# What are we, who produce 'art'?

## Art, Technology, and Humanity

By [Austin Cline](http://atheism.about.com/bio/Austin-Cline-5577.htm),

The creation of human art has always been deeply intertwined with questions about technology, in part because technological development has helped drive the sorts of art possible and in part because it causes us to reconsider just what we think art is supposed to be. But at every stage there has continued to be a human element to the production of "art" — technology's role, as medium or mediator, has remained only partial. What happens when the human element is removed (or at least nearly removed)?

Technology's role in making art possible can be seen all around us. New technologies made new pigments available for painting. New technologies created tools that allowed people to change how they sculpted in stone. New technologies have even created entire new mediums in the form of photography, films, and even computers.

At the same time, these changing technologies have altered our basic perception of just what "art" is supposed to be. Walter Benjamin is perhaps best known for his analysis of this in his essay "Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit" (The Work of Art in the Age of Mechanical Reproduction). Published in 1934, Benjamin wrote about the consequences of how technological reproductions of works of "art" could cause them to lose their uniqueness.

Previously, it was this very uniqueness of a painting or vase which made it "special" and hence worthy of the designation of "art" — but it also ensured that it remained in the hands of the wealthy who had the means to purchase and support the production of unique works. The introduction of mechanical reproduction changed this relationship between humans and art because it meant that everyone could have exact replicas of the same photograph or the same film in their homes, meaning that "art" was no longer a matter of being "unique" and could, moreover, become more a part of the lives of the average person.

At the same time, though, the truly "unique" artworks were infused with an even more powerful aura — a copy of the Mona Lisa is nothing at all like the original, and that seems even more true today in the age of mechanical reproduction than it was in the past when uniqueness was, well, rather commonplace.

Such a seismic shift in how people related to art may be repeated because new technology is allowing for the creation of "art" independently (sort of) from humanity. Researchers in Australia and the United States, working in concert over the internet, have created what they dub "the semi-living artist." A robot located in Perth draws pictures, but the movements are not controlled by a computer in Perth, in Australia, or indeed by any human being or computer at all. No, the robot was controlled by signals from a collection of rat brain cells which had been grown in Atlanta, Georgia.

Those brain cells are alive, obviously, but they aren't part of an independent living organism — they are "alive" in the same way that any group of cultured skin or liver cells grown in a petri dish are "alive." Instead of being used to test toxins or medicine, though, they are being used to control a robot — one ostensibly creating a work of "art."

I say "ostensibly" because this development forces us to confront the question of just what "art" is supposed to be. As I noted above, humans have always been intimately involved in the production of art in the past. Even when artworks are reproduced mechanically, there was still some "original" that started the process.

Many contemporary theories of art — for example that art is a means of expressing social or political ideas — assume the involvement of humans. But can a few thousand rat neurons tell us something about politics? Can the fruit of rat brain cells' electrical firings be employed as a basis for examining society in a new way? When it comes to art produced by humans, it isn't difficult to answer "yes" to such questions, but it just doesn't seem applicable in this new context.

This offers strong backing for those who defend the "intentional fallacy," a 20th century concept used in the arts and literary criticism to refer to the idea that the meaning of piece of art or work of literature is either entirely or at least largely dependent upon the intentions of the author. According to such critics, it is impossible to really know what an author meant and, besides, meaning is ultimately created in the relationship between the reader/audience and the piece in question. If a work of art has a "political" meaning, it's because of how we relate to it and not because of what the "artist" (be it a human being or a collection of rat neurons) might have intended.

It might also provide backing for the concept of "aestheticism," a concept used in art to refer to any trend which argues that art is self-sufficient and justifies its own existence, thus rejecting an opposing perspective which assumes that art must have some other purpose for existence and must be evaluated by non-aesthetic standards (moral, political, social, etc.). Aestheticism has been largely abandoned in aesthetic theory, but technological developments may force a reappraisal.

All of this hinges, of course, on whether we are willing to label the final drawings created by a collection of rat neurons as being "art" or not. If so, why — because they produce a pleasant aesthetic experience for us? But why do they produce such an experience? The sight of a starry sky may produce such an experience, but we don't call *that* "art," do we? Isn't that because there was no human agency involved? If we don't call the drawings "art," is it because of the absence of human agency — either working for the sake of producing such reaction or for the sake of communicating some political, social, or moral message?

Currently the output of the rat neurons isn't very complex, but the project is only in its earliest stages. Professor Steve Potter of the the Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory University has said "We're attempting to create an entity that over time will evolve, learn, and express itself through art." Express itself? What is "it" — is there a coherent "it," a single entity that is more than just a collection of neurons?

