CORY ARCANGEL
PRO TOOLS

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have been created by the same technological tool and process that produces product displays for supermarkets. The *Hello World* sculptures are both a result of mass-market production processes and conceptual works of art that point to concept, composition, and the writing of software as forms of expression that carry the aesthetic signature of an artist.

The works brought together in *Pro Tools* are multilayered, humorous, and ironic reflections on the role that technological products play in today’s culture. Arcangel’s work is a critique of technology that acknowledges the appeal and seduction of technological products. At the core of his work lies an interest in “the human factor”—the way we express ourselves through technological tools and platforms (from Photoshop to YouTube) in funny, original, creative, awkward, pathetic, and embarrassing ways. He manages to connect these forms of expression to the history of art, showing how the pop-cultural vernacular unintentionally and unknowingly emulates artistic practices and approaches in the fine-arts world. Arcangel’s product demonstrations ultimately do not evaluate technology itself but the human perspective on it—the ways in which we play with tools to engage the world.

—Christiane Paul
Adjunct Curator of New Media Arts

For more than a decade, Cory Arcangel (b. 1978) has explored the interplay among digital technologies, Internet culture, and fine art in a range of media. His projects include computer-generated work, performance, video, installation, music composition, sculpture, and print media. *Pro Tools* playfully explores the concept of product demonstrations, a method of sales promotion common at trade shows and some retail stores that “demo” how to use a new product. All of the works featured in this exhibition—ranging from modified computer games and sculpture to video and pen plotter drawings—incorporate or have been created with technological products or tools, emphasizing the combination of professional and amateur technologies as well as the vernaculars these technologies encourage within the culture at large.

The gadgets on view in product demonstrations are typically expected to showcase the latest innovations—tools to capture a better way of life—yet these products become obsolescent at ever increasing speeds. A major subject in the artist’s body of work is this absurdity of a given technology’s lifecycle—from the cutting-edge of design to an eventual affront to good taste. Arcangel also addresses our fascination with technology by playfully undermining our expectations of it. In his projects, viewers often have limited or no control over technology, and their interaction frequently results in frustration.

Another theme in Arcangel’s work is the tension between the readymade—an off-the-shelf product or technology—and the artist’s creative act, which often consists of a minimal intervention that positions the product as a work of art. Equally important to Arcangel’s practice are the tensions between high-tech and do-it-yourself (DIY), professional and amateur tools, pop culture and fine art. By playfully mixing technologies, the artist consistently blurs the boundaries between these realms.

The exhibition’s title, *Pro Tools*, references the popular software of the same name, which enables users to compose, record, edit, and mix music and sound. While none of the works in the exhibition actually make use of the software, the name captures Arcangel’s practice of recording, composing, and remixing. The title could also be read

1. Kinetic originated from the Greek word *kineîkos* for “bodies in motion.”
as "professional tools," a humorous twist on Arcangel’s mixing and matching of professional and amateur technologies.

**VIDEO-GAME MODIFICATIONS**

The centerpiece of the exhibition is *Various Self Playing Bowling Games* (2011), a visual bowling alley consisting of multi-channel, large-scale projections of bowling video games from the late 1970s to the 2000s that have been hacked by the artist to bowl only gutter balls. Projected in chronological order, these images are as much a history of bowling video games as of "technological progress" and the evolution of graphic representation in the digital medium, beginning with a highly pixelated depiction of the world and becoming increasingly three-dimensional and realistic.

As in many of his video game projects, Arcangel modifies and undermines the experience of play. Viewers do not get to interact with the bowling games but instead watch the games seemingly play themselves. Over a period of a couple years, Arcangel worked with a programmer and engineer to produce what they call a "video game TIVO," a microcontroller capable of recording and playing back button pressing. Affixed to the respective controller for each video game,
Packard 7475A and a Mutoh XP-300 Series Pen/Pencil plotter, once expensive machines that are now cheaply available on eBay. The Palms series consists of images of palm trees that blur the boundaries between machine- and artist-created drawings, making it difficult to distinguish the automated line produced by the pencil plotter from the artist’s hand. Arcangel intentionally chose a tree that is used in landscaping for its exotic appearance, occasionally in an artificial, synthetic form. The computer program Arcangel wrote to create the Hello World drawings picked random points between zero and one hundred in 2-d space and drew lines between them. (In one of the drawings, the program picked the number zero, so that the resulting work is just an empty sheet of paper). The title of the series refers to the "Hello World" program, which is typically used to print out "Hello World" on a display device for testing purposes and is one of the simplest programs possible in most programming languages. Arcangel originally wrote his "Hello World" code to test whether the plotter worked. The fact that the drawings in and of themselves were not particularly sophisticated was of particular interest to Arcangel because attention is shifted to the product and "container"—an aspect that has to be taken into consideration when it comes to the art-historical trajectory.

