

MCL-V: A streaming video quality assessment database

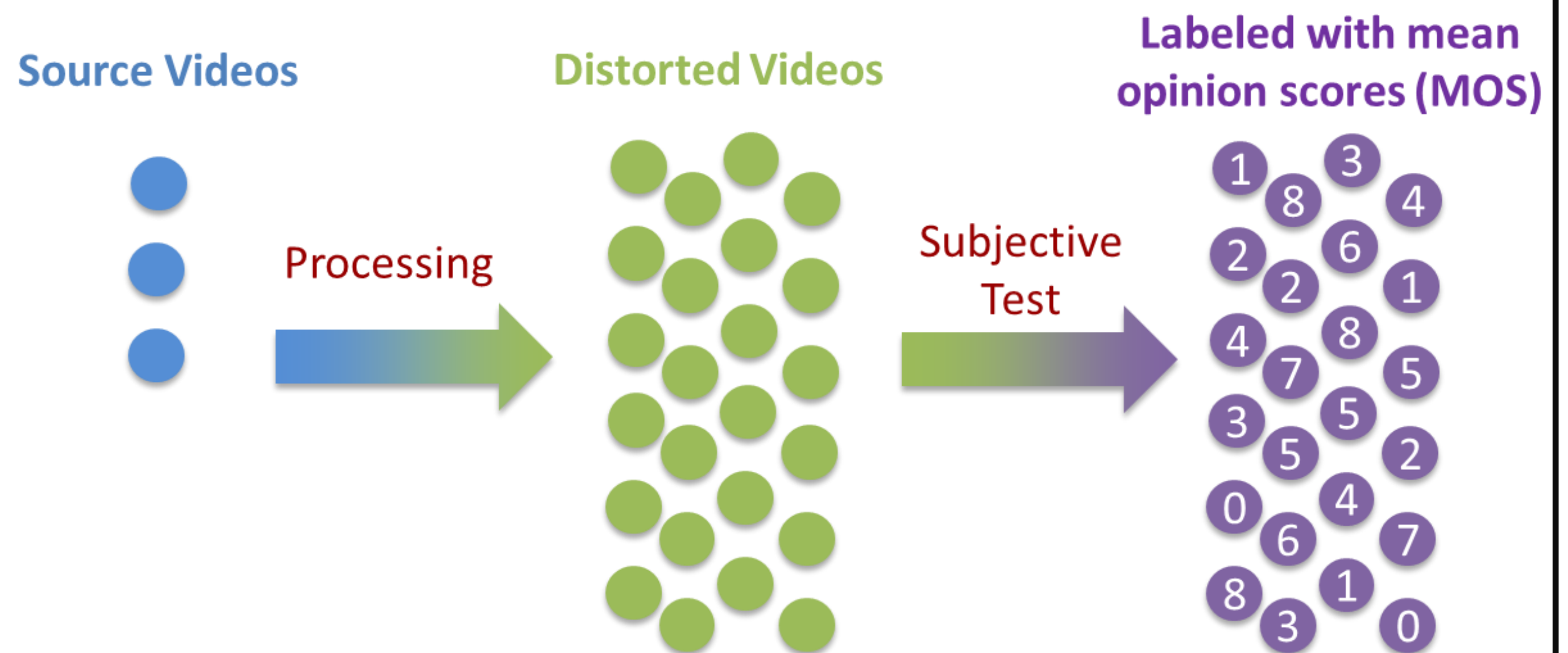
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Perceptual Quality

