

Cameras for broadcast

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Q: What camera can I use?

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A: It depends.

What shooters care about:

Does the video look good?

What broadcasters care about:

Sensor resolution

File wrapper

Shutter type

Lens distortion

Colour sampling

Sensor noise

Does the video look good?

Recording media

Exposure latitude

Sensor spatial aliasing

NLE compatibility

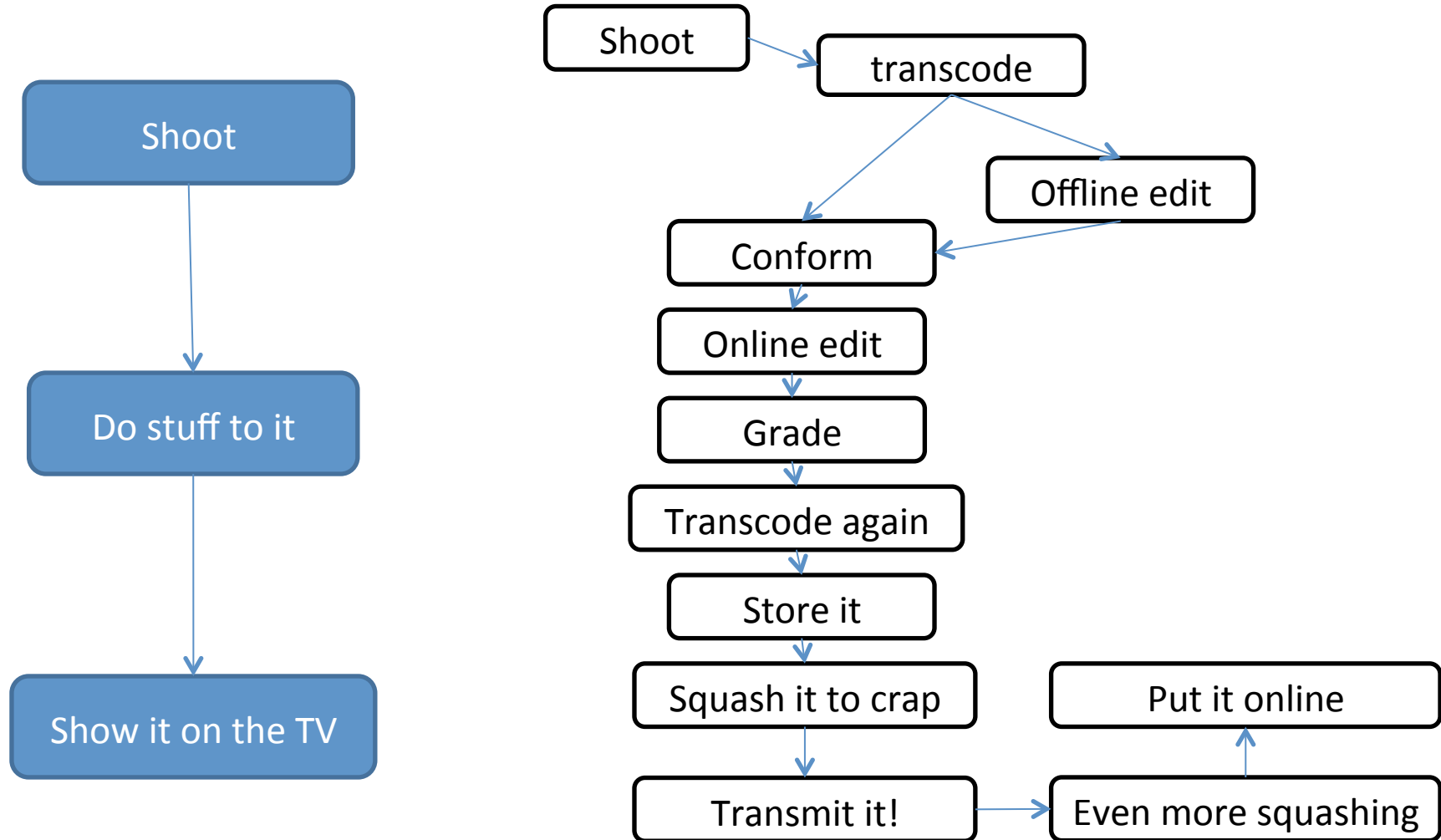
Codec bitrate

Codec type

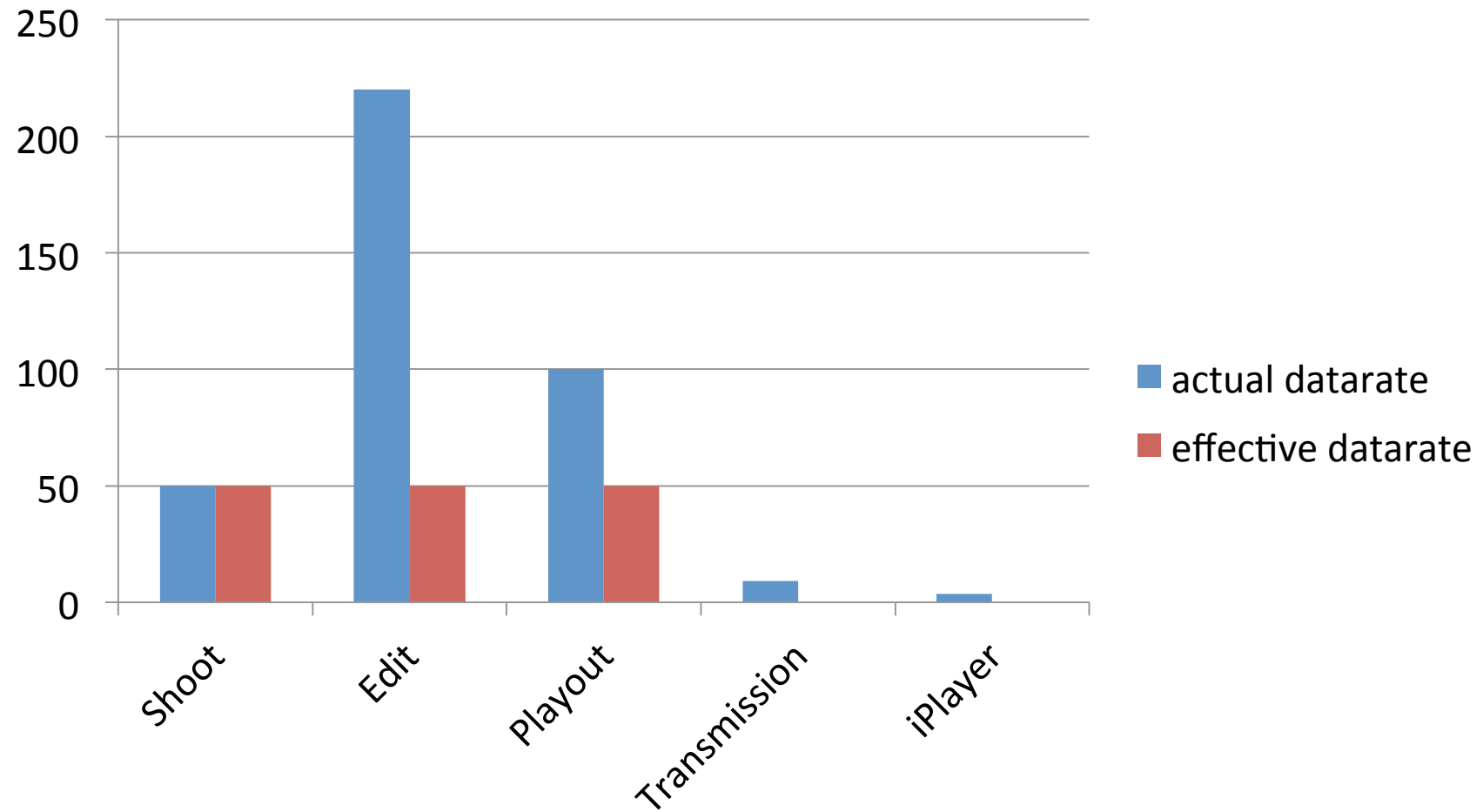
Sensor sensitivity

Compression artefacts

Why broadcasters care?



Example: Why does datarate matter so much?



How to decide if a camera is good enough?

Old way: Test every camera.

New way:

1. Define an agreed set of shorthand guidelines to categorise cameras based on specs & lab testing.
2. Then only do operational tests on the cameras in the categories you care about.
3. Then make a decision on what tiers/cameras can be used for what types of programmes.

1. EBU camera tiers

- Tier 1 – high quality large sensor (or multi-sensor) cameras with high datarate recording.
- Tier 2L/J – concessions on sensor spec and recording to accommodate smaller/cheaper camcorders but still classed as ‘full HD’.
- Tier 3 – semi-pro camcorders with reduced specs. Restricted use.
- Tier 4 – everything else. Exceptional cases only.