The idea of a technological tool as an integral part of an artwork is also evident in the series of Hello World sculptures, 3-d shapes that are also randomly generated by a computer program Arcangel wrote and then sent to a factory, which produces them by means of a robotic 3-d wireform machine that can bend metal in any direction. The CNC Wireforms—CNC standing for Computerized Numerical Control—"demonstrate" automated tools that are operated by computer-programmed commands. The wireforms produced by CNC machines are commonly used in furniture or point-of-purchase (POP) display stands that incorporate advertising next to the merchandise and encourage impulse buying. Arcangel’s Hello World wireforms are the epitome of a fusion between abstract art, product demonstration, and marketing display: these abstract sculptures, which reference canonic works of modern art, the chips replay moves the artist recorded in the game, blinking as they execute the actions. In the games recorded by Arcangel though, all the balls are gutter balls, frustrating any potential of success and reward that a sports game typically promises.

Various Self Playing Bowling Games thus has an element of a futuristic nightmare, a failure of gloriously seductive simulation in which the viewer has no influence on the system and is exposed to the endless repetition of unsuccessful actions. The technological progress symbolized by the increasingly sophisticated graphics is undermined by the lack of progress on the level of game play—no matter how the bowling alley looks, every ball will inevitably land in the gutter. By frustrating (and thereby highlighting) the existence of our expectations, Various Self Playing Bowling Games also points to our dependency on functioning technological apparatuses and tools as well as the prospects and anticipation surrounding them. As Arcangel puts it, "I have found the repetitive failure of a poorly rendered 3-d human figure bowling to somehow be an apt metaphor for our culture’s bizarre fascination with technology."

In Arcangel’s Masters (2011), the other video-game project featured in the exhibition, viewers can play an interactive golf game in its regular setup by putting a golf ball but their actions will not lead to a corresponding result in the virtual world. No matter how players hit the ball, it will never end up in the hole. As in Various Self Playing Bowling Games,
Art-historical references are also an important part of Arcangel’s series of pen plotter drawings, *Hello World* (2011) and *Palms* (2011), simple line drawings produced by means of out-of-date pen and pencil plotter machines from the 1980s and 1990s. As technological products, pen plotters preceded inkjet printers—the current dominant printing technology in contemporary art—and use an actual pen (a miniature “robotic arm”) that presses against the paper. Artists started creating computer-generated, “algorithmic” drawings as early as the 1960s, and some were included in the exhibition *Computer-Generated Pictures* (1965) at the Howard Wise Gallery in New York, which featured works by Bela Julesz and A. Michael Noll. Frieder Nake, Vera Molnar, Charles Csuri, Manfred Mohr, Harold Cohen, and Roman Verostko were among the other early practitioners of the medium. Arcangel is well aware that these early experiments, along with much of kinetic art of the 1950s and 1960s, were largely written out of mainstream art history and through these works creates a link between the cycle of obsolescence in technology and of omission in art history.

Arcangel produces the drawings of the *Hello World* and *Palms* series with a Hewlett-Packard Research in Motion (Kinetic Sculpture #4), 2011. Modified silver dancing stands and custom electronics, dimensions variable. Private collection; courtesy the artist and Galerie Thaddaeus Ropac, Salzburg and Paris

Arcangel humorously employs the failure of game play to highlight a subtle point about the technology of the game. In this case, Arcangel’s intervention questions the relationship between the actions of a human body in sports and their extension into a virtual environment, playfully commenting on the nature of “simulating” a physical activity in the virtual world of a game. Golf itself is a simulation of a simulation, a highly stylized reproduction in which people engage in the imitation of a chase (after a ball) in an artificial landscape. For Arcangel, simulation is a key element of our world and our obsession with highly manufactured renditions of reality.

