Wonk Worksheet Instructions

"Huang's Law" for the good HDVD shoot of a symphony states: "Use the flexible power of the HD camera to get a pleasant (not hyperactive) mixture of shots of the whole orchestra, groups of sections, large sections, small sections, small groups, and solo players — depending on what forces the composer commits at various places in the score." Huang's Law was inspired by 6 wonderful symphony Blu-rays published between 2008 and 2012 by NHK:

- Tchaikovsky Symphony No. 6 from NHK with the Berlin Philharmonic under Ozawa (NSBS-12133)
- Mahler Symphony No. 1 from NHK with the Saito Kinen Orchestra under Ozawa (NSBS-13457)
- Brahms Symphony No. 2 from NHK with the Saito Kinen Orchestra under Ozawa (NSBS-14719)
- Schumann Piano Concerto & Bruckner Symphony 9 from NHK with the Concertgebouw Orchestra under Haitink. (NSBS-13872)
- Mozart Symphony 35 & Haydn Cello Concerto from NHK with Mito Chamber Orchestra under Ozawa (NSBS-17531)
- Mendelssohn Piano Concerto No. 1 and *Midsummer Night's Dream Music* from NHK with Mito Chamber Orchestra under Ozawa (NSBS-13874)

If a symphony Blu-ray doesn't satisfy Huang's Law, we also say it has *DVDitis*. SD cameras used to make DVDs don't have enough resolution to make pleasant, large-scale images of a symphony. So a symphony DVD usually consists of a huge number of short clips of small groups of musicians (or single players) and the conductor. These short clips tumble through the music as fast as the Road Runner cartoon character. The TV director of a DVD also comes up with many tricks to amuse the viewer like instrument-only clips, panning, zooming, aerial swooping, shots from the rear, and above all— a multitude of shots of the conductor. These DVD-style shots are low-value.

On the other hand, with HD video cameras, you have enough video resolution to get HDVD-style, large-scale, and high-value shots that can't be shown in a DVD. A good HDVD of a symphony will also have a reasonable number of well-justified, small-scale shots of musicians and some clips of the conductor. So how do you distinguish between Blu-rays that are really just DVDs in disguise and the real HDVDs that take full advantage of HD TV?

Fortunately we have a model. After studying the 6 milestone NHK recordings, we arrived at way of comparing other symphony recordings to them by "running the numbers" in a Wonk Worksheet ("WW"). This worksheet lets you run the numbers and diagnose if a Blu-ray symphony recording is healthy or ill with DVDitis. Just copy the form and show your wonk!

The Key Idea

The key idea is to count the number of low-value DVD-style clips and the number of high-value HDVD-style clips in the video. The Wonk steps through the clips in the symphony video and assigns each clip to a category. The Wonk then divides the total number of clips into the number of seconds of music to get the "pace." Finally, we have established ratios and rules-of-thumb to quickly assess if the title is an unadulterated HDVD or suffers from DVDitis. DVD is starting now to fade from the marketplace as 2K (and 4K) becomes the norm. But the bad habits of DVDitis die hard.

The Work Worksheet

Let's work our way down the worksheet. In the top two fields we fill in basic information. Examples of "Soloist(s)" would be Mutter playing a violin concerto or Netrebko, Garanča, Kaufmann, and Pape singing in Beethoven's Symphony No. 9. PQ = picture quality, and SQ = sound quality. There's a place to fill in the sound recording sample rate. We assume the surround sound is lossless. If it isn't, you would make a note of the audio codec used.

Types of Clips

Here's our list of different kinds of clips. The entries beginning with an " * " are large-scale, high value, knights-on-horseback clips. The other entries are small-scale, low value, foot soldiers trudging along:

C= conductor shot. This is usually a close view of the front of the conductor from the waist up

 $\mathbf{C/B}$ = conductor-over-backs. This is a mid to long-range view showing the C and the backs of many musicians

Soloists — **not realistic**. An example of this would be a shot from the rear of a star playing a violin concerto. It's not a view the audience would see, and has low value

*Soloists — realistic. An example would be a shot of the whole body of a star violin player from the front as the audience would see her. See below different guidelines for different types of soloist players

Solos. This is a clip with that shows only one member of the orchestra (like a solo tuba or the concertmaster alone)

S§ = small section. This means an instrument section of up to 4 players

SG = small group. Up to 4 players with different instruments framed together in a clip. One wrinkle here is that we consider less than half of a string section to be a small group. For example, if there are 14 1st violins and you see 6 in a frame, it's a small group

Misc. small-scale. We use this category for any small-scale shots that are difficult to slot elsewhere — a good example being when we have choristers performing with an orchestra. In that case we need to modify the rule because choristers are often bunched much closer together than

instrumentalists. This is a time to apply your judgment, and to trust your gut. For a larger choir of 60 or more, a shot of 8 to 12 choristers might feel like a close-up of a bunch of heads. But when the shot includes more than 12 singers, we might feel that we are getting an audience-like perspective.

