

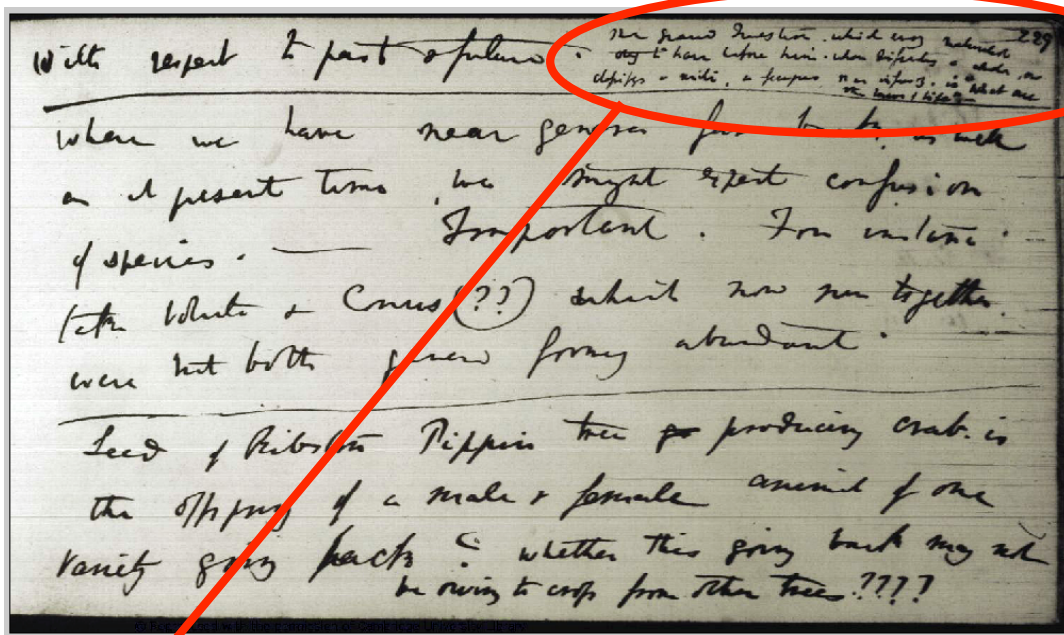
# Singing Darwin, Seeing Science

## A Call for Collaborators and Venues in a New-Media Event, 2009

On November 24, 2009, the 150th publication anniversary of *On the Origin of Species* will be celebrated through a 24-hour new-media event at venues around the world. "Singing Darwin" will be an orchestrated convergence of electro-acoustic and vocal music, Web 2.0 collaborative networks, readings, imagery based in Darwin's primary sources, and live performances at participating science, art, theater, and library venues. The event will begin at Greenwich, England near where *Origin* was published and move for a full rotation across the earth's longitudinal meridians. It will be broadcast through the internet and available as a public event in selected sites.

Like "Bloomsday" in Dublin when people gather to read James Joyce's *Ulysses*, "Singing Darwin" is based on public and community performance of a paradigm-shifting work, *On the Origin of Species*.

"Singing Darwin" celebrates not only the publication of the book, but also the process of unfolding understanding that is the *Origin*. It took Darwin years to conduct his data collection for his theory of natural selection, followed by more years of intense observation, and the re-working of thousands of pages of notes and observations. Our purpose is to honor what Darwin actually wrote—in its complexity, historical contingency, imperfectness, and immense scientific and humanistic creativity.



Page 229, Notebook B on the "Transmutation of Species" circa 1837

**'The Grand Question, which every naturalist ought to have before him, when dissecting a whale, or classifying a mite, a fungus, or an infusorian, is "What are the laws of life."'** (Darwin's margin note, above)



We are currently identifying institutional venues as well as scientists, artists, designers, and informal science educators who would be interested in collaborating with us over the next year. Our founding core venues, Virginia Tech and the Virginia Museum of Natural History--both located near the heart of "intelligent design" country--represent just a few of the kinds of institutions we seek. They will be complemented with art museums, botanical gardens, libraries and zoos. Each event at each venue will be part of the 24 hour whole but specific to the artists, audience, and resources at each location.

