

FACTS ALONE ARE NOT ENOUGH: A PLEA FOR COORDINATED VOICE AND MESSAGE

by
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Reality over Cliché

A cliché among many coaches of debate, oratory, and other forms of public speaking occurs when they tell their students to: “Research your topic and get the facts!” Some of these coaches quickly allude to Aristotle and others like him who contributed greatly to the development of rhetorical theory and criticism, and who strongly promoted the use of evidence, enthymeme, and syllogism.

A cliché resulting consciously or unconsciously among many students of the aforementioned instructors is: “Since I have researched my topic, gathered evidence, and weaved this evidence into logical arguments to support my message, I will be effective in the classroom and in tournament competition.” Coupled with the aforementioned cliché should be another one, namely: **Not necessarily so!**

Aristotle, for instance, did advocate research and fact-gathering, but his remarks should be treated in proper context. Aristotle also realized that external matters like voice, gestures, movements, and facial expressions have much importance because of the “defects of our hearers.” Aristotle meant that **in theory** public speakers should focus on inspiring their hearers to accept ideas, evidence, and logic rather than aim on entertaining their hearers through the use of vocal and visual techniques. However, as a keen observer of human behavior Aristotle realized that speaking situations don’t work by the preceding desired theory. Instead, delivery **is** an important instrument of persuasion, and the vocal and visual ways by which a speaker presents his or -her messages **do** make a difference. In short, facts alone are not enough for effective communication.

In the February 2000 edition of

Rostrum, the author urged his readers not to forsake their physical ethos, namely facial expressions, movements, and gestures. The purpose of this article is to urge the readers to appreciate and employ advantageously the following principal elements of vocal delivery: quality, rate, volume, pitch, pronunciation, and articulation.

Quality Should Blend with Message

Sound always has for its source some vibrating body which produces disturbances, or waves, in some transmitting medium such as air. The waves spread through the medium and reach the ear for the hearer’s interpretation. The sounds may seem rich, pleasant, charming, or beautiful; or they may seem thin, rough, harsh or ugly. These sounds, or **colors**, are a speaker’s vocal **quality**.

Vocal quality refers to a tone’s complexity, namely the frequency and relative intensity of certain vibrations. For instance, at a humanities concert combining Western music with ancient Japanese court music, successive tones from an oboe, saxophone, clarinet, trumpet, violin, and harp will sound different from each other. Variation in sound also will come from successive tones from a ryuteki (flute), hichriki (short, double-reed pipe), sho (mouth organ), kakko (small, horizontal, two-beaded drum), taiko (large, hanging drum), shoko (small gong), biwa (lute), kono (zither), and ko-tsuzumi (shoulder drum).

Vocal quality in humans is produced by the amount and shape of the breath stream passing over the vocal cords in the larynx, or voice box, by the vibrations of the vocal cords; and by the size, shape, texture, number, and manner of coupling of the various resonance chambers, including the cavities of the throat, mouth, and nose.

For example, deep, mellow, and

rich voices tend to come from people whose throat muscles are appropriately relaxed. High, sharp, and squeaky voices tend to come from people whose throat muscles are tense and rigid. Dull, muffled voices tend to come from people whose throat muscles are too relaxed. Other unpleasant voices come from people with sore throats and stuffy noses. Judges and other members of the audience easily can respond negatively to a speaker whose voice is nasal, breathy, colorless, rasping, piercing, or grating.

Desire for success in the classroom or in tournament competition should be sufficient reason to develop voice quality control. However, many students of debate, forensics, and public speaking seem unaware of, or even indifferent to, the effects their vocal quality has on their audience. Students who want to improve their vocal quality should learn to hear and evaluate it, and must realize that it is determined only partly by the structural limitations of their respective resonance system.

This article is not intended to correct extremely undesirable deviations of a clinical nature. A medical doctor is needed for that. Instead, this article is designed to help the readers develop awareness of vocal quality and its production. Since good quality generally means **the absence of certain negative tonal characteristics**, this article describes certain deviant qualities and recommends simple, yet often pragmatic, ways to control the objectionable features. This should help the readers to improve their vocal quality.

