

take me to the apple breeder

Apples symbolize humans' initial separation from the Garden of Eden in the tale of Adam and Eve, that point of departure from our place in a complete and unaltered nature. This is an apt metaphor, considering the great lengths to which humans have gone to alter natural selection in establishing the edible apple as we know it today. But what are the consequences of inhibiting genetic diversity? What do we lose when we limit our understanding of a species to a small fraction of its total genetic potential. Inspired by a foray into the esoteric world of the apple curator and breeder, *take me to the apple breeder* explores the aesthetic impulse behind our attempts to shape this complex fruit.

Each seed from an apple is genetically different. Six seeds planted from a Fuji apple results in six different trees, each with wildly varying tree architecture and apple shapes, colors, and taste; only one in 80,000 apples planted from seed will be sweet enough to eat and round enough to delight. Grafting began thousands of years ago to counter these slim odds. By taking hundreds of buds from one sweet apple tree to make an orchard of the same, humans essentially took over the process of natural selection, replacing it with the manmade process of cloning. The porcelain apples in *take me to the apple breeder* exemplify this moment of attraction and attainability, and of what art and literary critic Elaine Scarry describes as the specifically human desire to beget and distribute beauty.¹

Each sculpture represents one of nine endangered apple varieties chosen from hundreds being kept alive in pairs on a Noah's ark of orchards, the USDA-ARS Plant Genetics Resource Unit (PGRU) at Cornell University, the grand project of apple curator Dr. Philip Forsline. Bringing home dozens of apples to work with, I amalgamated the most striking aspects in form and volume of several apples representing one variety; for example, the oblong lilt of *Yellow Bellflower* is accentuated to the point of teetering in the sculpture. Conversely, I kept the actual scale true to the original, whether the small clusters of *PI 588933.12* or the behemoth size of *Deacon Jones*.

While the rich color and luster of the originals were important inspirations for the sculptures, final surfaces, which required two years of glaze experimentation on porcelain, are meant to

poetically evoke the same attraction and bewilderment in the viewer that the true apple would; thus the speckles in the blush of *Dulcina* look like a glittering night sky, as if one is peering into another galaxy while viewing it. Such exquisite details within these strange objects allude to what science journalist Michael Pollan describes as the plants' attempt to lure humans into acting as an agent of reproduction, thus pointing to subconscious human desire as a key component in the larger web of life.²

In contrast to the collection of clonal specimens grown at the PGRU, the project's photographic series is based on the production of thousands of unique new apples. Apple breeder Dr. Susan K. Brown creates new apple varieties by cross-pollinating two established clones whose characteristics (taste, architecture, disease resistance, shelf life) are worthy of reproduction. The cross produces thousands of seeds that are then planted out and left to grow unobstructed as seed "sisters." Using a 20 x 30 foot muslin back drop, I photographed Brown's work in early March 2012 to capture the trees' leafless silhouettes and the hint of future buds about to burst, flowers that would then begin the natural cycle of reproduction again. Within the titles, words like "weeping," "columnar," and "central leader" refer to the specific architecture of a tree, while "resistance" and "perseverance" reminds us of the strength required when faced with disease, all alluding to more human characteristics and possible states of being.

The photographs' scale balance the viewers' focus between the recognizable tree and its more sensuous details: the visceral texture of its skin, its unique and often extreme shape, and the dense earth from which it grew. The altered horizon line, created by the backdrop hitting the ground, makes the subject appear to be both of the earth and a human fabrication, which the edible apple is by its very creation. Measuring between 3 and 7 feet tall, the images vie for physical space in the room, as trees in an orchard. The parental clones stand older, larger, oddly formed in their genetically frozen state, while the sisters, hardly more than saplings, waver while holding infinite possibilities. In these portraits, one might discern the same kind of individualism that is so highly regarded in humans.

Agriculture and food production have always been as much cultural as scientific practices, with human preferences and desires influencing biological outcomes. In focusing our gaze on

the curating of the idealized beauty of apples plucked from natural selection and the extreme diversity found in breeding left to nature, *take me to the apple breeder* examines our sublime but fraught relationship with nature.

Jessica Rath, 2012

1. Elaine Scarry, *On Beauty and Being Just* (Princeton University Press, 1999).
2. Michael Pollan, *Botany of Desire* (Random House, 2001).

The artist would like to thank Dr. Susan K. Brown, Dr. Philip Forsline and William Srmack of Cornell University; photographers Ken Marchionno and Mary Wingfield; science writer Amanda Garris; John Weldon, Michael Keeler, and Katherine Baghaie of Weldon Color Lab; curators Shirlae Cheng-Lifshin and Kristina Newhouse; and Joe and Emma Ann Fairbrother. Special thanks to the original Kickstarter.com backers, the Center for Cultural Innovation for its generous Investing in Artists grant and ARC grant and Kevin Nguyen, Suzette Munnik, and Junzo Mori of the Xiem Clay Center in Pasadena, CA for providing both their professional expertise and support.