

Educating about Logical Fallacies and Manipulative Language

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FOR A SAFER WORLD®

How many of you have...?



hello & welcome

.....



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why misinformation



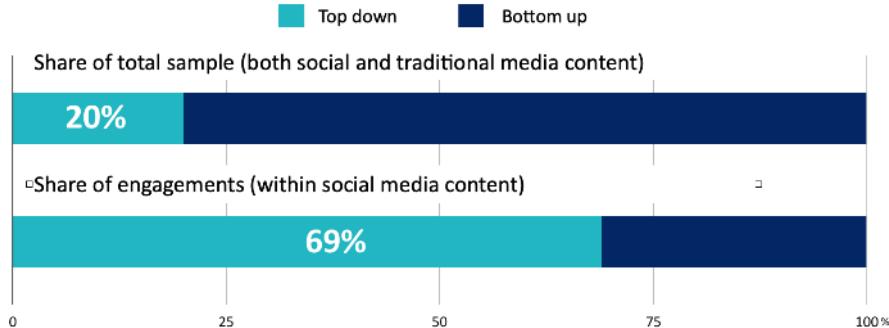
just take a look

Examples

Video repeats false claims about COVID vaccines

By ANGELO FICHERA yesterday

Figure 3: Top-down vs bottom-up misinformation



The first bar shows the share of content that was produced or shared by prominent persons in the whole sample (N=225).

The second bar shows the percent of total social media engagements of content from prominent persons out of the sub-sample of social media posts with available engagement data (N=145).



NOVEMBER 2, 2020



Two-thirds of U.S. adults say they've seen their own news sources report facts meant to favor one side

educational theories

Training wheels for critical thinking/filtering through information triage



Golden Circle

Zimmerman, Eric and Katie Salen. *Rules of Play*. Cambridge, MA: MIT Press, 2004.



Inoculation Theory

Roozenbeek et al. *Psychological inoculation improves resilience against misinformation on social media*. Science Advances, 2022.

educational theories

Training wheels for critical thinking/filtering



Golden Circle

Provide a safe environment to practice responding to fictional claims that could propel misinformation...leading to measurable response in the real world.

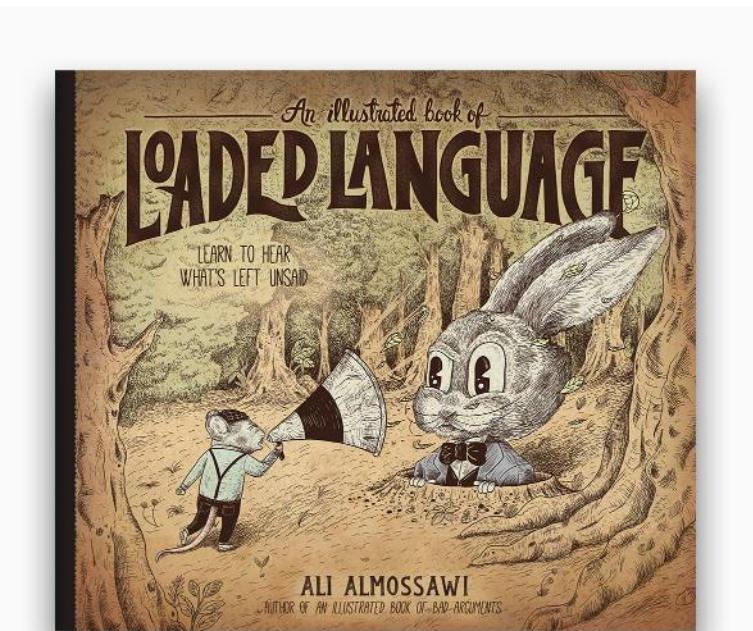
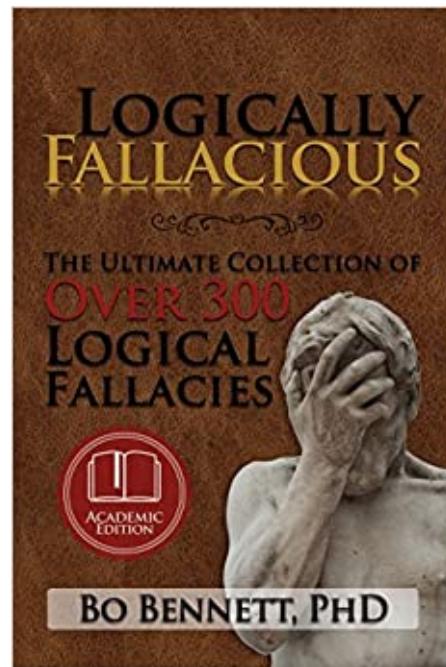
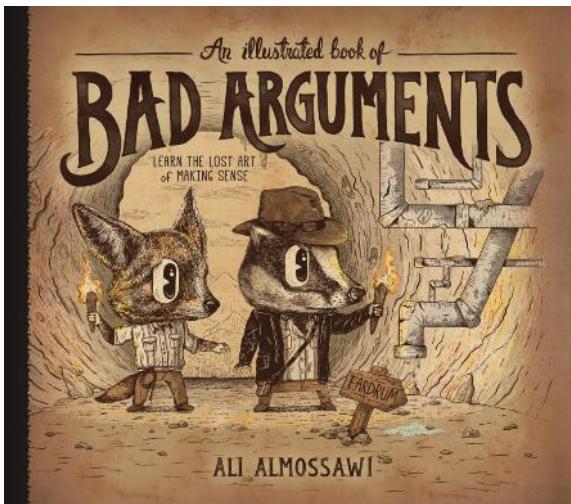