**READYMADES, DISPLAY, AND STORAGE MEDIA**

The investigation of products and tools finds a different form of expression in the series *Photoshop Gradient Demonstrations*—large, brightly colored prints that formally resemble color field paintings. These are unique works created through simple operations of the gradient tool—normally used to create fades between colors for an image background—in the popular image-processing software Photoshop. The prints are produced using the highest quality chromogenic print technology, mounting, and framing. The works from the series are named after Photoshop’s default gradients; the titles supply the exact coordinates for placing the mouse on the x- and y-axes of the image, so that anyone could re-create the image in Photoshop. The prints’ depiction of original images based on a found template and produced by one simple gesture (click of the mouse) is offset by their large size and high-end production value. *Photoshop Gradient Demonstrations* combine “dirt style” design—the quick and dirty, degraded aesthetic of the hobbyist, amateur, and geek—with the precious quality of an original art object. A driving force behind the work is Arcangel’s curiosity about the ways in which people express themselves in consumer systems, outside of the
virtuosity in a highly labor-intensive and obsessive way, its demonstration also seems ultimately pointless and useless. Arcangel’s *Paganini Caprice No. 5* functions as a critique of its own process and technology, raising the question of what we gain from partly automated, speedy reassembly of musical virtuosity.

**CONCEPTUAL ART, INSTRUCTIONS, AND AUTOMATION**

Another body of Arcangel’s work featured in *Pro Tools* explores automated production and the concept of the readymade in the context of both technological products and the art-historical links between conceptual and early technological art.

Arcangel’s *Research in Motion (Kinetic Sculpture #6)* (2011) is a moving sculpture assembled from off-the-shelf “dancing stands,” rotating consumer displays that are manipulated to move at a certain speed. Their design captures the era of 1980s design, RadioShack, and the famous retail company of consumer electronics, the Sharper Image, which now only has an online presence. Encountering *Research in Motion* within the gallery and museum context, one cannot avoid thinking of Sol LeWitt’s “structures” (a term he preferred to “sculptures”) and his open, modular use of forms originating from the cube, a shape that played a major role in his practice.

The instruction-based practices of Dada and conceptual art of the 1960s and 1970s are important art-historical precedents of contemporary media and software art in which a process—such as a computer program, machine, or other procedural invention—is set in motion to create a work of art. Arcangel’s moving “structure” also references the 1950s and 1960s as the golden age of kinetic sculpture, which was pioneered by artists such as Alexander Calder, Jean Tinguely, and the Zero Group and built upon earlier experiments by artists including Marcel Duchamp (*Bicycle Wheel, 1913*) and László Moholy-Nagy (*Light-Space-Modulator, 1930*).
artwork rather than the physical object—often creating art about art. Arcangel’s video appropriates a part of popular culture that has elements of conceptual art, expresses it in a popular vernacular form—the supercut—and then brings it back into a space for fine art. As the artist puts it: “It’s like playing ping pong with both popular and fine art cultures.”

The obsessive cut-and-remix culture is also at the core of Arcangel’s video *Paganini Caprice No. 5* (2011), in which he “remakes” Nicolò Paganini’s classical violin piece “Caprice No. 5,” a work known for its speed and the high level of virtuosity required to play it. Arcangel’s project reconstructs every single note of Paganini’s “Caprice” from YouTube videos of people playing heavy metal guitar. This work is a product demonstration of the artist’s *Gould Pro* software, named after the famous twentieth-century classical Canadian pianist Glenn Gould, whose playing was distinguished by its outstanding technical proficiency and articulation of polyphonic musical textures and whose recordings featured the early use of electronic editing techniques. Arcangel wrote the software in order to make a series of videos that re-create well-known classical, atonal, or baroque compositions out of notes from YouTube videos at a faster speed than commercial editing programs would allow.

