# 

INNER VOICE VS. OUTER VOICE. COROLLARY DISCHARGE.

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T GUEMBES | ZEN WAVES THERAPY 07-2025

### Intro

When your brain plans to speak, it not only sends a signal to your mouth and vocal cords but also sends a "copy" of that signal, called a **corollary discharge**, to your auditory system, the voice.

This copy lets your brain predict what you're about to hear from yourself. It's called the Corollary-Discharge Bridge.

## Why it's a "bridge":

**Bridge between inner and outer:** It's the mechanism that connects your internal thought (intention to speak) with your external action (hearing yourself speak).

**Bridge between self and other:** When this system works properly, your brain tags your voice as your own. If the bridge fails (like in schizophrenia), the voice can seem like it's coming from someone else, even though it's self-generated.

## Why it's important to understand:

By grasping how the brain generates and monitors its own "inner voice" signals via the corollary-discharge mechanism, you gain a powerful framework for designing and self-administering vibratory healing techniques. Here's why it matters:

# 1. Aligning Prediction and Perception

The corollary discharge is essentially your brain's "preview" of the sound or movement you're about to make. When you introduce an external vibration—whether through a singing bowl, vibroacoustic table, or binaural-beat track—the brain compares that incoming signal to its own expectation.

If you understand this loop, you can choose frequencies and rhythmic patterns that match your brain's predicted signal closely enough to feel integrated, or intentionally create a small "prediction error" that jump-starts neural plasticity and resets maladaptive patterns.

## 2. Tuning Vagal and Autonomic Tone

Vibrations in the 30–120 Hz range (vibroacoustic therapy) directly engage your body's mechanoreceptors and can entrain diaphragmatic motion and heart-rate variability. Knowing that your brain is continuously tagging these self-generated signals helps you see how external vibration can boost parasympathetic (rest-and-digest) activity by restoring that "tagging" to normal levels.

## 3. Empowering Intention and Placebo Effects

When you consciously set an intention ("I'm going to use this 5 Hz tone to calm my mind") you're recruiting the same predictive machinery. The clearer your model of how your brain expects certain vibrations to feel, the stronger your mental "signal" will be, and as psychoneuroimmunology shows, stronger intentional signals translate into measurable changes in inflammation, immune function, and mood.

## 4. Preventing Misattribution (and Hallucinations)

In extreme cases, like auditory hallucinations, the comparator flags a large mismatch and marks self-generated sounds as "other." By practicing with controlled vibratory feedback, you reinforce the brain's ability to tag its own internal states correctly, reducing anxiety, derealization, and the sense of voices or inner chaos.

# 5. Personalizing Frequency Selection

Everyone's corollary-discharge timing and gain control are slightly different. Understanding this encourages you to **experiment** (or measure via **HRV/EEG**) to find your own "fundamental frequency" or **resonance zone**, then use that as your starting point for binaural beats, sound baths, or vibroacoustic tables.



**HRV (Heart-Rate Variability):** The millisecond-by-millisecond variation in the time interval between consecutive heartbeats.



**EEG (Electroencephalography):** A non-invasive recording of the brain's electrical activity via electrodes placed on the scalp. It captures oscillatory rhythms (delta, theta, alpha, beta, gamma) that correspond to different states of arousal, attention, and cognition.

## **How it works**

- Corollary Discharge = internal "copy" of your intention to speak.
- 2. **Comparator** = the system that checks if what you expected to hear matches what you actually hear.
- 3. If the match is strong → "That's my voice."
- If the match is weak or missing → "That might not be me" → could trigger hallucination or depersonalization.

## **Putting It Together in Vibratory Healing**

**Biofeedback loop:** Real-time HRV and EEG feedback let you see exactly when an external vibration aligns (or misaligns) with your internal state.

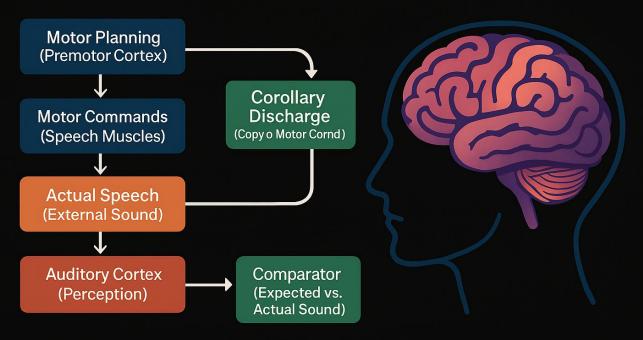
**Personalized protocols:** You might discover that a 6 Hz theta binaural track raises your HRV by 10% and amplifies frontal-midline theta in your EEG, signals that it's an effective choice for deep relaxation.

**Objective tracking:** Instead of relying solely on subjective feelings, you gather hard data to optimize frequency, amplitude, and session length, making your self-healing practice both art and science.

## **The Bottom Line**

Mastering the corollary-discharge bridge gives you a scientific compass for vibratory self-healing. It shows you how to choose, shape, and integrate external frequencies so that your brain doesn't just hear or feel them, but truly incorporates them into its ongoing self-model. That's how you shift from passive reception of sound to active, resonance-based healing at the deepest neurophysiological level.

# Corollary Discharge Loop: Inner vs. Outer Voice Pathways



## **Putting it into practice**

**Set Your Intent (Mind):** Begin with a clear question or declaration, for example, "I open my mind to receive guidance."

