## **Heuristics for Horn Players**

I don't know about you, but every time I encounter the word *heuristics* while reading I have to look it up. Every time. So I have decided that "the obstacle is the path" and I am going to dwell on it here for a bit so that I finally remember it. Because heuristics is really a useful concept.

The word comes the Greek *Heurisko* [*heur* (to find out, discover) + Latin *isticus*, - istic] meaning "find or discover." A heuristic is an approach to problem solving, learning or discovery that is not exact or completely accurate, but it gets the job done for the nonce. A heuristic usually goes by the more common sobriquet of Rule of Thumb. It is an educated guess, a general guideline (rather than a strict rule), a way to make a rough estimate of a complex problem or process quickly and easily. People develop Rules of Thumb over time from their experiences, and nearly every job or context in life has a collection of Rules of Thumb. Some examples below:

## **Common Rules of Thumb (heuristics)**

Measurement: Use your thumb as a makeshift ruler.

Interviewing: Make eye contact.

Fashion: Don't wear white after Labor Day.

Finance: To calculate when an investment will double, divide 70 by the interest

rate.

Weather: Red sky at night, sailor's delight. Red sky in morning, sailor's warning.

Programming: First rule of Program Optimization: Don't do it.

Survival: You can live 3 seconds without blood, 3 minutes without air, 3 days without water, 3 weeks without food.

Carpentry: Measure twice, cut once.

Business: 80% of profits comes from 20% of the customers (aka Pareto's Principle).

Temperature: Take the number of chirps a cricket makes in 14 seconds, add 40 and

this is the approximate temperate in degrees Fahrenheit.

Retirement: The percentage of bonds in your portfolio should equal your age.

Life: Always put your keys in the same place.

Networking: Don't be a jerk.

Success: 80% of success is showing up.

Medicine: Treat the patient, not the monitor.

Organizing: If it takes two minutes or less, do it now.

Gambling: When playing Blackjack, assume that any unseen card is an 8.

Illness: For every hour you spend in surgery, it takes about one month to recover

and feel normal again.

Weather, again: When ants travel in a straight line, expect rain. When they scatter, expect fair weather.

Most Rules of Thumb arise from trial and error. Try something. See what happens. Take note of what works and what doesn't. Capture the results in a sentence or two, including complex processes. The formulation is fuzzier than any sort of exact recipe (as in baking) or algorithm. Heuristics, then, is a way to solve a problem much more quickly than following a detailed set of rules. Heuristics are ways to make decisions based on incomplete information or to deal with highly complex situations. The well-known phrase "the quick and dirty solution" to a problem is exactly what heuristics are all about. It's also a way to achieve a workable solution when no exact solution is known or even possible.

What better field to make use of heuristics than our own daily blissful battles with our beautiful brass beast? Since Rules of Thumb/Heuristics come from experience, every horn player's list is bound to be a bit different. Following is a list of some that I have picked up or observed over the years. You probably know more – send them to me at your first opportunity!

## **Horn Heuristics**

It's better to be sharp than out of tune.

Practice the stuff you can't do yet. Why polish a new car?

It should take about 20% of your practice time to conquer 80% of a piece, and then 80% of your time to master that last 20%.

You always have time for the things that are important to you.

Never speak ill of another player; such talk will always come back to bite you.

For unreasonable conductor requests (e.g. continual demands to play softer), after you reach your limit (10% above the no-speaky line) play exactly the same thing and keep asking "How was it this time?" Eventually they will tire of these demands.

Transposition "mental key signature" rule of thumb: - if it's a sharp key, add a sharp; if it's a flat key, add a flat. E.g. Horn in G: one sharp for G major, add a sharp = 2 sharps, or D major (horn key); Horn in E-flat: three flats for E-flat, subtract a flat = 2 flats = B-flat major).

To transpose horn in A-basso or A-flat-basso, simply read it as old notation bass clef and adjust the mental key signature (A: 4#s; A-flat: 3 flats)

The "13th transposition" is playing a part in C (concert) in bass clef, like reading a

trombone part. Be acquainted with it - it will come up sooner or later. Method: read it either 1) in tenor clef or 2) in E-flat horn, down an octave.

You can never win an argument with a conductor. On the other hand, there is such a thing as "malicious compliance" where a player (or players) might decide to play exactly what the conductor conducts. Not recommending this, just sayin'.

Half of performance success is from the quantity and quality of practice. The other half is from being comfortable on stage (stage presence).

The first solution to any problem on the horn is: More Air.

Money can't buy happiness, but it sure quiets your nerves. Descant horns won't help you to play any higher, but they will definitely improve your batting average in the stratosphere.

Valves help with final pitch adjustment, but aren't responsible for pitch changes beyond about a minor third.

If it is not assigned and given a grade, it won't be done.

The more valveless study a player does, the easier playing with valves is.

The more ways a scale is studied, the easier any one scale is.

Players may prefer one set-up or another, but they sound like themselves on just about any equipment or mouthpiece.

Never play from a transposed (for F horn) part when the original key is available.

Contrary to popular belief, it is possible to play the horn without sheet music nearby.

The first choice of notes/fingerings for whole step trills are overtones 8 and 9.

Young players who can't lip trill and don't know the style are not ready to play Mozart.

The earliest lessons for novices should be concerned with how it sounds and feels to play horn, and not with reading or interpreting music notation.

To tell if a young player is depending on mouthpiece pressure to change pitch, watch their left hand pinky in the hook – see if it pulls or strains against the hook.

Improvement is faster and better with a coach/mentor to observe you and suggest ways to improve.

Before playing something new, sing it. Before singing it, buzz it. Before buzzing it, tap it.