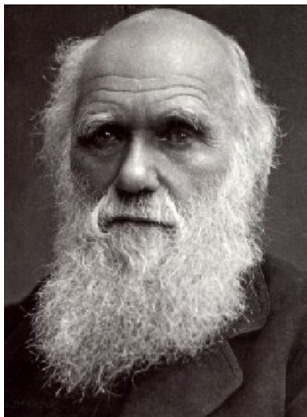
*The design of "Singing Darwin" will be facilitated through the Digital Art Research Collective at Virginia Tech, an interdisciplinary team of artists, designers and scientists, in a series of workshops with evolutionary scientists and museum personnel. We will employ an integrated model for working with Darwin's writings using live performance, digital media, imagery, sound recordings, and field participants--who are investigating evolutionary history as they create the elements for "Singing Darwin" with Web 2.0 technologies and location-specific resources. The approach has relevance not only to Darwin, but also to related uses of new media and cutting edge creative technologies in informal science education.*



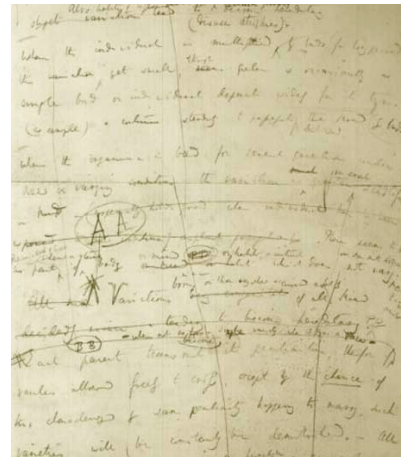
Digital Arts Research Collective

*Observation and listening are at the core of both natural sciences and the arts. "Singing Darwin" will provide unexpected ways for audiences and artists to engage with Darwin's writings, focusing on the central role intense observation played in his scientific process.*

New media of various kinds are well suited to layered presentation and re-presentation; creative technologies can show how a thinker proposes, backtracks, reconsiders,



erases, takes in new information, experiences insight, and follows out ideas. We can take passages and notes from Darwin's manuscripts and texts, and draw from the multitude of organisms and environments he studied. Through layering and juxtaposition of sound and imagery we can create within the viewer and listener a sense of



how Darwin creatively worked and explored over an extended period of time, following threads of deep observation and curiosity toward new knowledge of the biological processes of life and the geological processes of the earth.

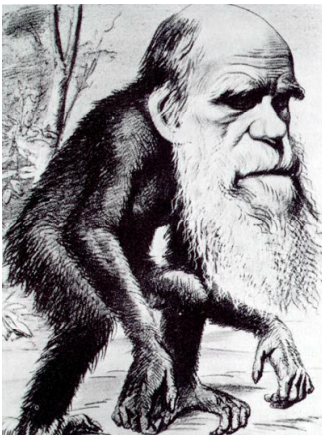
This unfolding of meaning through new media technologies is more like art than science or argumentation. Yet among Darwin's most important cultural legacies are his insights as a scientist into both aesthetics and the expression of emotions. Darwin's curiosity

about expression of emotion in animals led him to speculate that music preceded speech in the distant, evolutionary past. "Singing Darwin" plays with this insight through emerging artistic media at the intersection of biosciences and history. It is an extended interdisciplinary collaborative among artists, scientists, and the public.

"Singing Darwin" is not intended as a repackaging or appropriation of *On the Origin of Species*, but the exploration of a new form of public engagement around critical ideas in science. In this way, the project is informal science education. Therefore we are developing a grant proposal to NSF's Informal Science Education program to support the event and its follow-on internet presence. Since this is an experiment in new forms of interacting with the public, the grant would also support evaluation and dissemination of the workshop methods used to develop the event. "Singing Darwin" will be provided in a Web 2.0 environment for continuing user-development.

The 19<sup>th</sup> century questions Darwin asked about the "laws of life" remain controversial in the 21<sup>st</sup> century. Although contemporary life sciences are based entirely on evolutionary principles, only about 60% of Americans regard any form of evolution as true. Only about 28% believe that life evolved due to processes within nature such as natural selection.<sup>1</sup>

The cultural discomfort over evolution is complex and extends beyond the conflict between science and religious fundamentalism. Intelligent design advocates denounce Darwin. But Darwin is invoked or condemned across a bewildering array of cultural and political lines outside of creationist enclaves in support of diametrically opposed ideologies.



In our current moment, where everything from stem cell research to biodiversity to genetic engineering to climate change intersects with evolutionary concepts, ignorance about the actual science of evolution has

become a form of societal self-destruction. We have not yet found ways to incorporate the vast and strange view of nature that Darwin helped to open. "Singing Darwin" will contribute to public awareness by engaging people aesthetically and cognitively, connecting insights in evolutionary science and natural history with their own existence.



**For more information about "Singing Darwin" contact:**

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<sup>1</sup>Exploratorium Survey, 2006 Princeton Survey Research Associates International for the Pew Internet & American Life Project.

<sup>2</sup>Illustration by Simone Paterson, Digital Art Research Collective, School of Visual Art, Virginia Tech, copyright 2008.