One way to improve vocal quality is to utilize listening skills. This can be accomplished, for illustration, by listening to different voice qualities on radio and television; in movies, classrooms, shopping malls, and restaurants;

at work or public forums; or during play or other social gatherings. Trying to identify various types can sharpen listening skills and develop awareness of vocal factors. Personal vocal quality also can be developed by delivering speeches or reading aloud into a tape-recorder and then, with an instructor or friend, trying to identify the pleasant and unpleasant tones that are heard.

To discuss vocal qualities with exactness is difficult, because no universally accepted names exist for them. Many disagreements and contradictions occur, in this respect, among authors of textbooks on public speaking, voice and diction, acting, oral interpretation, radio and television broadcasting, and speech pathology. However, such authors recognize the importance of quality differences and advocate control of quality for making voice effective. The following examples of poor quality control usually are easy to detect.

Some Inappropriate Vocal Qualities

BREATHY vocal quality results when the vocal cords are not brought together closely enough during tone production, and when air rushing through the glottis (the space between the vocal cords) produces friction heard as a whisperlike noise in addition to the vocal cord tone. This vocal quality may be appropriate for an actress trying to appear and sound sultry, but it is inappropriate for effective public speaking!

HOARSE vocal quality is characterized by a grating, rough, sometimes husky sound heard from people with laryngitis. This quality can be caused by organic problems in the larynx. Swelling, growths, paralysis, or other organic problems can cause laryngeal malfunctions likely to produce the harshness. This quality may be appropriate for drill instructors yelling at their recruits in boot camp, but it is inappropriate for effective public speaking!

NASAL vocal quality occurs from inadequate closure of the nasal port by the velum (the soft palate) and associated structures. It is character-

ized by resonance from the nasal cavities during the production of sounds normally non-nasal. This quality may be appropriate for a stereotyped villain in a movie, but it is inappropriate for effective public speaking!

STRIDENT vocal quality usually comes from strain and tenseness in the resonators during vocal production. The harsh and piercing vocal quality may be appropriate for an actor pretending to have a severe cold, but it is inappropriate for effective public speaking!

THIN vocal quality generally is flat, colorless, and drab. It may be appropriate for a stereotyped nagging, forceful, and domineering wife or mistress, but it is inappropriate for effective public speaking!

Once one is aware of what vocal quality is and what it should not be for effective oral communication, at least four steps can be taken to improve vocal quality.

LEARN TO RELAX. Tension and vocal strain cause numerous vocal problems, including vocal distortion. It is easier to achieve efficient, effective voice production by relaxing the body to a level of tension just adequate to the task at hand. Exercises to relax the muscles of the neck, shoulders, pharynx, larynx, face, and mouth can be helpful, but one should approach these exercises easily, without a feeling of urgency.

SEEK VOICE AWARENESS AND IMPROVEMENT EXERCISES. Exercises to identify different vocal qualities and to improve known negative qualities can be helpful, but practicing these exercises should be done daily and without a feeling of urgency.

WHEN NECESSARY, SEEK PROFESSIONAL HELP. If an important, undesirable vocal quality exists after trying the aforementioned drills, then professional help should be sought. One should not persist in exercises and drills that are not producing the desired result. Perhaps x-rays of nasal and non-nasal vowel production are required. Another possible need is a laryngoscopic examination to determine voice practice or medical attention.

In such cases, a physician or speech pathologist should be consulted.

USE VOICE QUALITY FOR PERSONAL ADVANTAGE. Everyone who talks has voice quality characteristics, mostly unconsciously controlled. Voice quality occurs whenever talk occurs, so voice quality should be used for personal advantage. Exercises and drills prescribed, for example, by a physician, speech pathologist, speech instructor, or singing instructor, should not be wasted. Students of public speaking should note that their primary goal is to transmit their intended thoughts, and that vocal quality must coordinate with the intended thoughts. In short, voice must blend with sense!

Rate Should Blend with Message

If someone were to blow numerous soap bubbles in front of a two-year-old child, for instance, the child probably would become confused over which bubble to catch and thus would not catch any. However, if someone were to blow one bubble every two minutes in front of the same child, the latter might catch the first bubble, but likely would not be present to catch others. The child's attention would wander, causing the child to play elsewhere. Similarity holds true in public speaking.

If a speaker were to bombard his audience with multiple ideas rapidly delivered, many of the audience probably would be unable to discriminate among sounds, think about what was said, assimilate the messages, respond to them, or work with them. People who lack sufficient time to apprehend and comprehend a message may give up trying. In such cases, effective communication is absent.

