Is seeing believing?

Helen Boots-Blankers
4,950,000,000

Number of videos viewed on YouTube every day
Identifying Aspects of Informative Videos that Indicate Objectivity

Is Seeing Believing?
Research questions

● Which aspects of an informative video indicate its level of objectivity?

● Which aspects of an informative video contribute *most* to its level of objectivity?
Research design

**Activity**
- Literature research
- Expert survey
- User survey

**Output**
- List with video aspects that indicate objectivity
- Complete list with necessary video aspects that indicate objectivity
- A ranked list with necessary video aspects that indicate objectivity

**Aim**
- Identify the aspects of a video that indicate the level of objectivity.
- Rank video aspects to express their contribution to the objectivity level of a video.

**Goal**
- Measuring the level of objectivity of informative videos

Identify the aspects of a video that indicate the level of objectivity and rank video aspects to express their contribution to the objectivity level of a video.
Literature research
What is objectivity?

`Factual, value free and free from personal biases’

Value free:

- Impartial: not influenced by contextual values
- Neutral
- Autonomous: the motive is the desire to increase knowledge

Reis et al. (2016), Lacey (2002)
Objectivity and persuasion

Persuasion mode

- Logos
- Ethos
- Pathos

Objectivity component

- Factual & Truthful
- Credible
- Neutral
## Factual and Truthful

<table>
<thead>
<tr>
<th>Cues (Examples)</th>
<th>Video Aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argumentation, errors in information</td>
<td>Spoken content</td>
</tr>
<tr>
<td>Characteristic phrases and words</td>
<td>Vocabulary use</td>
</tr>
<tr>
<td>Facial movements</td>
<td>Facial expressions</td>
</tr>
<tr>
<td>Head movements, posture</td>
<td>Body language</td>
</tr>
<tr>
<td>Value free</td>
<td>Title</td>
</tr>
<tr>
<td>Recency</td>
<td>Date of publication</td>
</tr>
<tr>
<td>Relevance</td>
<td>YouTube category</td>
</tr>
<tr>
<td>Cues (examples)</td>
<td>Video aspect</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Education, employer</td>
<td>Knowledge on the subject</td>
</tr>
<tr>
<td>Pitch, loudness</td>
<td>Vocal inflections</td>
</tr>
<tr>
<td>Clothing</td>
<td>Physical appearance</td>
</tr>
<tr>
<td>Cues (examples)</td>
<td>Video aspect</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Monologue, interview, discussion</td>
<td>Type of scene</td>
</tr>
<tr>
<td>Ideology, upbringing, experiences</td>
<td>Personal beliefs and values of the actors</td>
</tr>
<tr>
<td>Reputation, popularity</td>
<td>Publisher</td>
</tr>
<tr>
<td>Informative, education, entertainment</td>
<td>Production intent</td>
</tr>
<tr>
<td>Country of production</td>
<td>Governmental influence</td>
</tr>
</tbody>
</table>
2.3 "This aspect of the videos influences my judgment of the **credibility** of the videos."

Choose for each aspect below to what degree you agree or disagree with the statement.

<table>
<thead>
<tr>
<th>Physical appearance</th>
<th>Fully disagree</th>
<th>Disagree</th>
<th>Partly disagree</th>
<th>Neutral</th>
<th>Partly agree</th>
<th>Agree</th>
<th>Fully agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocal inflections</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge on the subject (e.g., education, employer)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Result expert survey

Aspects in order of necessity for objectivity measure

Production setting: camera position and lightning
**User survey**

**Subjectief of objectief?**

Kies voor elk van onderstaande onderdelen in welke mate het *subjectief of objectief* is in de video op deze pagina.

<table>
<thead>
<tr>
<th></th>
<th>Heel subjectief</th>
<th>Gedeeltelijk subjectief</th>
<th>Subjectief noch objectief</th>
<th>Gedeeltelijk objectief</th>
<th>Heel objectief</th>
<th>Geen mening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woordkeuze (b.v. herhaling, dubbelzin(nigheid, ontkening)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Gezichtsuitdrukking</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Lichaamstaal</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
User survey - Video objectivity ranking
User survey - Video objectivity ranking
Results - Objectivity ranking per video by users

- Ranking based on weighted average for all participants (n=61)
Results of User Survey

Objectivity rating per video (n=61)

Objectivity rating on aspects, aggregated per video (n=61)
Which Aspects are Most Useful?

Variance per aspect aggregated for all participants (n=61), 5 videos
How difficult are the aspects to judge?
Aspect scores per video

A1=Vocabulary use
A2=Facial expressions
A3=Body language
A4=Spoken content
A5=Physical appearance
A6=Vocal inflections
A7=Knowledge on the subject
A8=Personal beliefs and values
A9=Type of scene
A10=Title
A11=Publisher
A12=Production intent
A13=Production settings
Conclusion

1. Which aspects of an informative video indicate its level of objectivity?

2. Which aspects of an informative video contribute most to its objectivity?
Limitations and future directions

- Limited generalizability, 61 users gave their subjective rating; expand the study to a broader population of video users
- The `very subjective’ is easier to identify; use informative videos on other subjects
- Explore objectivity measurement using these 13 aspects
THAT'D BE LIKE FINDING A NEEDLE IN A HAYSTACK.
Conclusion

1. Which aspects of an informative video indicate its level of objectivity?

2. Which aspects of an informative video contribute most to its objectivity?
Absolute objectivity value per participant
(13 aspects, 5 videos)
Results
A1=Vocabulary use
A2=Facial expressions
A3=Body language
A4=Spoken content
A5=Physical appearance
A6=Vocal inflections
A7=Knowledge on the subject
A8=Personal beliefs and values
A9=Type of scene
A10=Title
A11=Publisher
A12=Production intent
A13=Production settings
Objectivity per video - mean and standard deviation
When the Facts Change, I Change My Mind.

What Do You Do, Sir?

John Maynard Keynes
Any questions?

“On the Internet, nobody knows you're a dog.”