NBER WORKING PAPER SERIES

WHO ARE THE GREATEST LIVING ARTISTS?
THE VIEW FROM THE AUCTION MARKET

David W. Galenson

Working Paper 11644
http://www.nber.org/papers/w11644

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
September 2005

Who Are the Greatest Living Artists? The View from the Auction Market
David W. Galenson
NBER Working Paper No. 11644
September 2005
JEL No. J

ABSTRACT

Many art critics and scholars argue that art markets are irrational, and that there is no correlation between prices and artistic importance. This paper identifies all living artists who have executed at least one work that has sold at auction for at least $1 million, and ranks them both by the highest price for which any of their works have sold, and by the number of times their works have sold for $1 million or more. These rankings show that the most valuable art is made by the greatest artists: the leaders in these tables, including Jasper Johns, Bruce Nauman, Robert Rauschenberg, Gerhard Richter, and Jeff Koons, are clearly among the most important artists alive today. This study also underscores the fact that the most important art of the past 50 years has overwhelmingly been made by young geniuses who have made radical conceptual innovations at early ages.

David W. Galenson
Department of Economics
University of Chicago
1126 East 59th Street
Chicago, IL 60637
and NBER
galenson@uchicago.edu

The Value of Art Prices

> There is a good correlation between what is considered great art and what is expensive art... The artists who are respected and thought important, whose work is most esteemed for its innovation and beauty, become the most expensive.
>
> Peter Watson, 1992[1]

Many scholars categorically deny that art prices have any value as an indicator of genuine artistic importance. A recent example of this attitude was provided by Richard Benson, the dean of the Yale University School of Art, who told the *New York Times* that "We don't consider success in the marketplace has anything to do with being a successful artist."[2] Many critics share Benson's Olympian disdain for market outcomes. So for example Robert Hughes of *Time* once declared that "the price of a work of art is an index of pure irrational desire."[3]

Yet art prices have not been universally rejected by either scholars or critics. Some scholars have recognized that the value of works of art inevitably affects how they are perceived. Thus for example the eminent art historian Meyer Schapiro observed that "the enormous importance given to a work of art as a precious object which is advertised and known in connection with its price is bound to affect the consciousness of our culture."[4] Even more narrowly there is a significant tradition in which critics and other observers of trends in modern art have cited prices as evidence of artistic success, particularly in support of new challenges to the entrenched artistic establishment. So for example one of the first champions of the Impressionists, the critic Théodore Duret, argued in a famous early defense of their work in 1878 that its success in the market was a sign of its importance: "Because it is necessary that the public who laughs so loudly over the Impressionists should be even more astonished! - this painting sells."[5] In 1940 Virginia Woolf equally used prices as indicators of importance. Thus in her

biography of Roger Fry she wrote of the pain he had suffered when the Post-Impressionist exhibition he presented in London in 1910 was so widely ridiculed, but she concluded that "Time... vindicated Roger Fry, if money is any test. Shares in Cézanne have risen immeasurably since 1910. That family, who... accumulated works by Matisse must today be envied even by millionaires."[6] More recently, in1989 the critic Peter Schjeldahl conceded that "I must admit that the artistic judgment of current big bucks is better than the average among, say, critics. (Like the prospect of being hanged, shelling out millions may concentrate the mind wonderfully.)"[7] And in the same year, the former Director of the Tate Gallery, Sir Alan Bowness, explained that it is only the most important artists whose work attains the highest prices: "It is only the museum artists whose work begins to rise to exceptional prices."[8]

It is hardly surprising that many artists pay close attention to the market for their work, for a number of reasons. Auction outcomes directly affect artists' reputations. Elizabeth Murray acknowledged this in a recent interview: "Somebody told me once, when the auctions started to be a big deal, 'You're never going to be anywhere until one of your paintings goes for over $500K.' I'm beginning to think there's something to that at this point, it's so much about money."[9] Jeff Koons made a similar point more emphatically, telling a critic that his concern for the price of his work did not stem from greed, but rather from his concern for its reception: "What I'm saying is that the seriousness with which a work of art is taken is interrelated to the value that it has. The market is the greatest critic."[10]

This paper will use auction prices to identify the most important artists alive today. Together with scholars' assessments, this evidence will also serve as the basis for a systematic assessment of the careers of these most important living artists. The analysis carried out here will

yield important new insights into the achievements of leading contemporary artists, and the sources of their success. It can also point to some common patterns of these artists' training and their rise to artistic importance.