Then, too, speakers who talk too slowly tend to lull their hearers to daydream or even to sleep. Again, effective communication would not occur.

Effective public speakers talk neither too rapidly nor too slowly. Most people speak American English within a range of 130 to 180 words per minute. This does not mean that a rate of 90 words is too slow, nor that 200 words is too fast. The ultimate test of a desirable rate of speech is whether or not the au-

audience understands the intended message.

Rate of speech depends on many factors, especially pause, phonation, occasion, subject matter, and personality.

PAUSE determines rate. Pauses are periods of silence with several functions. For illustration, pauses are normal places to breathe; breathless gasps often reflect inexperienced speakers. Pauses act as oral punctuation, serving to separate words and phrases from one another like commas do; and clarifying and strengthening their meaning like periods, question marks, and exclamation points do. Pauses serve as transitions from one thought to another, serve as attention-getting devices, and give the audience time to digest and react to what is said.

PHONATION determines rate. Phonation refers to duration or time consumed in uttering vowel and consonant sounds. Whether the rate is fast or slow, short or long, some words should be made to stand out from the context by changing their time value. Regardless of the speed or duration, phonation should adapt to the particular audience, message, mood, and the like.

OCCASION determines rate. Fast delivery usually is for gaiety, eagerness, and joy as expressed, for example, at pep rallies, athletic events, and political rallies. Slow delivery usually is for reverence, solemnity, and peacefulness as expressed, for illustration, at funerals, graduation exercises, and business meetings.

SUBJECT MATTER determines rate. Subjects that are light, simple, and familiar usually are spoken at a faster rate than subjects that are deep, complicated, and unfamiliar or esoteric.

PERSONALITY determines rate. Speakers who are confident, socially-minded, egocentric, or well prepared on their subject tend to speak faster than those who are nervous, introverted, shy, or poorly prepared on their subject.

In summary, the ultimate test of a desirable rate of speech is whether or not the audience understands the in-

tended message. One should speak slowly enough to be understood and fast enough to sustain audience attention. Skilled public speakers frequently modify their rate, well-placed pauses, and phonation.

Volume Should Blend with Message

Volume concerns the loudness or force of the voice. Variation in loudness occurs by increasing or decreasing the force of impact of air against the vocal cords. When the force of the impact is great, the cords become tense and elongated; vibrations occur through a greater distance called the *amplitude*; and a loudness occurs. As the force of the impact is lessened, the cords become relaxed and shorter; vibrations occur through a shorter distance; and a soft sound or even a whisper occurs. This can be seen by using a rubber band. Pulling the band makes the sides long and tense. When plucked in this condition, the band gives a loud noise compared with what happens when the sides of the band are released and allowed to hang loosely. So, too, are the vocal cords.

Details about the levels at which sound becomes perceptible and pleasant or painful are best handled by physicians, audiologists, and engineers. However, students of public speaking should be concerned with volume, for it can capture or lose attention, give or lose emphasis, convey or destroy meaning, and transmit or smother feelings and emotions. In short, speakers who antagonize their hearers by talking too loudly, too softly, or with monotonous volume should not expect to be effective communicators. Speakers must change their volume according to degree and form.

DEGREE of volume refers to variations in the amount of energy applied is speaking. Volume can vary from a shout to a whisper. Of course, the meaning of the message should dictate the degree of volume. Some speakers are fortunate to perform in rooms with excellent acoustical design and high-quality, properly-working microphones. Other speakers must perform in rooms with poor acoustical design, improperly-

working microphones, and numerous distracting noises coming from the surrounding area, like noises from lawn mowers or construction jackhammers. Whatever the situation, speakers must adapt their volume to the environment; speakers must be clearly heard by the audience.

FORM of volume refers to the ways by which force is applied. Some instructors categorize form into the explosive, expulsive, and effusive.

EXPLOSIVE FORM is applied abruptly like when a coach shouts an order from the bench to his players on the field.

EXPULSIVE FORM is applied in normal conversation.

EFFUSIVE FORM is applied gradually, resulting in a draw-out tone which indicates control but also sentiment, contemplation, or even grandeur.

Perhaps the most universally known forms of volume are accent, stress, and emphasis.