Inoculation Theory

Increase exposure to recognize and respond to misinformation.

start here

Reviewing common logical fallacies & loaded language



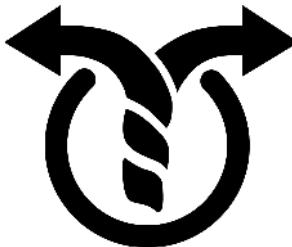
choosing concepts to test

common logical fallacies & loaded language



Appeal to Emotion

Logical Fallacy



False Dilemma

Logical Fallacy



**Ad Hominem or
Character Attack**

Logical Fallacy



Inflated Heroism

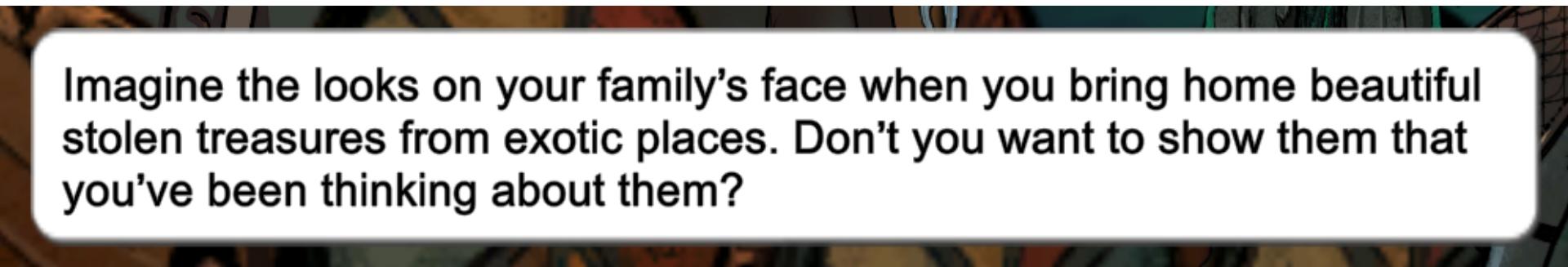
Loaded language



Conspiratorial Thinking

Loaded language

Pop Quiz



Imagine the looks on your family's face when you bring home beautiful stolen treasures from exotic places. Don't you want to show them that you've been thinking about them?

learning from others



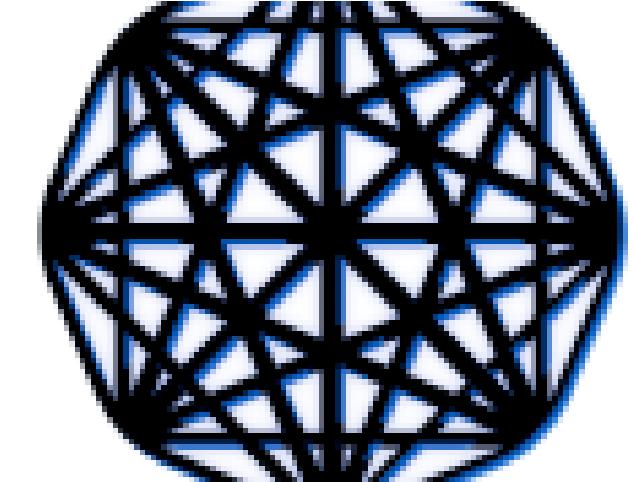
Go Viral!