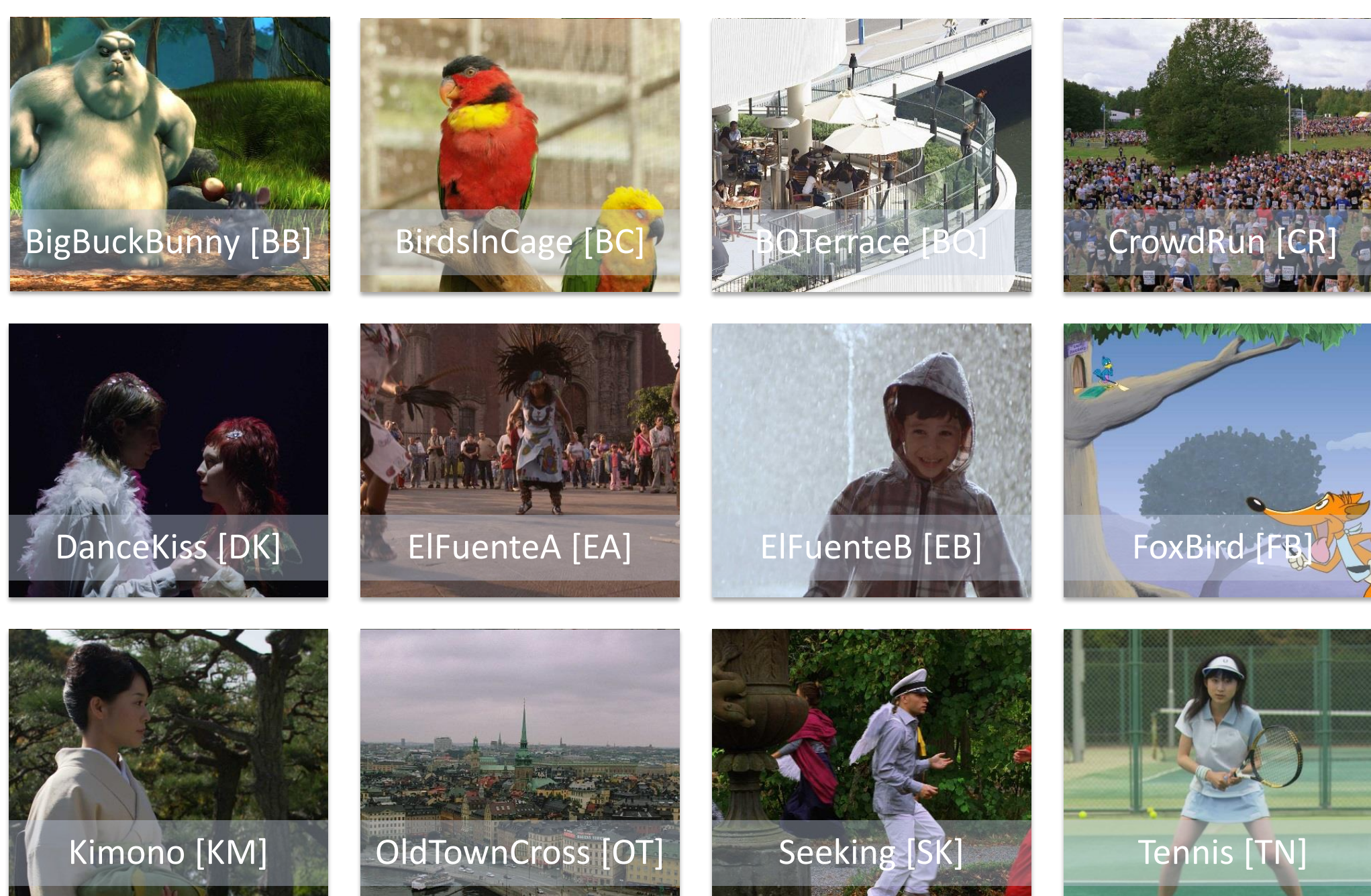


Both MSE = 42
Different Perceptual Quality

What is video quality database?



