

Meaning Beyond Comprehension

Reece Cox

The implication of scale or amount as a conceptual framework is not new in art or music. Minimalism - both in musical composition as well as in the visual arts - is perhaps the clearest and most direct example. The title itself suggests a stylistic perquisite of less in direct but generous terms. In this case the question of what is reduced and to what extent isn't precisely defined but suggested - less material, conservative gestures or forms, more negative space - and at what moment can a work be considered minimal? It is easy to assume, and perhaps not incorrectly, that the position is taken against previous music and art historical canons as the metric for what could appropriately be deemed minimal, orienting the notion of finitude around formal rules and material conservatism which are rather general.

In their most recent album, 10^{-33}cm , 2018 Giga-Hertz Production Prize recipients GRAYCODE, jiiiiin have ambitiously chosen to approach the subject of scale through the exacting

metrics of theoretical physics by way of sound art. Specifically, the work is positioned relative to the smallest measurable distance in the physical universe - the Planck length. The work's title directly appropriates the Planck length (10^{-33}cm) which was defined by prominent German physicist, Max Planck to describe the approximate smallest possible unit of measurement. Beyond the relative distance of the Planck length the physical laws of nature, e.g., gravity, begin to dissolve and quantum effects dominate.¹ After this point the foundations on which we build notions such as length and size begin to fall apart, making the Planck length indeed the smallest relevant distance within the familiar metrics of what we call physical.

The title describes the level of sonic and compositional detail while also setting a

precedent for the auditor's attention, yet considering that degree to which the Planck length surpasses human comprehension the choice of reference can only be seriously considered aesthetically rather than as a working model. Immanuel Kant defines the problem of mathematical vs. aesthetic understandings of scale by stating that while mathematical scale is infinite and precise, comprehension is restricted by human ability to imagine numbers. As the scale surpasses the thresholds of human perceptibility the discrepancy between comprehensive and mathematical acuity grows, "that is, all estimation of the magnitude of the objects of nature is in the end aesthetical (i.e. subjectively and not objectively determined.)"² While only an impression, the aesthetic impact is effective, "As to apprehension there is no difficulty, for it can go on ad infinitum; but comprehension becomes

¹ "First Steps of Quantum Gravity and the Planck Values," Brief History Of Computer. Accessed February 15, 2019. http://people.bu.edu/gorelik/cGh_FirstSteps92_MPB_36/cGh_FirstSteps92_text.htm.

² p.66. Kant, Immanuel. Critique of Judgment. New York, NY: Dover, 2005.

harder the further apprehension advances, and soon attains to its maximum, viz. the aesthetically greatest fundamental measure for the estimation of magnitude.”³ Rather than dealing with subatomic scale itself it is through the anticipation and impression of extreme precision that *10⁻³³cm* gains its aesthetic acuity. As a work exhibited in a gallery as opposed to a live performance or a privately consumable format, the work benefits from the presumed focus of the gallery space. Free of the presumption of a formal start and finish, the auditor may engage the piece in the free space and time of the exhibition without the expectation of behaving like a member of an audience. Instead the work exists autonomously, allowing each visitor to approach the work on their own accord.

Formally, the record approaches the issue of scale and perception on many fronts. The sonic palette throughout *10⁻³³cm* is reflected in the

software which was used, presumably Max MSP or Supercollider, and is easily likened to artists such as Alberto De Campo or Ryoji Ikeda, given the synthetic textures and pacing of each composition. Focusing on digitally generated tones and effects while eschewing overt referentiality, i.e., sampling, musicality, or rhythm, *10⁻³³cm* never loses sight of the proposed problem of scale, both formally and in terms of addressing the perceptual acuity of the auditor. Immediately, one notices the length of the tracks, the first ten of which span under a minute, with the shortest clocking at only 0.102 seconds. This track, entitled [0.00d, 1.00e] 00_00_102, features only one brief high-pitch artifact. This micron-scale sound is a motif carried throughout the record, including the exact point at which it begins and again at its end. The longest track stretches to a comparatively enormous 41:39, making a clear distinction in the range of

³ p.67. Kant, Immanuel. Critique of Judgment. New York, NY: Dover, 2005.

information perceivable across time scales. In another exploration of scale, the record begins with a track nearly entirely composed of an unchanging low-frequency sine wave. The tone is barely audible, yet the impression of a frequency at the depths of the audible range is felt. One can easily imagine the gently sloping curves of the low-frequency oscillation represented on an oscilloscope, but as the tracks advance, new layers of white noise at higher and higher pitches are introduced at semi-regular intervals, and the once easily comprehensible tone grows to a wall of complex sonic information. Stretching past and preceding the limits of our perception, two tones have been included as compositional elements at the frequencies of 23,999Hz and 0Hz, raising questions about the role of the machine producing the tones in relation to an assumed audience. Here again, GRAYCODE, jiiiiin are carefully testing the limits of our attention and perception as they move from barely detectable to indiscernible. While listening to $10^{-33}cm$, it is easy to suspect

that perhaps some elements are missed as they fall somewhere outside of the realm of observability.

10⁻³³cm will be on view as a sound installation with accompanying sculptural elements at the Korean Cultural Center, gallery damdam, from the 14 March through 28 April 2019. The exhibition and program was curated by gallery damdam resident curator, Ka Hee Jeong.

Meaning Beyond Comprehension

Reece Cox

2019

10^{-33}cm

2019

GRAYCODE, jiiiiin

© 2025 GRAYCODE, jiiiiin.

All content on this site is copyrighted and may not be reproduced, distributed, or used without prior permission.