- We wanted to extend past a social media simulator
 - Integrate dynamic consequences



Harmony Square

- Allow players to play diff ways to win
- Expand the possibilities of new scenarios for learning



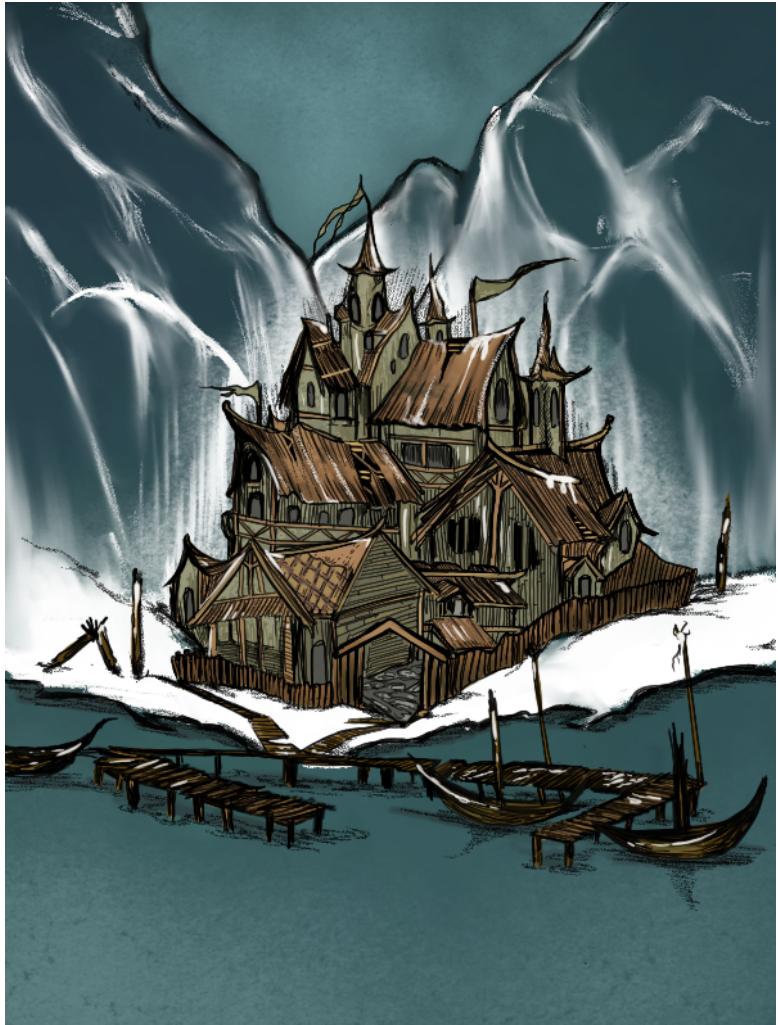
The Misinformation Game

- Respond to multiplayer input and decisions

scoping Loki's Marauders



goals



1. Identify what **manipulative language** looks like for common techniques (Information Literacy)
2. Develop ability to **triage or “critically filter” out arguments** to find the truth
3. An **immersive replayable** single and multiplayer game



Target Audience: Young Professionals (18–30)

game mechanics



experiential learning

The most important thing is that players learn the material.



- Players learn best by doing. And doing the actions that they are trying to learn about. They will learn best by both avoiding and employing manipulative language.
- Intrinsic mechanics work best for learning. Learning the material should enable them to perform better in the game. Its not just a number score.
- Layered learning. Basic skills can be learned quickly, but more experience and learning leads to higher level tactics and improved success in the game.

feedback & self learning



Exposure to the learning material is critical to learning.

- Players receive immediate feedback about their choices as they make them. Both through mouse-over icons and the impacts on their opponents.
- In-game educational material is provided. Players can consult in-game materials to improve their knowledge and performance.
- External links to additional material can also be provided in game.

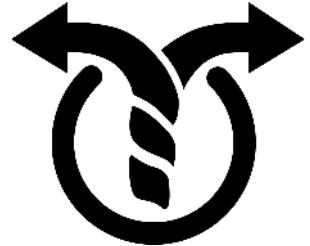
engagement & motivation



Players need to be engaged and motivated. A disengaged player will not learn well.

- Competition with friends is a great motivator.
- Ensuring the game has sufficient challenge can keep players engaged and motivated. Challenge increases with competitor learning.
- Graphics, animation, sound, and story all combine to create an immersive environment which is appealing to multiple senses and keeps players fully engaged.

player agency



Player Agency is critical. You need players to feel like they are part of the story, not just being dragged along.