Testing & Tiering does NOT equal approval.

...but it's not just about specs.




- Ease of use.
- Depth of field control
- Format compatibility
- NLE compatibility
- Metadata
- Etc. etc. etc.

Broadcasters will do operational tests
and make their own decisions!

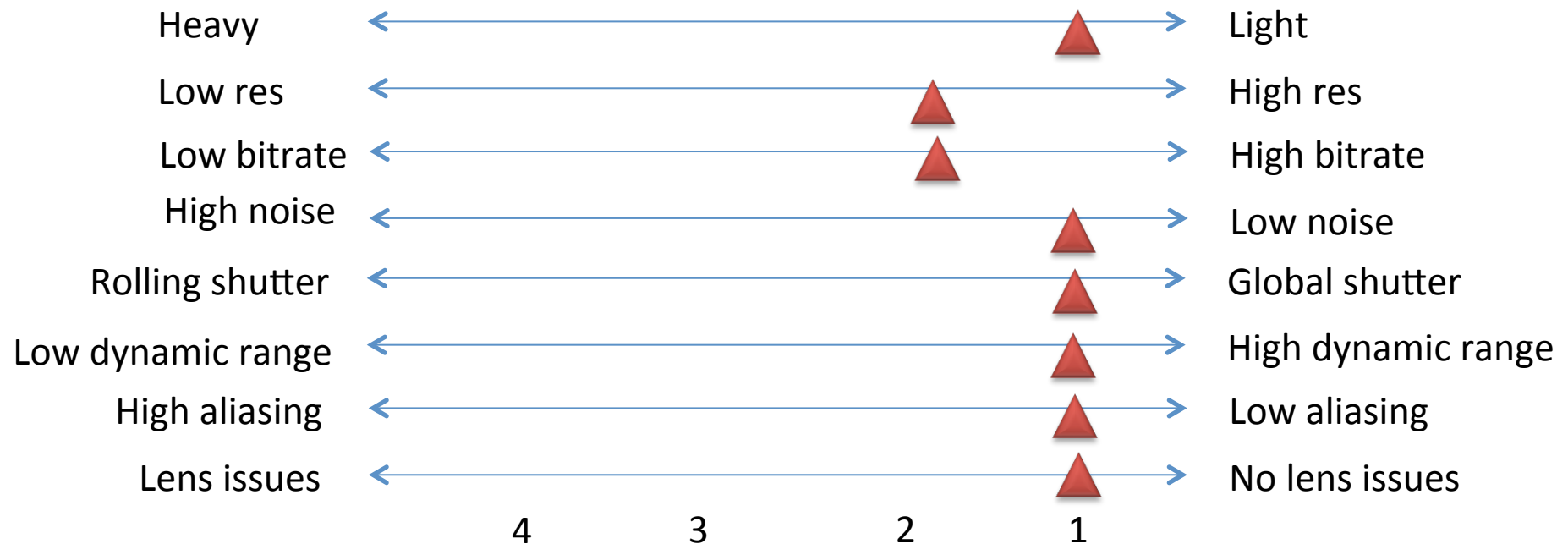
**“SHOW ME
THE LIST!”**

How to decide if a camera is good enough?

