Voice Assessment Guide

Hirano (1981) developed the original GRBAS scheme:

G = Grade The general level of the voice quality; 'the degree of hoarseness or voice abnormality' 0 = normal, 1 = slightly disordered, 2 = moderately disordered, 3 = extremely disordered.
R = Rough Represents the psychoacoustic impression of the irregularity of the vocal fold vibrations. It corresponds to the irregular fluctuations in the fundamental frequency and/or amplitude of the glottal source sound. Perceptually it is likely to be heard as a harsh, irregular quality. 0 = no roughness, 1 = slightly rough, 2 = moderately rough, 3 = extremely rough.
B = Breathy A psychoacoustic impression of the extent of air leakage and is related to turbulence. This is likely to be heard as a whispery sort of quality. 0 = no breathiness, 1 = slightly breathy, 2 = moderately breathy, 3 = extremely breathy.
A = Aesthenic Denotes weakness or lack of power to the voice. It is related to a weak intensity of the glottal source and/or lack of higher harmonics. This will be perceived as a weak, usually low energy and volume quality. 0 = no weakness, 1 = slightly weak, 2 = moderately weak, 3 = extremely weak.
S = Strained A psychoacoustic impression of a hyperfunctional state of phonation. It is related to an abnormally high fundamental frequency, noise in the high frequency range and/or richness in high frequency harmonics. We will hear this as a tense quality within the larynx. 0 = no strain, 1 = slightly strained, 2 = moderately strained, 3 = extremely strained.

The above table is taken from: Voice Work, Christina Shewell (2009)

In addition to the GRBAS it is useful to consider other features of voice as described in some other voice profiling schemes. A few examples are below:

Dejonckere et al. (1996) added: instability (think intermittent pitch/phonation breaks).

Langeveld et al. (2000) added: aphonia, diplophonia, staccato, tremor, falsetto, and vocal fry (creak).

CAPE-V Scheme

Developed by the American Speech and Hearing Association, it expanded the original concepts of the GRBAS to also include pitch and loudness. All features are marked as consistent or intermittent.

Other often used terms

De-energised, guarded, backed. Also think articulation (e.g. hard glottal onset) and resonance (e.g. hyponasal).

Voice Skills Perceptual profile (VSPP)

The Voice Skills Perceptual profile (Shewell) assess eight parameters: body (posture), breath (inc. respiratory rate and method i.e. mouth/nose at rest), channel (vocal tract—larynx to lips), phonation, resonance, pitch, loudness, and articulation (style of speech e.g. rate, fluency, clarity).

Other considerations when doing a voice assessment:

Vocal Tract Discomfort Scale (VTDS)

Assessing associated persistent throat symptoms: burning, tightness, dryness, aching, tickling, soreness, irritability, globus. Also think: When it is better/worse. Does it fatigue? Any associated throat clearing/cough.

Basic overview of a voice assessment

Case history: Onset/pattern, any associated life events?, thorough medical history (inc. hearing impairment in self and family), mental health, current medications (some impact voice/dryness/cough), social information, voice use (work/interests inc. singing and sport), daily hydration, smoking, drugs, alcohol, timings of food/fluids, irritants, breathlessness (ILO)/breathing ax, alongside objective (inc. palpation if needed) and subjective voice assessment. Formal measures i.e. Voice: VHI-10, VTDS, Cough: CSI, NLHQ, Breathing pattern: BPAT, Nijmegen.