# Jordan Dykstra <br> Sounds as Brilliant 

for an ensemble

May 2017
Middletown, CT

Sounds as Brilliant
for an ensemble

Jordan Dykstra
2017

For Astronomy Professor Seth Redfield and his guidance in Exploring the Cosmos.

Without a timer-and, perhaps, before a sunrise-the ensemble begins the piece together.

Each performer's score consists of 3 sections ( $\triangle, \square$, and $\bigcirc$ ) all of which will be played once and may be arranged in any order:
$\Delta=74 \%$ of the total duration, with no intentional sound-actions, $\square=4 \%$ of the total duration, with intentional sound-actions, 1 part per performer,
$O=22 \%$ of the total duration, with no intentional sound-actions.

Once during the piece, each performer chooses when to play one extremely short intentional sound action lasting $0.001 \%$ of the total duration ( 0.0279 second).

The piece ends after 100\% has passed ( 46.5 minutes).

Sounds as Brilliant realigns two relationships to create new aesthetic meaning: compositional make-up as sound and distance as time. On one hand, if luminous matter is treated as sound and non-luminous matter as silence, $96 \%$ of the universe is silent; current scientific data states that while dark energy accounts for $74 \%$ of all mass-energy in the universe and dark matter accounts for $22 \%$, ordinary matter (luminous matter made up of protons, neutrons, and electrons) accounts for just $4 \%$. On the other hand, if the distance to the edge of the observable universe is translated as a ratio of one-billion-light-years to one-minute-of-Earth-time, the time needed to travel to the edge of the observable universe is experienced as 46.5 minutes. By exposing these two relationships as the structural form, the listener comes in contact with the two goals represented in Sounds as Brilliant. 1) to encounter a great expanse, and 2) to receive a surprisingly minuscule presence in relation to the whole.

Although 46.5 minutes (or 2,790 seconds) is quite specific, I do not expect the performers to precisely execute this duration. On the contrary, my aim is for each performer to experience a larger sense of time passing through the psyche of the entire group, one that comes with a consensus regarding large formal structures of intentional and non-intentional sound-actions. Using a percentage structure as the guiding force, the performers collectively feel their way through this metaphorical duration, aided by the 3 sections: $\triangle, \bigcirc$, and $\square$. Although both the $\triangle$ ( $74 \%$ of the whole) and $\bigcirc(22 \%$ of the whole) sections involve only indirect sound production, the placement of the intentionally-sound-producing $\square$ section ( $4 \%$ of the whole) becomes an decision of great proportion. Each performer freely chooses their part from the 40 given that is suitable to their range. In regards to the placement of the $\square$ section within the entire piece, it's $4 \%$ will inevitably be situated in one of the following four possibilities: $0-4 \%, 22-26 \%$, $74-78 \%, 96-100 \%$. Worth noting as well is that the middle $26-74 \%$ of the piece will be overwhelmingly occupied with non-intentional sound-actions.

A cosmic microwave background fluctuation variable has been included for each performer, who chooses when to play this single extremely short event ( 0.0279 second) at any point in the piece. The duration of 0.0279 seconds not only represents $1 / 100,000$ th of the intended total duration ( 46.5 minutes) but also the amount of fluctuation observed in the 2.7 K temperature uniformity amongst the cosmic microwave background astronomers find throughout the observable universe.

A frontal layout of the performers must be avoided.
Copies of the score should be made available. for the audience.
The performance may be planned so that it begins 46.5 minutes before a sunrise, sunset, eclipse, or other celestial event that especially delights the performers and audience members.

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Sounds as Brilliant
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Sounds as Brilliant
(1.3)



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| $\mathbf{\gamma} \boldsymbol{\square}$ | $\square(3.5)$ | Jordan Dykstra, 2017 |

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| $\mathbf{y}$ | $\square(3.7)$ | Jordan Dykstra, 2017 |

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| $\square(3.9)$ | Jordan Dykstra, 2017 |
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