*L\\$ = large section. 5 or more horns, percussionists, etc. More than half of the strings in a particular string section, etc.

*LG = large group. This includes 5 or more mixed instruments

*Misc. large-scale. This category, as with its small-scale opponent, is used for any large-scale shots that are difficult to slot elsewhere. For a large choir of 60 or more, a shot containing greater than 12 choristers will likely give an audience-like perspective and be large-scale. If a choir happens to have readily distinguishable sections (soprano, alto, tenor, or bass), it would be reasonable to classify a section shot as large-scale if it has been neatly framed by the video director. For a chamber choir (perhaps up to a maximum of 36 choristers, but typically less), waist-up shots with multiple singers (perhaps 25% or more of the total number) are likely to feel large-scale. Rules can only take us so far. Judgment will be key in assessing a broad range of shots over a broad range of concert productions.

*PO = part orchestra. This includes a large portion of all or of several string sections or other combination of instruments. If the frame shows all the brass down a long row, that would be a PO view. All the woodwinds in a view would be PO

*WO = 90% and up of the musicians in a view from the audience. A WO shot must normally fill up the whole video frame so as to get as much detail about the musicians as possible. A shot showing the backs of many or all of the musicians is not a WO shot—it's a C/B view.

IO = instrument only (not the number 10). If a shot of an IO is made for a special reason, it's not an error, and is counted as a solo shot. But if the shot is just lazy filler, we keep count of it as a separate kind of clip. If there are too many of these (like 20) we may downgrade for this.

Other low-value. An example is an "anthill shot." The whole orchestra is shown from far away and the image of the orchestra takes up a small portion (say, 1/3 or less) of the screen. Another example would be an error shot where nothing is in focus.

*Other high-value. An example might be an architectural shot that shows a magnificent view of the venue and is deemed by the Wonk to add real value to the film. Another example would be shot of 3 trumpet players in a room off the stage playing distant music in a Mahler symphony. It's a small group, but it is also a high-value shot.

(Sometimes in reviews, we have spoken of "multi-section" shots. But we find it easier now to refer to LG or PO rather than multi-section.)

How to Run the Numbers

The hard part is stepping through the video and marking each clip into a single category. Then count the number of clips in each category and put that subtotal in the left margin in a circle. Then add up all those numbers to get the Total Clip Count. (The biggest total so far was a Mahler S1 with 890 clips!). Using the time stamps from the video, put the end time and the start time in the bottom right-hand corner of the worksheet and figure how many minutes and seconds the

performance lasted. (We normally do not deduct seconds of time the orchestra is at rest between movements. But some conductors take a long time between movements. Then we time each movement separately.)

Now go to the Pace & Ratios section of the WW. Divide the total seconds by the total number of clips and get the pace (how many seconds are in the average clip).

The large-scale, high-value categories of shots marked with an "*" are called supershots. Add up the number of clips in those categories to get a supershot total. Divide this by the total number of clips to see what percentage of the video was devoted to high-value video clips.

Next, add up the C and the C/B shots to get the total conductor shots. This number divided by the total clips show what what percentage of the video was devoted to the conductor.

Finally, add up the two categories of soloists shots and figure what percentage of the total soloist shots were realistic or high-value.

The Wonk Worksheet has been developed to keep the process of judging a video as objective and repeatable as possible. We have a large number of categories because we want to see in detail what the TV director is doing. But before calculating DVDitis statistics, we simplify things. For example, it is possible that a Wonk may consider, say, the woodwinds as a large section, a large group, or as part-orchestra. But this will not skew the results! Before calculating DVDitis statistics, L§, LG, and misc. large-scale shots are eventually combined (along with other large-scale shots) into a single number on the worksheet. This approach helps us reach a consistent result, despite expected variations in how we each think in the moment while watching a performance.

Whew. Wonking is not easy, but with a little practice it is considered well within reach for anyone! It can be rewarding to look at the world around us through a different lens, and you may find wonking a satisfying mind-bending game or brain exercise. In any event, after getting this far, you can objectively compare your subject title to the NHK milestone recordings.

Here are rules-of-thumb we are now using:

A good HDVD should have a slow pace with more than 10 seconds per video clip on average. 20 to 40% of the clips should be large-scale supershots. Conductor shots should be less than 20% of the clips in the video. Over 50% of soloist shots should be realistic.

More Thoughts on Using the Work Worksheet

The symphony orchestra is a complicated organism, and you will have to make many judgment calls in using the WW. You should read our special article on www.hdvdarts.com called *Standards for Grading Symphony Orchestra Concerts of Symphonies, Concertos, and other Large-scale Compositions*. Read our story on the NHK Mendelssohn Piano Concerto No. 1, which has a sample WW for an A+ symphony title. Then read our story on a Mahler Symphony No. 1 recording by the San Francisco Symphony (as part of a Keeping Score title). Study the WW for that title, and see why it got a D from us.