He previously used the software in his video *Drei Klavierstücke op. 11, 1909* (2009) to assemble Arnold Schoenberg’s famous piano pieces entirely from YouTube clips of kittens playing piano. Arcangel’s goal is to produce an extreme demonstration of the capabilities of his software. While the software highlights professional realm. He is also interested in allowing technology to propel the work, and in the series’ inevitable obsolescence; as he points out, there presumably will be nothing impressive about the prints’ production quality ten or twenty years from now. The artist highlights the role that the material object—in this case a high-quality print—plays in the perception of an artwork and hints at the fact that this materiality itself is dependent on technological processes that are bound to become outmoded.

At the same time, the *Photoshop Gradient Demonstrations* are an intriguing art-historical commentary in that they reference both Marcel Duchamp’s ready-made—the appropriation, manipulation, and recontextualization of mass-produced objects that emphasized a shift from finished artwork to process—and the visual qualities of Abstract Expressionism’s nonrepresentational, improvisational imagery. Arcangel invites us to reconsider how the qualities of established artistic practices have been profoundly affected by digital tools that allow for the instant creation of Abstract Expressionist imagery—typically considered the product of labor, angst, and emotion—by amateurs.

Arcangel’s sculpture *Volume Management* (2011) takes his play with product to another level by stripping it of all artistic intervention. In the work, the viewer is confronted with a wall of flat-screen televisions still contained in their original packaging as one would encounter them in a retail store or warehouse—pristine, suggestive, and unavailable. The artwork that might have been shown on the screens is left to the viewer’s imagination. This conceptual piece points to the relationship between the technological means of display and artwork exhibited on it, underscoring the fact that the frame of presentation can override the content of a work. Arcangel became fascinated with the power of the screen as a display mechanism for art when large flat screens were still expensive and rare. In the early 2000s, it was not uncommon for people viewing an artwork presented on a flat screen to initially fixate on the screen itself. One could occasionally hear people in a gallery exclaim, “I LOVE the screen!” as a first reaction to the artwork. To both emulate and undermine this power
then surfaces again in Since U Been Gone. Arcangel, who studied technology in music and related arts as well as classical guitar at the Oberlin College Conservatory of Music, has always been specifically interested in the technology of musical production. Since U Been Gone does not visually communicate the genealogy of the Kelly Clarkson song but only presents the CDs of the related songs as a nonplayable document and "historical record" of musical influences for a single song. The obsolescence of the CD as a storage mechanism gives the project's title an ironic twist, underscoring the evolution of the recorded form, the degree to which music distribution has moved to the Internet, and the DIY aspect of music production and mixing enabled by software tools.

SUPERCUTS AND VIDEO REMIXES

The supreme intersection between product, its presentation, DIY, pop culture, and high art is captured in Arcangel’s video There’s Always One At Every Party (2010), a supercut—an obsesssive video montage highlighting a single theme—from the television series Seinfeld. Arcangel cut together every scene in which the character Kramer’s coffee-table book about coffee tables is mentioned. The supercut has become a YouTube genre and a form of expression on the Internet. Like Arcangel’s Gradient Demonstrations and game modifications, the supercut is a variation of a readymade since it is a compilation of found images. Kramer’s coffee-table book about coffee tables could be seen as the epitome of a "product"—one that is self-indulgent to the point of decadence. There’s Always One At Every Party packages this product—as conceptualized in a popular television show—in a DIY video montage. A coffee-table book about coffee tables itself could also be viewed as a proto-supercut, collecting and combining every instance or manifestation of a coffee table. This self-reflexivity builds a connection to conceptual art, which privileges the concept and idea behind the

at a time when flat screens have become more common and much cheaper is one of the ideas behind Volume Management, which was inspired by the numerous pallets of flat screens Arcangel saw displayed at a Costco store close to his studio, as if they were cheap candy bars. The theme of technology’s built-in obsolescence again surfaces in Volume Management.

The reflection on technological delivery formats and storage is also present in Since U Been Gone (2011), a series of prints created by scanning music CDs and then using a combination of metallic stamping foils and silkscreening to produce a trompe l’oeil effect. The music stored on the original CDs is related to and traces the musical genealogy of the Kelly Clarkson song "Since U Been Gone" (2004) through parallel musical and cultural influences. One of the elements traced, for example, is the buzzsaw guitar technique. This technique, according to popular legend, was invented by Dee Dee Ramone in the 1970s, updated by the Bangles in the 1980s, and reappeared in the music of the Strokes in the late 1990s; this sound and phrasing