VBENCH
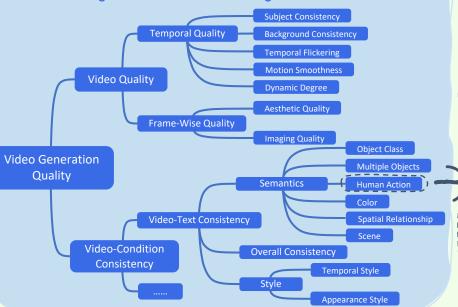
Evaluation Dimension Suite
- comprehensive, hierarchical, fine-grained, objective
- revealing individual models' strengths and weaknesses

Video Generation Quality
- Video Quality
  - Temporal Quality
    - Subject Consistency
    - Background Consistency
    - Temporal Flickering
    - Motion Smoothness
    - Dynamic Degree
  - Frame-Wise Quality
    - Aesthetic Quality
    - Imaging Quality
- Video-Condition Consistency
  - Semantics
    - Object Class
    - Multiple Objects
    - Human Action
    - Color
    - Spatial Relationship
    - Scene
  - Video-Text Consistency
    - Overall Consistency
  - Style
    - Temporal Style
    - Appearance Style
  - ......

Prompt Suite
separate prompts for:
- each evaluation dimension
- each content category

Generated Videos
video generation models   sampled videos

Evaluation Method Suite
for each dimension:
- designated model and pipeline

Alignment Verification

Human Preference Annotation
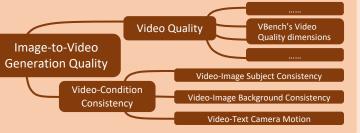
VBENCH++

Image-to-Video (I2V)

Image Suite
- Adaptive aspect ratio
- Diverse and fair content
- High resolution (mainly 4K+)
- Paired text prompts

Evaluation Dimension Suite
Image-to-Video Generation Quality
- Video Quality
  - ......
  - VBench's Video Quality dimensions
- Video-Condition Consistency
  - Video-Image Subject Consistency
  - Video-Image Background Consistency
  - Video-Text Camera Motion

Trustworthiness
non-technical aspects of video generation models

Trustworthiness
- Culture Fairness
- Gender Bias
- Skin Tone Bias
- Safety

More Models
VideoCrafter-2.0
SVD-XT   VideoCrafter-1.0
    SEINE
Pika   Show-1   ConsistI2V
Gen-2   I2VGen-XL   Open-Sora
Animate-Anything   DynamiCrafter

Alignment
I2V & Trustworthiness:
human alignment is thoroughly ablated and validated.

Generated Videos → Alignment Verification