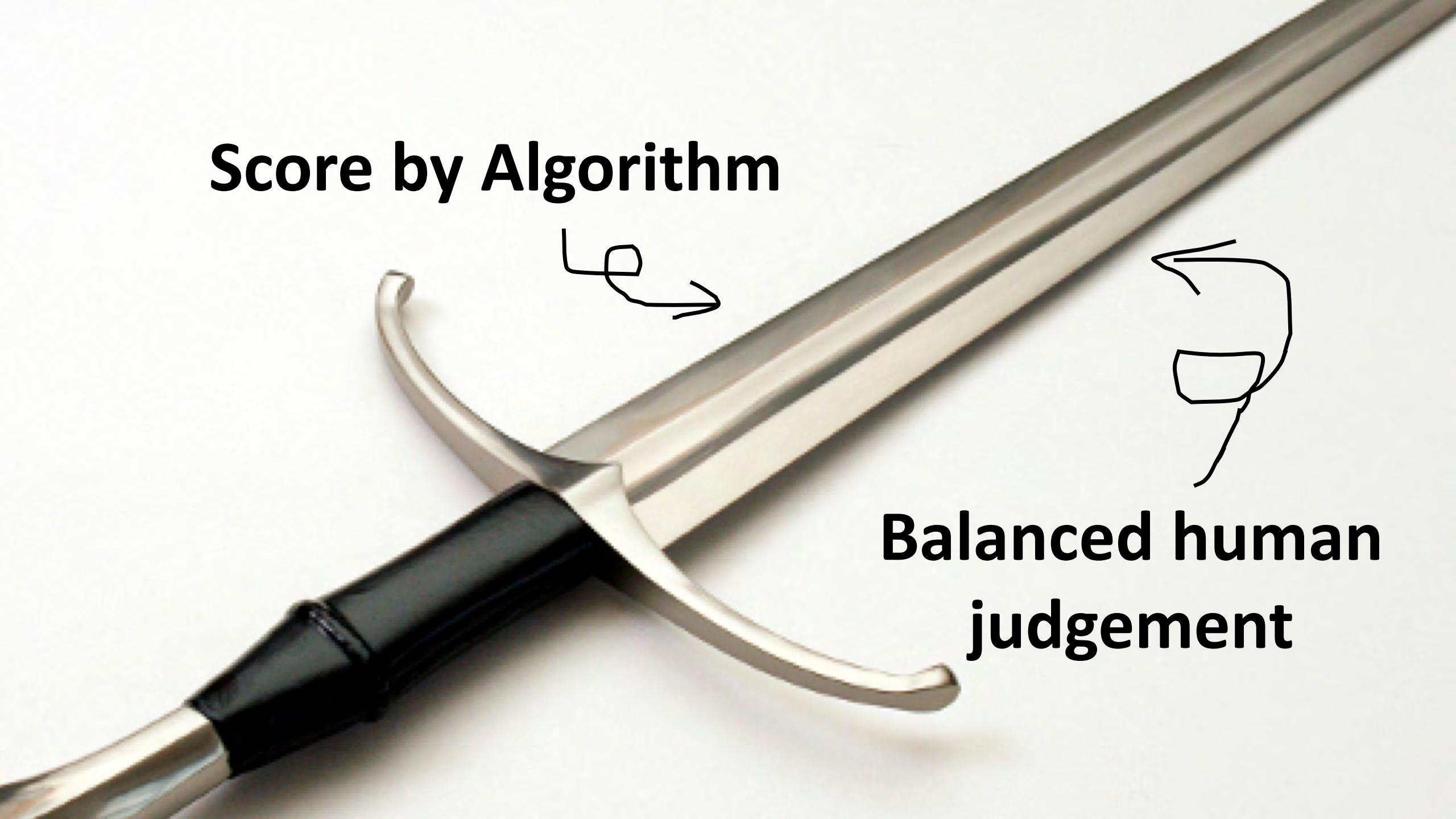
723

©  
COMEDY  
CENTRAL

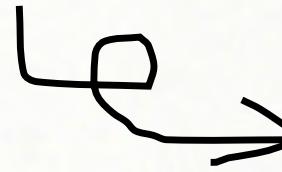


# Score by Algorithm





**Score by Algorithm**



**Balanced human  
judgement**



Beyond “Most Liked”

## All Comments

Newest First ▾

Pause live updates ■■

Newest First

Oldest First

Most Replies

Most Liked

gonna have to go back to his taxpayer-funded J-O-B? That's gonna be a tough one.

1 ·  Like Reply Share



**Liam-Still**

12:48 PM EDT [Edited]

RNC Chairman urges all Republicans to just go; Full Jonestown, and just drink all the Kool-Aid.

## All Comments

Newest First ▾

Newest First

Oldest First

Most Replies

Most Liked

gonna have to go back  
gonna be a tough one.

Newest First ▾

Newest First

Oldest First

Most Replies

Most Liked

From my neighbors

From best writers

Personal stories

Short unexpected



**Liam-Still**

12:48 PM EDT [Edited]

RNC Chairman urges all Republicans  
all the Kool-Aid.

## All Comments

Newest First ▾

Newest First

Oldest First

Most Replies

Most Liked

gonna have to go bad  
gonna be a tough one.

Newest First ▾

Newest First

Oldest First

Most Replies

Most Liked

From my neighbors

From best writers

Personal stories

Short unexpected



**Liam-Still**

12:48 PM EDT [Edited]

RNC Chairman urges all Republicans to drink all the Kool-Aid.

# Conclusion



WHAT ARE GOOD COMMENTS?

HOW CAN WE SELECT GOOD COMMENTS?

What is a high-quality comment depends  
on the journalistic context.

What is a high-quality comment depends on the journalistic context.

Visual analytics approach can help moderators find high-quality comments.

# Time to upgrade our comments section

Newest First ▾

Newest First

Oldest First

Most Replies

Most Liked

From my neighbors

From best writers

Personal stories

Short unexpected

d  
h





# TEAM WORK



Simranjit Sachar  
ssachar@umd.edu



Nicholas Diakopoulos  
@ndiakopoulos



Niklas Elmqvist  
@NElmqvist



Deokgun Park  
@intuinno

The slide displays a screenshot of a web page from 'commentIQ'. The title of the news article is 'As Scott Walker visits White House 5th, questions linger over college visit'. Below the article, a large red circle highlights the text '3247 Comments'. To the right of the circle, there's a link 'Sign in to Comment' and a note 'Submitted in the story and hasn't been approved yet. Please sign in to Comment'. At the bottom of the slide, there's a section titled 'How Can we share?' with a link 'Please live update'.





Simranjit Sachar  
ssachar@umd.edu



Nicholas Diakopoulos  
@ndiakopoulos



Niklas Elmqvist  
@NElmqvist



Deokgun Park  
@intuinno



Try at  
Comment-iq.com Questions?