- Real choice is critical. Choices should be real. If every choice leads down the same path, the experience loses credibility and learning is reduced.
- Players need to be able to make mistakes, some outcomes should lead to failure, and players can learn from this mistakes.
- Frequent interaction. Minimize the text. Keep the story going but keep the players interacting. If they are just reading pages of text, they might check out.

replayability



Multiple play throughs, and extended exposure to the material increases learning. Players won't learn much if they only play once.

- Hundreds of events, of which a handful are randomly selected each game.
- As a multi-player game, the experience is always different.
- Even the tutorial game is challenging. Losing is a great way to learn, but also motivation to play again.

let's see the demo



thank you!

Stay Connected!

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supporting material



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Welcome to the *The Loki*, the world's most cunning ship. You are **Draugr**, a champion of honor. Only you are qualified to lead your fellow Vikings. Convince the **mót** to side with you, fend off manipulation attempts, gain influence and become the next **styrimaðr**. But be careful to keep the crew's honor high or else the móts will deem you incompetent as a leader!

**Continue**



0



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0

Welcome to the *The Loki*, the world's most
of honor. Only you are qualified to lead you
with you, fend off manipulation attempts, g
styrimaðr. But be careful to keep the crew's
incompetent as a leader!

Loki's Ma



Draugr



Values

Honor

Weakness

Inflated Heroism**Cont****Close**



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Becoming Styrimaðr

Your goal is to become the next styrimaðr by the end of a **season**.

This requires you to:

- keep your honor resource value > 29
- end with the most influence

Selkie starts as the styrimaðr.



Continue



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Selkie

Values

Warriors

Weakness

Character Attacks

Prideful, but concerned for the wellbeing of her **Warriors**. Selkie is angered by Fenrir's disregard for life and annoyed by Troll's stupidity. Believing herself a paragon, Selkie is easily goaded by **Character Attacks**.

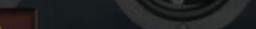
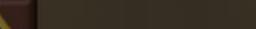
Close**Continue**

Styrimaðr

ðr by the



29





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Help



Click the ? at the top right for instructions and survival guide.



Start Voyage



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Begin Season:
Tutorial



100



25



25



35



20

Major events will occur during the voyage. The mó^t will choose a course of action.

Each action will impact ship resources.

The mó^t members will argue for their preferred actions.

If the mó^t is divided about a resolution, the styrimaðr resolves ties.

Tip: Click on for the most recent event.



Continue



100



25



25



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You awake sluggishly after a raucous night of merry making. There's another boat close enough to spit on. You don't recognize the flags. There is risk to attacking, but if there is going to be a battle, you want to start the attacks and win swiftly and mercilessly. Should you attack or parlay?

Impacts

Attack: +5 -5 +8

Parlay: +3

Fight or Friend?



Close



100



25



25



35



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Narrator

The mysterious vessel rocks gently on the waves.

Attack!

Parlay with them.



100



25



25



35



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Responding to Others

Everyone will argue why their proposed course of action is best. You can accuse them of using a manipulation technique, agree with their logic, or ignore them. Your response may impact your influence.

Response Options

Accuse!**Accept****Ignore**

If their argument was manipulative

You gain 10
They lose 10You lose 15
They gain 15

You lose 5

If their argument was logical

You lose 10
They gain 10

No change

You lose 5

Continue



100



25



25



35



20



Imagine the looks on your family's face when you bring home beautiful stolen treasures from exotic places. Don't you want to show them that you've been thinking about them?

Accuse!

Accept

Ignore





110



25



25



35



20

Fish stew for dinner?

Give me a break.

That's hogwash!



Imagine the looks on your family's face when you bring home beautiful stolen treasures from exotic places. Don't you want to show them that you've been thinking about them?

Continue

Accuse!



Accept



Ignore





110



25



25



35



20

Fish stew for dinner?

Give me a break.

That's hogwash!

Imagine the looks on your family's face when you bring home beautiful stolen treasures from exotic places. Don't you want to show them that you've been thinking about them?

Continue

Appeal to Emotion

Accept
The attempt to manipulate an emotional response in place of a valid or logical argument.

Accept

Ignore





110



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Fighting without need is senseless. Just because we have strength and weapons does not mean we need to use them. We should save our health for when a good pillage calls for it.

Accuse!

Accept

Ignore



110



25



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35



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My nose is itchy.

She has a point.

Absurd.