**Listen Inward (Spirit):** Close your eyes, tune into the vibration you feel in your heart or center. Notice its quality: is it steady, warm, bright?

**Express Outward (Body):** Use your voice or an instrument to echo that quality. Perhaps hum or chant at the pitch you sensed, or place your hands on a vibroacoustic table tuned to that frequency.

As you do this repeatedly, you'll strengthen the mind-spirit-body "bridge," making your inner guidance more vivid and your outer expression more authentic.

## **Final Thought**

The spirit corresponds to the inner voice, the source of intuition and higher knowing; the body corresponds to the external voice, the instrument through which that knowing becomes tangible. By mastering the tuning process in your mind, you allow spirit to flow effortlessly through body, creating a unified, healing vibration in every cell.

### Resources

# Here are several key studies and overviews from renowned institutions that explore HRV, EEG, vibroacoustic therapy, and corollary discharge mechanisms:

#### Heart Rate Variability: A New Way to Track Well-Being (Harvard Health Blog, Harvard University)

https://www.health.harvard.edu/blog/heart-rate-variability-new-way-track-well-2017112212789 health.harvard.edu

#### What Is Heart Rate Variability? (Harvard Health, Harvard University)

https://www.health.harvard.edu/heart-health/what-is-heart-rate-variability health.harvard.edu

#### How Brain-Wave Data Can Refine Psychiatric Treatment Choices (Stanford Medicine)

https://med.stanford.edu/news/insights/2020/10/how-brain-wave-data-can-refine-psychiatric-treatment-choices.html med.stanford.edu

The Effect of Low Frequency Sound on Heart Rate Variability and Subjective Perception during Vibroacoustic Therapy (Int. J. Environ. Res. Public Health, NIH/PMC) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9223227/pmc.ncbi.nlm.nih.gov

#### Electrophysiological Evidence of Corollary Discharge Dysfunction in Schizophrenia (PubMed)

https://pubmed.ncbi.nlm.nih.gov/14690769/pubmed.ncbi.nlm.nih.gov

#### Human Cortical Responses to Slow and Fast Binaural Beats (PubMed)

https://pubmed.ncbi.nlm.nih.gov/25008412/pubmed.ncbi.nlm.nih.gov

## **Additional Resources**

All the clinical vibroacoustic and binaural-beat studies leverage the same corollary-discharge principle—you are supplying an external sensory "copy" that the brain's comparator evaluates against its own efference-copy prediction. When chosen frequencies match or intentionally nudge the predicted signal, you modulate that comparator loop for healing effects.

#### **Exploring Vibroacoustic Therapy in Adults Experiencing Pain**

Link: https://pubmed.ncbi.nlm.nih.gov/35383053/

Source: Kantor J, Campbell EA, Kantorová L, et al. Exploring vibroacoustic therapy in adults experiencing pain: a scoping review. BMJ Open. 2022 Apr 05;12(4):e046591.

#### Effects of Vibroacoustic Stimulation on Psychological, Physiological, and Cognitive Stress

Link: https://www.mdpi.com/1424-8220/24/18/5924

Source: Fooks C, Niebuhr O. Effects of Vibroacoustic Stimulation on Psychological, Physiological, and Cognitive Stress. Sensors. 2024;24(18):5924.

#### Effect of Low-Frequency Sound Vibration on Acute Stress Response in University Students

Link: https://www.frontiersin.org/articles/10.3389/fpsyg.2022.980756/full

Source: Maaß V. von Georgi R. Effect of low-frequency sound vibration on acute stress response in university students. Front Psychol. 2022;13:980756.

#### Potential of Vibroacoustic Therapy in Persons with Cerebral Palsy: A Narrative Review

Link: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6843730/

Source: Baglio F, et al. Potential of Vibroacoustic Therapy in Persons with Cerebral Palsy: A Narrative Review. Neuropsychiatr Dis Treat. 2018;14:267–280.

#### Vibroacoustic Stimulation and Brain Oscillation: From Basic Research to Clinical Application

Link: https://musmed.iammonline.com/index.php/musmed/article/view/540

Source: Bartel LR, Chen REW, Alain C, Ross B. Vibroacoustic Stimulation and Brain Oscillation: From Basic Research to Clinical Application. Music Med. 2017;9:14.

# Thanks

### HAVE QUESTIONS?

#### **Points of contact:**

Tony Güembes Zen Waves Therapy zenwavestherapy.com

## Think of it as a three-fold resonance system:

#### 1. Mind as the Tuner (Conductor)

Role: Your conscious awareness, your "observer" that notices inner and outer signals.

**How it works:** By focusing attention (e.g., through breath, mantra, or visualization), the mind aligns its neural predictions (the corollary discharge) with an intended vibration or tone. In other words, you set the frequency you want to channel.

#### 2. Spirit as the Inner Voice (Signal Source)

Role: That subtle, guiding "voice" or felt sense inside you—your intuition, purpose, highest self.

**How it works:** When the mind is tuned, the spirit's message (your inner voice) becomes a clear, coherent signal. This is akin to a radio picking up a strong station when the dial is exactly on frequency. If the mind wavers, the spirit's message is garbled or lost.

#### 3. Body as the External Voice (Signal Emitter)

**Role:** Your physical form—vocal cords, breath, posture, even the cells that resonate with sound.

**How it works:** Once mind and spirit are in sync, the body "speaks" that vibration into the world. This can be literal speech, musical tones, or even the subtle field of your energetic presence that others feel.