When assigning a frame to a category, ignore the incidental members of the orchestra who are not prominent or completely in the frame. Ask yourself, What's going on here? If there are 4 horns centered in the frame, don't bother with the heads, or feet, or elbows of other players. 4 horns is a small section.

A realistic shot of a piano soloist playing with a symphony means a view that a member of the audience could have with the unaided eye or with opera glasses looking at the pianist from 4:00 to 8:00 in a position that shows the waist of the soloist. If the view is from 4:00 to 5:30 you probably will not see the hands or keyboard but the view of the performer's demeanor and facial expressions can make for an excellent image. A view from 5:30 to 8:00 will show the keyboard and hands and is the highest value shot. Unrealistic views would be those that an audience member couldn't have. This would include keyboard close-ups (everybody knows what it looks like to play a piano), extreme close-ups of the performer's face, or shots taken from the sides of the stage or from within the orchestra. The very best HDVDs of the piano soloists stick pretty much to realistic views. But we don't want to be sterile or clinical—a few fancy shots are OK so long as well over half of the total soloist clips are realistic.

A realistic shot of a cello soloist is easier to define. All the cellist can do is sit on the front of the stage with the cello between his legs. Anything is realistic if shot from the audience side showing the cellist at least from the waist up. A side or rear shot of a cellist would normally be unrealistic. But close-ups of fingering and bowing are realistic for the cello film since an audience member could be on the front row just a few feet from the performer. Also, many viewers are surprised or amazed at how dramatic playing the cello can be. So close-ups of fingering and bowing are more valuable that seeing, say, fingers striking keys. Cello rules would apply also to bassoon and horn soloists who usually sit in a chair.

Violin and viola soloists are harder to film because they are mobile. As the camera gets closer and the performer moves about on the stage, the shots get harder to get and shorter, which works against a good HDVD. So the safe thing for the TV director is to shoot whole-body or waist-up shots from a middle distance. Shots from the side or rear are unrealistic for the violin. If the performer will stay still enough, the video can have some close-ups of fingering and bowing, and these are called "realistic" because they have high value. The violin rules would also apply to other mobile soloists playing the trumpet, flute, or clarinet, etc.

Some TV directors like to pan and zoom, even though these movements create inherently unnatural images that are taxing to the viewer's brain. Use your judgment whether to divide a long pan into separate "tableaux" and count it as several clips. Fairly often a shot starts as a whole-orchestra view and then zooms in to frame, say, a pianist. Feel free to divide that zoom into a single WO shot and a single soloist shot.

Video error shots include, for example, a frame with the wrong person or nobody in focus, a frame that's a jumble, a pan that blurs the picture, and a shot of the conductor with the snout of a bassoon sticking up in front. An error can be recorded as an "other low value" shot. A video of a symphony should not have a single error. Symphony musicians and the conductor never make any error that can be identified by a member of the audience. So it is intolerable for the videographer and his editor to blotch even one frame in his video of a symphony.

The timestamp column along the right margin lets you make notes for making screenshots and the like.

Grading the Video

There is no place on the form for a grade. We usually arrive at a grade in the story we write in the journal of www.hdvdarts.com. But we will discuss our grading process next.

The main problem we see with the Blu-ray symphony videos published in recent years has to do with video content, and that is something that can be objectively measured and described. The reason we developed the WW was to improve our ability to grade these videos in a way that can be peer reviewed. This may be the first time in history that art critics have ventured statements that can be checked.

Blu-ray symphony videos usually are excellent performances by world-class musicians led by famous conductors, normally in live performance. The quality of music making tends to be high. Live performances often celebrate a special event, which can add a palpable sense of anticipation and expectation by audience and musicians alike. Unless a Wonk has a special reason or inclination to consider performance quality or the significance of the performance event, HDVDarts.com typically focuses on the technical elements of the video.

We start with a grade of A+.

Next, we consider PQ and SQ. Picture quality should be sharp, clear, and in-focus. There should be good lighting and natural color saturation. Otherwise, deduction of a partial or entire grade should be considered. For SQ, we recognize 96kHz/24-bit sound sampling as being well within the grasp of current industry standards and practice, and therefore a deduction is made for anything less. We adjust down if there is no lossless sound codec for the surround sound. As with picture quality, the deduction for sound quality is often a partial letter grade.

Lastly, we consider the 4 primary DVDitis criteria:

- If pace is not greater than 10 seconds per clip, deduct a full letter grade
- If the percentage of supershots is not greater than 20%, deduct a full letter grade
- If the percentage of conductor shots is not less than 20%, deduct a full letter grade
- If the realistic soloists shots is not greater that 50%, deduct at least a part-letter

A Wonk can exercise discretion in adjusting a final grade by a partial letter as follows:

- Adjust down if the title only just barely meets any of the 4 DVDitis criteria
- Adjust up if the title greatly surpasses any of the 4 DVDitis criteria
- Adjust up for for a special event that has been captured on HDVD
- Adjust up for special features included on the HDVD, such as a particularly useful documentary (more than some banal interview with the conductor)
- Adjust up for exceptional performance attributes