Fighting without need is senseless. Just because we have strength and weapons does not mean we need to use them. We should save our health for when a good pillage calls for it.

Continue

Accuse!

Accept

Ignore



110



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Are you all idiots? Even if we win this fight, we can't survive much longer without more food.

Accuse!

Accept

Ignore





120



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Locking

Each character is weak to a different manipulation technique. If a character accepts a technique to which they are weak, you will hear a locking sound and one of the below icons will appear.



Locked into voting your way



Locked into voting against you

Mouse over the icon for more information about how they are voting.

Continue



120



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25



35



20



Selkie

Values

Warriors



Weakness

Character Attacks



Prideful, but concerned for the wellbeing of her **Warriors**. Selkie is angered by Fenrir's disregard for life and annoyed by Troll's stupidity. Believing herself a paragon, Selkie is easily goaded by **Character Attacks**.

Close

e idiot here?

I agree.

I do like living...

his fight, we can't survive much

Continue

cept

Ignore





120



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25



35



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I suspect this
disguise. The
because they
We need to s
them before t



Manipulation Techniques



You can lock the decisions of other characters by using the manipulation technique to which they are weak.

Click on a member of the mó^t to see their weakness.

Learn more about manipulation techniques by visiting the Book of Manipulation .

Continue



120



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I suspect this
disguise. They
because they
We need to
them before



Book of Manipulation



False Dilemma

Presenting two options as the only possibilities, when in fact more than two possibilities exist. For example, "you're either with us or you're the enemy" is a false dilemma.



Character Attack

Attacking someone's character, life circumstance, or personal traits in a way that is unrelated to the validity of the argument or logic. Name calling is a common form of character attack.



Appeal to Emotion

Manipulating an emotional response in place of a valid or logical argument. These appeals frequently try to stir up guilt, anger, sadness, fear, or pride.



Inflated Heroism

Exaggerating the impact of an individual's actions as heroic when the actions do not rise to that level. Inflated heroism often frames individuals as part of a vanguard protecting others.



Conspiratorial Thinking

Arguing that people are secretly working together to do something harmful. This type of argument usually cannot be proven wrong. As an example, "Prove to me that they are *not* working together to make me suffer."

Close



120



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Narrator

The crew turns their attention towards you. How will you phrase your argument?

I suspect this is secretly our enemies in disguise. There's no sign that it's our enemies because they are trying so hard to fool us. We need to stop being so blind and attack them before they attack us.

We do not have anything to gain from a parlay. We have enough to get by until our next stop. The risk of surprise attack is too high, and the potential benefit of parlay is much too low.

We either raid today or we sheath our swords and return home to dull, meaningless lives on the farm.



120



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35



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Narrator

The crew turns their attention toward argument?

I suspect this is secretly our enemies in disguise. There's no sign that it's our enemies because they are trying so hard to fool us. We need to stop being so blind and attack them before they attack us.

We do not have anything to parlay. We have enough time for our next stop. The risk of surprise is high, and the potential reward is much too low.

Troll



Values

Food



Weakness

False Dilemmas



A bit slow. Troll mostly just cares about Food and sleep. He is often distracted and doesn't pay attention which leads him to frequently ignore conversations. Troll is easily confused by False Dilemmas.

Close



120



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25



35



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Narrator

The crew turns their attention towards you. How will you phrase your argument?

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We either raid today or we sheath our swords and return home to dull, meaningless lives on the farm.



150



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25



35



20

Cabbages are boring.



+30



Whatever.



-5



Exactly!



Narrator

The crew turns their attention towards you. How will you phrase your argument?

Continue

I suspect this is secretly our enemies in disguise. There's no sign that it's our enemies because they are trying so hard to fool us. We need to stop being so blind and attack them before they attack us.



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We either raid today or we sheath our swords and return home to dull, meaningless lives on the farm.



150



25



30



30



28

Attack!

Attack!

Parlay.

Attack!

Narrator

You have tricked Troll into voting for an attack.

+5 Honor, +8 Loot, -5 Warrior

Continue



150



25



30



30



28



Now you're ready to begin!



Now that you understand the basic rules of *Loki's Marauders*, you're ready to finish on your own.

Good luck and don't get manipulated!

Continue



170



33



35



25



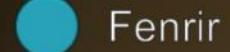
30



Draugr has become the new Styrimaðr!

Influence

Draugr



Fenrir



Selkie



Troll



Resources



Food: 33



Honor: 35



Warriors: 25



Loot: 30

Draugr had the most influence.

[Replay](#)[Quit](#)