Price Lists

> Lists seem trivial, but in fact they are crucial symptomatic indices of underlying struggles over taste, evaluation and the construction of a canon.
>
> Peter Wollen, 2002[11]

Table 1 presents an alphabetical listing of every living artist who has had at least one work sell at auction for at least $1 million.[12] The table has 39 entries. For present purposes, these artists will be ranked in two ways. Table 2 ranks them by the single highest price for which any of their works has sold at auction.[13] Table 3 then ranks them by the number of times their works have sold at auction for at least $1 million.

Before examining these lists, it is worth noting that these rankings based on the most valuable works will be used in preference to other possible rankings, including the total value all of an artist's works have generated at auction. The reason for this is the concern here with artistic importance. Greatness in art depends not on quantity but on quality. The greatest artists are obviously not those who produce the most works, or even those who produce the most good works, but rather those who produce the work of the greatest importance. Some great artists have been extremely productive, but others have left only a handful of works. Two twentieth-century artists clearly illustrate the extremes: Pablo Picasso was among the most prolific of modern artists, while Marcel Duchamp created a very small body of work, but Picasso and Duchamp may have been the two most important artists of the past century. Because of the irrelevance of the

volume of work an artist produces for his or her importance, the rankings here concentrate on the most important works.

The rankings of Table 2 and 3 are not identical, but they are broadly similar. The top 10 artists in Table 2 are all among the top 17 in Table 3, and the top 11 in Table 3 are all among the top 17 in Table 2. Thus in general it is the artists whose work has sold for the very highest prices who have also had the most works sell for more than $1 million. Perhaps the most striking difference between the two rankings occurs for Gerhard Richter, who ranks a respectable seventh in Table 2, but stands alone at the top of Table 3 by a large margin over Jasper Johns. The large number of Richter's paintings that have sold for very high prices is a significant fact that will be considered in analyzing his position in contemporary art.

Does the Market Work?

> Perhaps the importance that we must attach to the achievement of an artist or a group of artists may properly be measured by the answer to the following question: Have they so wrought that it will be impossible henceforth, for those who follow, ever again to act as if they had not existed?
>
> Walter Sickert, 1910[14]

Before proceeding to more detailed analysis of the evidence presented in Tables 2 and 3, it is useful to consider the reliability of these data for our purposes. Does the art market work? Do the highest prices attach to the work of the "museum artists," as Alan Bowness would have it, or is the auction market so irrational that its outcomes bear no relation to the importance of particular artists or their work, as Richard Benson and Robert Hughes appear to believe?

As Walter Sickert recognized, importance in art is determined by influence: the most important artists are those whose influence is greatest, and thus those whose successors cannot

"act as if they had not existed." Does the auction market identify these artists: are the artists who stand at the top of Tables 2 and 3 those whose work has had the greatest impact on their successors?

Even a brief survey can suffice to indicate the answer to these questions. Jasper Johns ranks first in Table 2 and second in Table 3. His work is widely recognized as having played a key role in producing a shift from the gestural abstraction that dominated advanced art during most of the 1950s to the Pop art and Minimalism that would come to dominate the 1960s. So for example looking back from late in the 1990s, Arthur Danto reflected that Johns' early work "opened up the present in which we all exist artistically."[15] One of the leading textbooks of modern art recently observed that "The formal innovations of Jasper Johns had an even more far-reaching influence than Rauschenberg's in bringing on the radical new objective art of the sixties."[16] It is not an accident that Johns is juxtaposed with Rauschenberg, for in different ways both of them were responsible for overthrowing the visual art of Abstract Expressionism and replacing it with a more conceptual approach that descended from Duchamp. Perhaps the most distinctive element of Rauschenberg's contribution was his invention of the "combine," in which the use of real objects reduced the role of painting, and thus contributed to the proliferation of hybrid genres of art during the 1960s and beyond. It was in recognition of this trend toward mixtures of different artistic media that Leo Steinberg observed that "on the New York art scene the great shift came in Rauschenberg's work of the early 1950s," and that Arthur Danto would write in 1997 that "the artistic mainstream today is very largely Rauschenbergian."[17]

Gerhard Richter's place at the top of Table 3 reflects his importance in producing a partial counterbalance to the influence of Rauschenberg. In some respects Richter's role parallels that of

Andy Warhol, for during the 1960s both pioneered new approaches to painting, based on photography, that appealed to younger artists who did not want to abandon that traditional medium.[18] Like Warhol and other Pop artists, Richter and his friend Sigmar Polke developed styles of painting that avoided what many of their contemporaries considered the excessive emotional and philosophical claims of Abstract Expressionism, and pointed toward more ironic and emotionally detached images. In the process, they became models for younger painters in both Europe and the US who created a revival in painting during the 1980s. Looking back from the vantage point of 1990, Peter Schjeldahl declared that "the four absolutely best artists, by my own and many other people's lights, to have emerged internationally since the '70s - Sigmar Polke, Gerhard Richter, and Anselm Kiefer, along with the late Joseph Beuys - are German."[19]

