

Theory of Flight
A Fantasia of Avian Obsession

by

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ABSTRACT

In *Theory of Flight*—a fantasia of avian obsession—a scientist’s lecture on biologically based flight goes awry when she reveals her own extreme experiments. Dreams of flight, avian arias, a magical chalkboard, transgenic experiments, animations of cellular processes, orchestral bird songs, and molecular music intersect in this emotional and scientific pursuit of human flight. The music, animation, and story were created by Anna Lindemann. *Theory of Flight* premiered on April 16, 2011 in Troy, NY at the Experimental Media and Performing Arts Center Goodman Studio. It was performed by soprano Lucy Fitz Gibbon as the bird spirit and Anna Lindemann as the scientist, directed by Emma Lunbeck, and with costumes by Kylin Mettler and lighting design by Jay Maury. The performance was followed by a Flying Feast concocted by Ellie Markovitch and Rose Mitchell—a multi-taste experience inspired by the avian world.

In this thesis I discuss the integration of different artistic disciplines and different biological sciences, as well as the broader integration of biology and art. And I discuss the creation of *Theory of Flight*, a performance intended to be an emotionally gripping and intellectually challenging experience emerging from the integration of music, performance, animation, and evolutionary developmental biology.