ACCENT refers to vocal power applied to syllables within a particular word. It is often used to distinguish words spelled the same but different in meaning. Consider, for instance, how the syllabic stress in the following pairs of words changes the meaning of the words.

ADDRESS - address

(What is the ADDRESS of the person about to address the audience?)

COMbat - combat

(If we must enter COMbat, then I will combat to the death of one of us.)

Content - content

(Are you conTENT over the conTENT of the chapter?)

Contract - contract

(Did you see his face conTRACT when he read his new CONTRACT?)

CONflict - conflict

(If there is another CONflict, wi)J your heritage conFLICT with your loyalty?)

deFECT - defect

(I shall deFECT from your team, if you have one more DEFect in your plan.)

preSENT - present

(Please come forward to preSENT the PREsent to Mrs. Winthrop.)

PROject - proJECT

(This PROject should proJECT your image more favorably.)

OBject - obJECT

(The OBject of this exercise is to learn how to obJECT more strongly.)

REcord - reCORD

(The REcord department has no secretary to reCORD inventory.)

Usually nouns and adjectives receive primary accent on the first syllable, and verbs receive accent on the second syllable.

STRESS refers to vocal power applied to words. Stress makes certain words stand out from other words in a sentence, thus strengthening the meaning of the specific message. Usually stress is applied to action words, idea words, and picture words; rarely is it applied to connective or structural words. Abraham Lincoln's "*of, by, and for the people*" is a notable exception to general usage.

Consider, for illustration, the sentence, "Marge was determined to win the automobile." Notice how stress on a particular word changes the meaning of the sentence.

(1) **MARGE** was determined to win the automobile.

(2) Marge **WAS** determined to win the automobile.

(3) Marge was **DETERMINED** to win the automobile.

(4) Marge was determined to **WIN** the automobile.

(5) Marge was determined to win **THE** automobile.

(6) Marge was determined to win the **AUTOMOBILE**.

The first sentence implies that Marge alone was determined to win the automobile. The second sentence implies that Marge was but no longer is determined to win the automobile. The third sentence stresses Marge's attitude. The fourth sentence focuses on Marge's method for winning. The fifth sentence implies Marge was after the best automobile. The last sentence identifies the object of Marge's determination. Indeed, stress does determine meaning!

EMPHASIS refers to vocal power

applied to units longer than syllables and words. For example, read aloud the following statements and emphasize volume when reading the capitalized parts. Notice how volume strengthens the meaning.

To err is human, **TO FORGIVE** **DIVINE**.

The man who saves money nowadays isn't a miser, **HE'S A WIZARD!**

It should be **EASY** to make an honest living, for **FEW PEOPLE** pursue it.

Before marriage, a man **YEARNs** for a woman. After marriage the **Y** is **SILENT**.

When a man says, "I run things in my home," he means the **LAWN MOWER**.

It is very difficult to stand prosperity, **ESPECIALLY YOUR NEIGHBORS'**.

One advantage of being stupid is that you **NEVER GET LONELY**.

If a man wants his dreams to come true, then he **MUST WAKE UP**.

Give **EVERY** man your **EAR**, but **FEW** your **VOICE**.

Cruelty is **FED**, not **WEAKENED** by tears.

Whether it be *accent* on syllables, or *stress* on words, or *emphasis* on phrases or larger units of syntax, every form of volume must coordinate with the intended thoughts, or communication effectiveness cannot occur.

RECOMMENDATIONS. Prior to presenting your speech, try to visit the place where you will be speaking. Take along a friend and have him or her sit in various places while you practice your address. Make sure that your friend can hear you clearly from different locations. If certain places have poor acoustics, then try to adapt to those places while speaking.

Prior to speaking, also try to discover what distractions you will confront during your address. For instance, if heavy construction or lawn mowing is occurring outside your speech setting, then combat such distractions by increasing your volume. Such advice may seem like a "no brainer," but not surprisingly, many people fail to employ

sufficient volume in such circumstances, thus causing communication breakdown.

Before using a microphone, be sure that everything is working properly. Also remember not to shout into the microphone.

If you have a voice that usually falls below a level adequate for effective communication, then seek instruction for breathing and phrasing exercises. Often the voice that is inadequately loud gets trapped in the speaker's mouth and fails to find its way to the hearers. In other words, the speaker fails to open the mouth wide enough, so oral inactivity or failure to project is the problem.