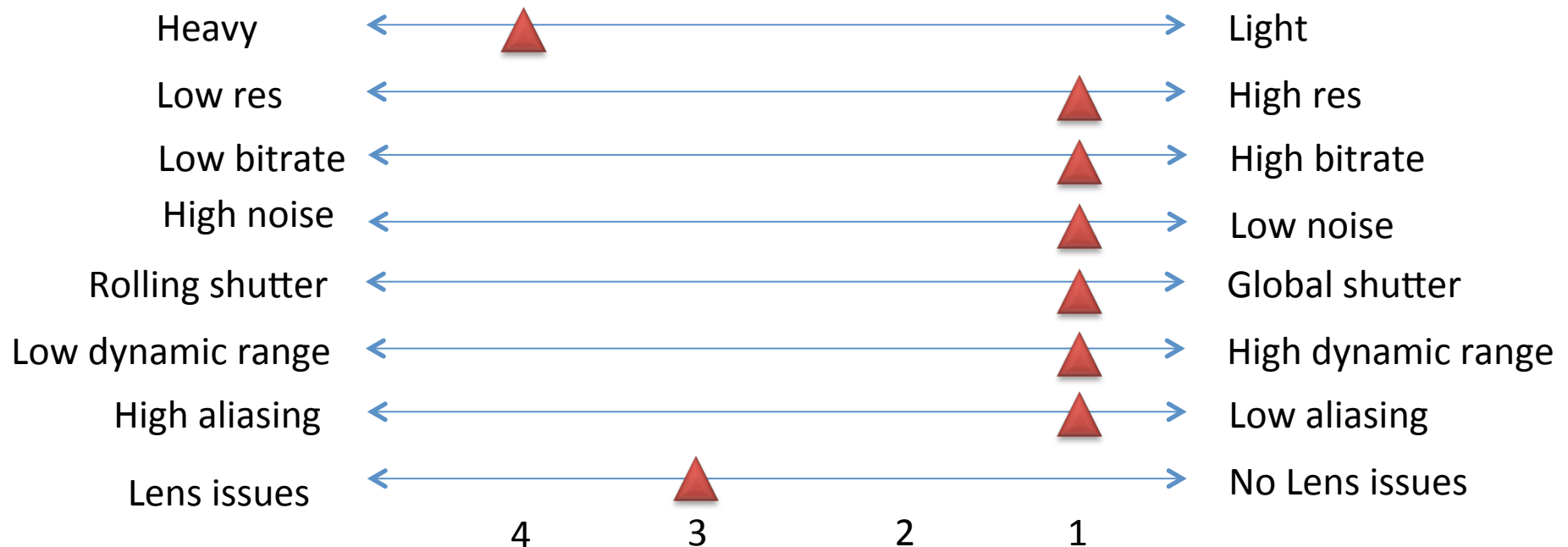
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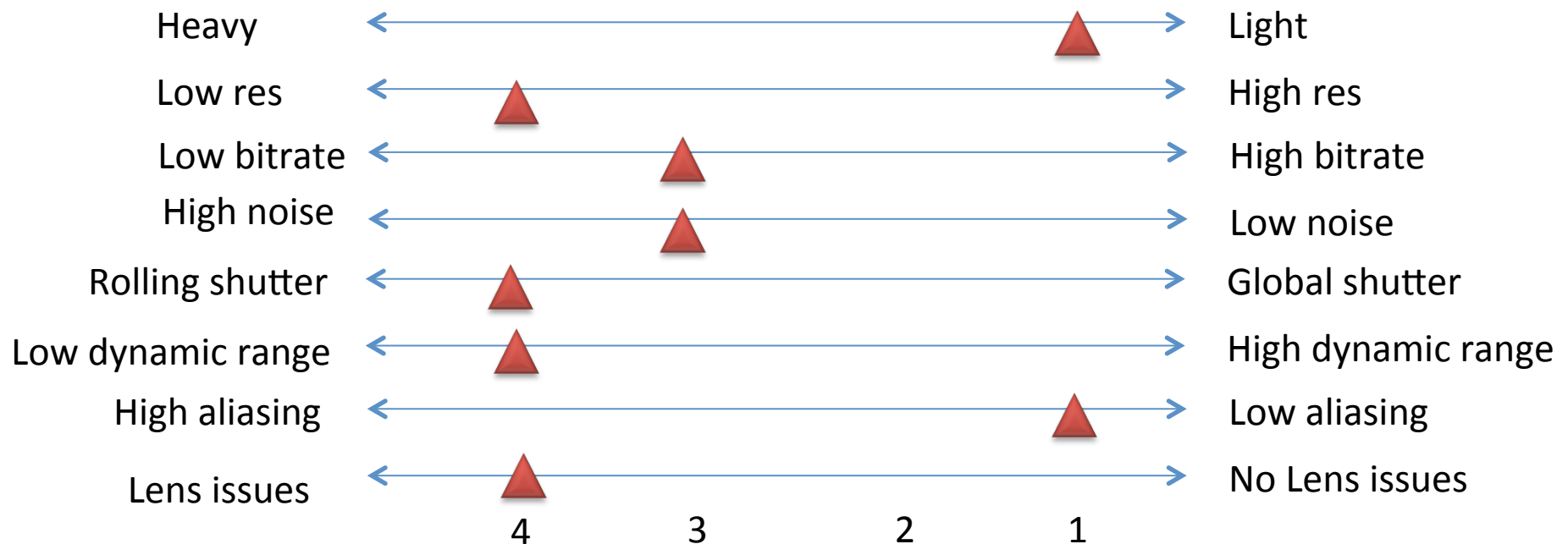
Ideal camera for UAS use: (hint: doesn't exist...yet!)