There's a lot more going on here than just a question about what is art — we are also being forced to confront what the "self" is. Who or what is it that "creates" art in the first place? A lot would presumably depend upon interaction with the environment, and the researchers are replicating that as well by providing the neurons in Atlanta with feedback from the activity of the robotic arm in Perth.

What if the researchers used human brain cells for this experiment — would the resulting entity be human? Would it have rights? Assuming that we are talking about an "entity" (which is somewhat debatable, but perhaps not very), this isn't one which is lying passively in stasis somewhere. No, it is actively engaged with at least a portion of its environment — not only learning, but in fact creating something new because of that interaction.

If we are going to say that such a collection of human neurons, acting independently and in new ways, is "alive," then it seems that we will be forced to reconsider just what it means to be a living human being in the first place. We'll be forced to reconsider what makes us "us" — and we'll be doing so in the context of the creation of art. It has been said that one of the things which distinguishes "higher" animals is the process of artistic creation — is that perhaps even more true than has been assumed?



**Essay: Technology changes how art is created and perceived**

**Through the Internet, video games, YouTube, Twitter, et al, original art is sampled and re-envisioned by anyone who can master the computer skills. But where does art end and amateurism begin?**

It used to be so simple. A book had an author; a film, a screenwriter and director; a piece of music, a composer and performer; a painting or sculpture, an artist; a play, a playwright. You could assume that the work actually erupted more or less full-blown from these folks. In addition, the book, film, musical composition, painting or play was a discrete object or event that existed in time and space. You could hold it in your hands or watch or listen to it in a theater or your living room. It didn't really change over time unless the artist decided to revise it or a performer reinterpreted it.



Well, not any more. For years now numerous observers have described the process by which the very fundaments of art are changing from the old principle of one man, one creation. Songs have remixes through which anyone so disposed can alter the original music; videos have mash-ups that use footage to reposition and change the original meaning; the visual arts have communal canvases and websites; poetry has Flarf, which allows one to generate verse from random words; , and books have collages, like David Shields' recent "Reality Hunger," which was assembled entirely, paragraph by paragraph, out of other authors' words. Recombinant art is the rage.

What all these forms have in common is appropriation and a sense of rampant collaboration in which every work of art is simply raw material for anyone who decides to put his or her imprint on it, which then allows someone else to put his imprint on the imprint, which allows still someone else to put his imprint on the imprint on the imprint, and so on ad infinitum. You could call it Wiki-Culture after its prototype, Wikipedia, because like Wikipedia, it is a new form of democratic cultural construction in which everyone can make a contribution.

Of course communal culture is not a new concept. The process began a long time ago in folk art — who is the artist of the Lascaux cave paintings? — and it eventually entered the precincts of fine art with the borrowings of Duchamp, Warhol, Johns, Rauschenberg, Lichtenstein and others who deployed the detritus of popular culture in their work, albeit reformulated by them. If art was about life and life was now increasingly a product of mass consumption, then popular culture was a vast warehouse to be rummaged through and repurposed. That made the industrial designer of the Campbell soup can label or the Brillo box a collaborator with Warhol, Betsy Ross a collaborator with Johns, or little-known comic book artists collaborators with Lichtenstein.

Still, with Warhol and the Pop artists, there is a commanding sensibility: an artist using the larger culture for, and in a way, subordinating it to, his or her own ends. But over the last five years or so — and it is happening at a head-snappingly fast pace — the degree of appropriation and the number of collaborators has proliferated to the point at which there are not only literally millions of new art objects but also millions of new "artists" working in conjunction with one another, so that the very notion of authorship is becoming attenuated and archaic. Where people are invited to add to or edit an object, whose sensibility governs and who gets credit for the evolving creation? The most logical answer, as with Wikipedia, is that the author is the collective whole.



Naturally the Internet has greatly facilitated this process. It brings together far-flung collaborators and gives them the technological wherewithal to ply their talents jointly on objects. The Johnny Cash Project, for example, solicits fans of the late singer to share their vision of Johnny "as he lives in your mind's eye," by providing an image of him and a customized drawing tool to reimagine it. "Your work will then be combined," says the website, "with art from participants around the world and integrated into a collective whole." Call it Wiki-Art.

But if the Internet facilitates this new form of cultural construction technologically, it also encourages it ideologically by attacking the old, increasingly discredited cultural hierarchy. Traditional art was largely top down — delivered from elite cultural commissars who had always determined what art was. On the Internet, however, everything is bottom-up. Of course, long before, the Internet people were taking up their cudgels against those commissars; popular culture is itself an attack on them. But never before has that war been so broad or so effective. Now, anyone with a computer and connectivity has the means to air his voice, his opinion, his own authorship and authority.