Video Source Selection



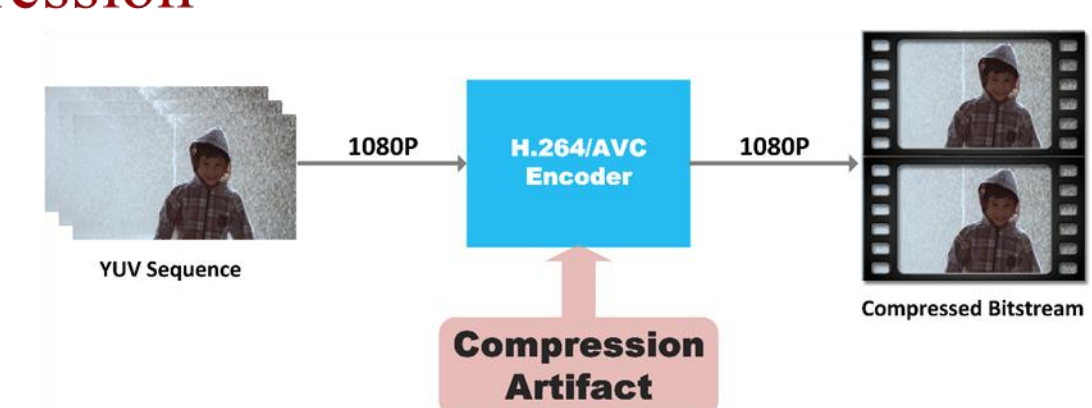
Distortion Design



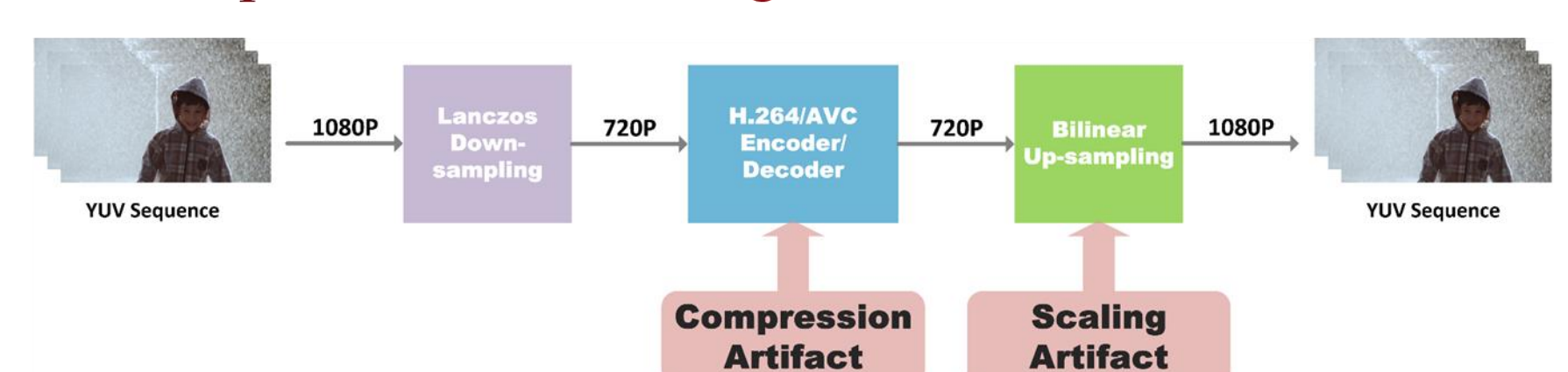
Compression Artifact
Quality varies with Bitrate

Compression and Scaling Artifact
Quality varies with Bitrate and Size

Compression

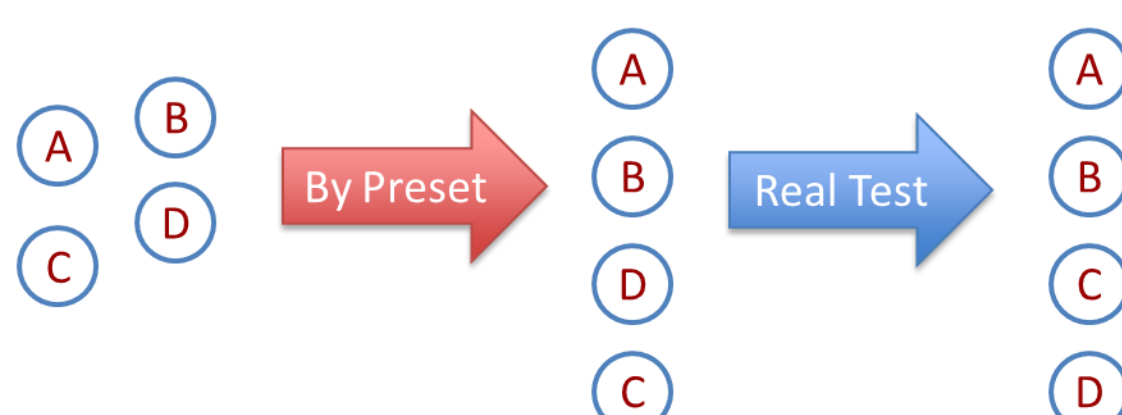


Compression and Scaling



Pairwise Subjective Test

- Adopt pairwise comparison
- Issue of long test time
 - DCR = 24 minutes
 - Pairwise = 108 minutes
- Use preset quality level to reduce test time



- Reduce 108 → 30 minutes

Conclusion & Future Work

- Discussion
 - Diverse and general video sources
 - Representative distortion and consistent quality
 - Efficient pairwise subjective test
- Future Work
 - Extend current video database
 - Develop Video Quality Assessment Algorithm