In summary, the strength of the signal must be above the threshold of the receiver. The speaker must be loud enough to be heard by the receiver, and louder than environmental noises. Signal strength, (volume) and intelligibility (understanding the message) have a close relationship.

Pitch Should Blend with Message

Pitch basically is the position of a sound on a musical scale, and it is determined by how fast the vocal cords vibrate per second. For example, a sound having 256 cycles per second is called *Middle C*. A tone one octave higher is produced by 512 cycles per second. Most people have a usable pitch range of two octaves, but few use this range effectively.

As a person matures, pitch usually follows a downward course. At maturity the voice is pitched at a lower range than that of an immature voice. Thus, grade school children usually have pitches higher than those of high school students, and the latter often have pitches higher than college students. Also, men's voices, because of the length and thickness of the vocal cords, usually are lower in pitch than those of women's voices. An appropriate pitch for either sex is that which produces the most resonant tone.

Meaningful communication demands variation in pitch, and the latter comes about primarily in three ways. The *STEP* is a distinct change that goes

either up or down. The *SLIDE*, sometimes called *inflection*, is a change which starts gradually and continues in the upward or downward direction in which it started. The *DOUBLE SLIDE*, sometimes called the *circumflex*, involves two slides with a change of direction. Rising pitch patterns usually suggest indecision, uncertainty, incomplete thought, suspense, or a question. Downward pitch patterns usually suggest decisiveness, resolution, finality, confidence, or annoyance.

The relationship of the above changes in pitch must vary and adapt to the intended thoughts and language used. If variety of pitch does not occur, then a mechanical pattern develops, resulting in a sing-song pattern or a chant-like monotone.

The causes of vocal inflexibility include, for example, temporary illness, poor health in general, functional problems, emotional upset, hearing loss, or poor ear training. Whether the cause of the deadening effect on pitch is temporary or long-ranged, the important factor is that a limited range makes a dull delivery, and the latter does not produce communicative effectiveness.

It is unlikely that occasionally in your speech you can simply insert various pitch changes. Instead, you must discover the pitch changes you possess and then study how to improve them in value and number. Perhaps the simplest way to do this is to record your voice while delivering a speech and while engaging in normal conversation. Compare the two recordings, note how they differ, and then try to adopt for your public speaking the best elements of your conversational pattern. Also try to determine how you can strengthen your intended thoughts by using a wider pitch range within the pattern you established.

Pronunciation Should Blend with Message

Like most respected leaders in society, public speakers are expected to use pronunciation that meets the standards of well-educated people. Pronunciation means *choice* in uttering sounds and stressing words in such a way that

the words do not call attention to themselves. For instance, a speaker would employ incorrect usage by pronouncing salad as saLAD, *Chevrolet* as ChevROlet, *tomato* as TOMato, *basketball* as baSKETball, and *transportation* as transPORtation. Therefore, it is advisable to rehearse the proper pronunciation of one's message. Standard references of pronunciation are mandatory for communication effectiveness.

One should be especially careful not to pronounce the following frequently used words: *just, can, get, been, to, many, hundred, something and for*. Too often the words are pronounced *jist, kin, git. bin, ta, miny, hunerd, sompin, and fer*. Such pronunciation makes the speaker appear slovenly or ignorant of appropriate usage, and either image prevents effective communication.

Articulation Should Blend with Message

Whereas pronunciation essentially involves human *choice* as to the ways sounds are uttered and words stressed, articulation involves *capacity or ability* to produce sounds. To understand the importance of articulation, it is necessary to review- how the speech mechanism works.

The first step for producing speech is the *breath stream* or power mechanism. The primary biological function of breathing is to take oxygen and release carbon dioxide. Speech formation begins with the escaping air.

The second step for producing speech is *phonation*. The breath stream produces a controlled column of moving air that furnishes the power for speech. During exhalation, the escaping air passes through the throat and larynx. When the air passes over the vocal cords in the larynx, the cords assume various positions. When the cords are in a wide position, the air can escape with no significant noise. The cords can also take a *partially closed* position, thus causing friction noises characteristic of whispering. The cords can go into a very rapid motion, causing the space (glottis) between them to open and close alternately. When this

happens, the air column is allowed to escape in the rhythmical puffs of air that produce the sound waves of typical speech. Finally, the vocal cords can go into a *closed* position, completely stopping the passage of air and thus forming the *glottal stop*, so typical of a Scotsman's speech.

