

Portable Gold and Philosophers' Stones (Deviant Resonances)

David Rosenboom

Program Note

In 1972 I made two versions of the brainwave music work *Portable Gold and Philosophers' Stones*, which were subtitled (*Music with Trills*) and (*Music from Brains in Fours*). Scores for these pieces appeared in my book, *Biofeedback and the Arts: Results of Early Experiments* (Aesthetic Research Centre of Canada Publications, 1975 & 1976 editions, ISBN 0-88985-002-X). A recording of the second version appeared first on vinyl (*Brainwave Music*, 1976, A.R.C. Records, ST1002) and later on two CDs (*Invisible Gold*, 2000, Pogus Productions, Chester, New York, 21022-2 and *Brainwave Music—2006 Edition*, EM Productions, Osaka, Japan, EM1054CD). Earlier I had been reading about mantric symbols and came across an interpretation of the “Philosopher’s Stone” as an enduring, invisible, mental symbol that is about the *prima materia*, the original substance, the ultimate principle of the universe (Govinda, L. A., *Foundations of Tibetan Mysticism*, 1969 edition, Samuel Weiser, Inc., New York). It was said that by returning from the qualities of sensation and thought, which we perceive through differentiation and specialization, to the undifferentiated purity of the *prima materia*, we might learn truths about creative power and the fundamental mutability of all phenomena. Combining this with the symbol, *Portable Gold*, was my way of emphasizing the timelessness and spacelessness of this idea, which we can carry with us anywhere. To manifest these symbols in music, those early pieces worked with resonant coincidences detected among the physical brainwaves of one to several performers and applied them in various ways inside the circuits of custom-built, live electronic music devices to grow spontaneous musical forms. For this occasion I have made a third version of *Portable Gold and Philosophers' Stones* subtitled (*Deviant Resonances*). It is realized here with portable brainwave detectors, computer music software, and an auxiliary keyboard instrument.

Threaded through many of my musical works, one can find various versions of a *propositional music* model for investigating concepts associated with resonance—in all its conceivable forms and with all its emergent phenomena—and how they might be materialized in self-organizing musical forms. Many are about the emergence of perceivable substance from reinforcements among tiny perturbations in patterns of energy flow—or maybe like pinching an elastic field of essential tension in some idea of *universe* to produce differentiable, interacting entities. These might range from mere wisps of ineffable quantum resonances hinting at the existence of ponderable matter to brain/body/society holograms enfolding and enabling the creation of memories and histories.

Portable Gold and Philosophers' Stones (Deviant Resonances) continues this investigation, paying particular attention this time to interesting goings on inside margins of uncertainty near the boundaries of differentiation that might be associated with recognizable, resonant entities. It also explores how unpredictable, transient events may either reinforce or disturb emerging orders in resonant patterns and what can result from collisions among differentiated resonances. All of this exploration is carried out within the framework of how we can fuse brainwave patterns and musical forms. In the context of musical performances like this one, our intentions are *artistic* and *inclusive*, melding products of scientific investigation and technology with *aesthetic* inquiries and speculations about the nature of human awareness and our ability to describe what we perceive as *self* and *universe*.

All the immersive electronic sounds heard in this performance are controlled by coincidences detected among spectral components extracted from performers' brainwaves (EEG), along with occasional insertions of spontaneous musical impulses passing like breezes through the leaves of a neuromusical forest, which may react and then resettle according to whatever interactive dynamics might be then at play.

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David Rosenboom (b. 1947) is a composer, performer, interdisciplinary artist, author and educator known as a pioneer in American experimental music. Since the 1960s David Rosenboom has explored the spontaneous evolution of musical forms, languages for improvisation, new techniques in scoring for ensembles, multi-disciplinary composition and performance, cross-cultural collaborations, performance art and literature, interactive multi-media and new instrument technologies, generative algorithmic systems, art-science research and philosophy, and extended musical interface with the human nervous system. His work is widely distributed and presented around the world. He holds the Richard Seaver Distinguished Chair in Music at California Institute of the Arts, where he is also Dean of The Herb Alpert School of Music. David Rosenboom is a Yamaha Artist. Website: <http://www.davidrosenboom.com>

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