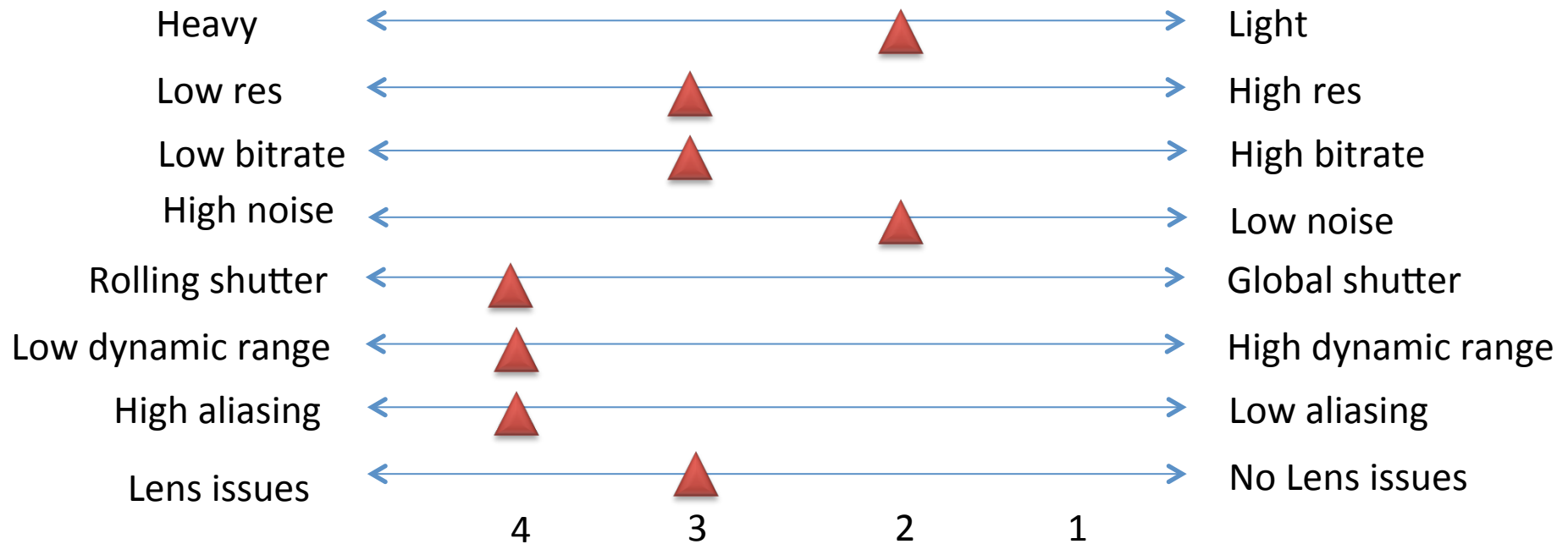
Sony F55,
Canon C300,
Red Epic, etc.



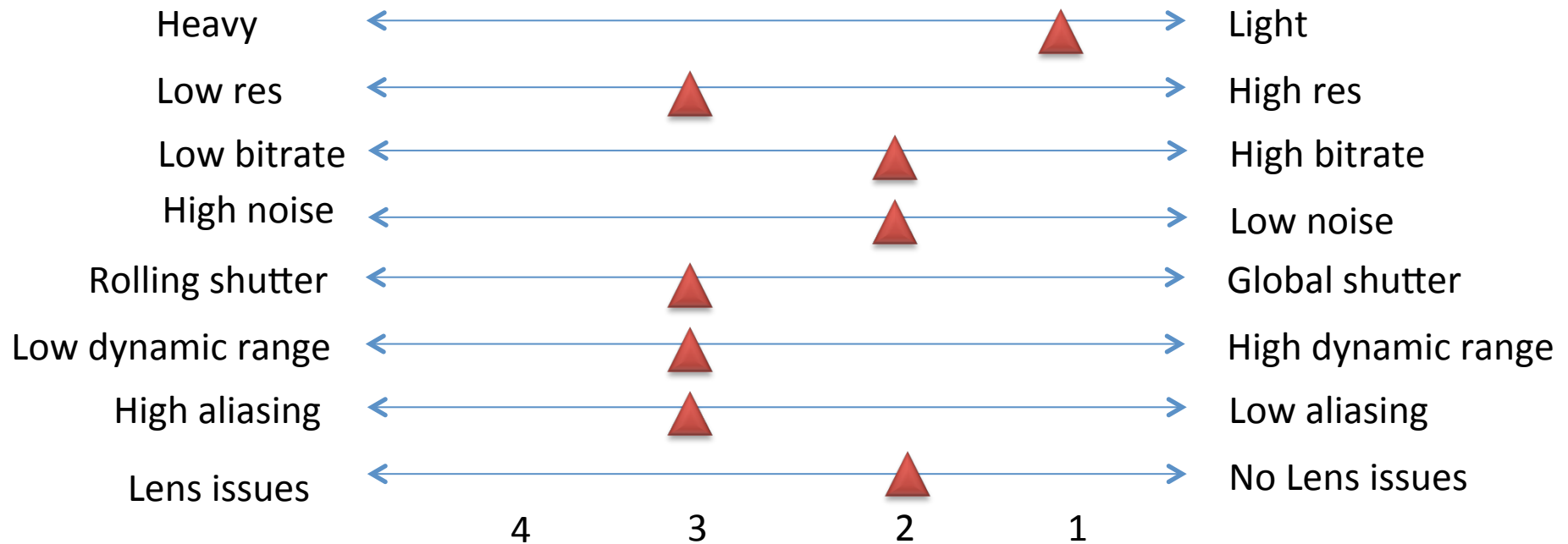
GoPro Hero (with protune)
Sony ActionCam, CX740
Contour HD etc.