Once the vocal cords flutter and cause sound to develop, the sound waves in the breath stream bounce against different sounding boards and enter various chambers. This stage is called *resonance* and produces voice quality. Sounding boards include the chest walls, bones in the head, and the hard palate (alveolar ridge). Chambers include the throat, mouth, and nose. Before the sound waves and their quality escape from the body, they are shaped into various forms. The latter is the fourth stage, namely *articulation*.

The articulators act as valves or valve contacts for the interruption of the breath stream by complete stoppage, or by constriction of the passage. The major articulators of the human voice are the soft (velum) and hard palates, lower jaw, teeth, lips, various parts of the tongue, and the opening and closing of the vocal cords.

To appreciate the value of the articulators, slowly recite the following words and *feel* which articulators are involved in the formation of the capitalized sounds. The following words represent the major sounds of American English. Each line stresses a single sound.

tUb	frOnt	dOes
sErgeant	pOsterior	
	knOwledge	
shAft	Anxious	bAGgage
friEnd	lEopard	mAny
chAotic	mAintAin	designAte
bUSiness	EnglIsh	cItY
pEOple	lEisure	rEpEat
brOad	sOfT	wATER
nOt	OdD	stOck
vetO	potatO	flOtilla
crOOked	lOOk	cupfUl
sOOt	rOOf	sUre
heaRd	stiRRing	cuRRent
altaR	prescRibe	peRiphery
crackLe	tabLed	preambLe

whittLing	bubbLing	schooLing
Humble	aHoy	beHind
cAne	sLEigh	pAinful
Ideal	mIHty	dIamond
nOise	destrOy	fOist
profOUnd	IOUd	hOUse
fIown	sOw	thOugh
nitWit	Wooing	tWirl
WHich	qUIck	WHarf
Yesterday	valUe	Yale
HUman	HUbert	HUMility
Rue	veRy	suRe
Lemon	aLLOW	Learn
PHone	soFten	lauGH
caVe	oF	haVe
THeme	THinsome	THing
THere	worTHy	THese
eXit	maSS	fenCe
ZigZag	sciSSors	hoSe
Sugar	cuSHion	maCHine
treasure	garaGe	beiGe
hoBBy	tuB	caBin
hiccough	caPtain	trIP
DreaD	weD	aDDition
poStman	slit	satiSfaction
CHromium	toCK	piCKle
Ghost	ruGby	Goose
saMple	huMdruM	Mother
Ninth	iNcome	Now
saNG	fiNGer	aNGle
CHurCH	whiCH	detaCH
Judge	Jouste	fuDGe

RECOMMENDATIONS. Most people are capable of producing the primary sounds of American English, but careless habits develop when attention is not devoted to articulation. When practicing for a speech, it may help to request someone to sit in the farthest seat from the rostrum, if possible, and check for articulatory effectiveness. One can also listen to oneself via a tape recorder, video recorder, and the like.

Another exercise for good articulation is to abandon phonation when practicing a speech. This is the act of whispering so that the vocal cords are not vibrating and producing sounds. Without phonation, the speaker can concentrate on clearly enunciating the vowels and consonants to increase intelligibility.

Probably the most effective method is to invite someone formally trained in speech to analyze one's vo-

cal characteristics.

**The Educational Trinity -
Closing Remark**

The Attic orator Isocrates clearly identified the educational trilogy of *theory*, followed by *criticism*, followed by professional, constructive *criticism*. The theory presented in the February 2000 edition of **ROSTRUM**, coupled with the theory presented in this article, should give students of debate, oratory, and other public speaking genres sufficient information on how to make the delivery of a message effective.

The next step for the above students is to employ consciously the theory in their classrooms, tournament competition, and other public speaking activities.

Finally, the students should listen with open minds to the feedback of their instructors, coaches, and tournament judges. Students should never interpret helpful comments as *ad hominem*, or "attacks" on their personal character. All criticism should be interpreted - *and given* - as remarks intended to improve the quality of public speaking.

In conclusion, students of public speaking who want to be successful should always strive to employ good delivery, for facts alone are not enough!