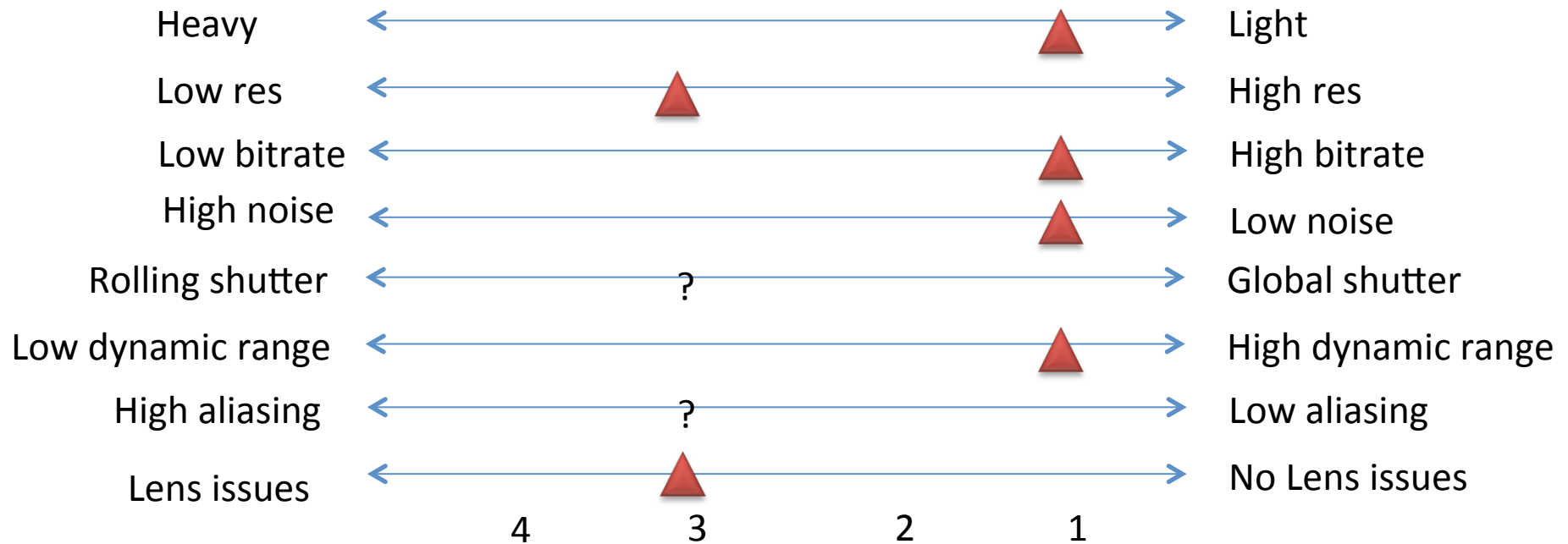
Canon 5DmkII/III
Canon 550D
DSLRs etc.



Hacked Panasonic GH2/3 (Hack at your own risk!)



Blackmagic Design Pocket Cinema Camera



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A: It depends...if you ask first!