Bruce Nauman, who ranks second in Table 2, was a leader of the cohort that followed that of Johns and Richter. Nauman's highly conceptual approach to art produced contributions in a wide variety of media. In 1990, Schjeldahl summarized his role: "Now 48, a dominant figure in the generation of post-minimalism and vastly influential in Europe, he is a maverick who at one time or another has affected the course of just about every visual medium except painting, earning a prestige among serious younger artists like that of no one else since Jasper Johns."[20] Eight years later, the English critic Richard Cork testified to Nauman's continuing role, noting that "Nauman has influenced younger artists in all kinds of ways. Damien Hirst and Rachel Whiteread are only the most prominent of the British practitioners to owe him debts."[21]

From the next cohort, Jeff Koons ranks prominently in both Tables 2 and 3. Koons is perhaps the most controversial and flamboyant American artist since Warhol. He has just turned 50, and art historians have not fully charted his role in contemporary art. Some critics have

weighed in, however. Thus in 1988 Schjeldahl declared that Koons "may be the definitive artist of this moment."[22] Sixteen years later, Arthur Danto observed that "It is widely acknowledged that Jeff Koons is among the most important artists of the last decades of the twentieth century."[23]

This discussion could be extended to more of the artists who figure prominently in Tables 2 and 3, situating them within what Bowness called the "chronological sequence of [museum] artists, carrying forward an argument which forms the material of modern art."[24] This would include recent views of Lucian Freud as a precursor of the Neo-Expressionist painting of the 1980s, of Cy Twombly as an inspiration for Neo-Expressionism and Graffiti art, and of Frank Stella as a key link between Jasper Johns and Minimalism.[25] Yet for present purposes it seems unnecessary to extend this discussion. For examination of Tables 2 and 3 establishes beyond any reasonable doubt that the auction market has assigned its highest values to those artists who have been leaders of their generations. Sir Alan Bowness clearly understood this, noting that it is the rarity of these key artists "that accounts for the phenomenal prices achieved today in the auction houses."[26] But it is difficult to see how even Richard Benson or Robert Hughes could deny that Johns, Rauschenberg, Richter, Nauman, Koons, and the other artists who head Tables 2 and 3 are the most influential artists alive today.

Creative Careers

> Each stylistic portion of an artist's total time span constitutes a separate sum of artifacts, and this is recognized by the art market in the values it places upon certain "periods" of an artist's work in contrast to others.
>
> Harold Rosenberg, 1974[27]

Recent research has shown that there is a consistent relationship between an artist's

methods and goals and the stage of his career in which he produces his most important work. To provide a basis for examining this relationship for the artists considered in this study, Table 4 shows the ages of the artists when they executed the works listed in Table 2.

The ages in Table 4 cover virtually the entire adult life span, ranging from a minimum of 23 (Stella) to a maximum of 73 (Bourgeois). Yet their distribution is far from uniform, as young ages appear much more frequently than older ones. The median age in Table 4 is 34. More than three-fifths of these highest-priced works were produced by artists below the age of 40; less than one-fifth were made at 50 or above. The median age of the top 10 artists when they made their highest-priced works was just 32.5; the top two - Johns and Nauman - were both in their 20s when they made the works that would later sell for millions of dollars.

The youth of many of these top artists when they produced their best work is not merely an artifact of the auction market, but is confirmed by the judgments of art scholars. Six of the top artists in Table 4 have entries below the age of 35. For these six artists, Table 5 presents their ages in the single year from which their work was found to be most often illustrated in a search of 13 art history textbooks published since 2000.[28] The evidence of the textbooks yields ages very similar to the auction results: for three of the six artists the two sources produce the same age, and the median of the six ages from the textbooks, of 30, is virtually the same as the median of 29.5 obtained from the auction outcomes. Art scholars thus agree with collectors that many of our greatest living artists have peaked at very early ages. Understanding why is critical for understanding contemporary art.

Conceptual Innovation

> We are living in a conceptual art world.
> Arthur Danto, 2001[29]

The preponderance in Table 2 of works made by young artists is a consequence of the fact that from the late 1950s to the present advanced art has been dominated by conceptual innovation.[30] The artists who stand at the top of Tables 2 and 3 include some of those most responsible for the transition to this conceptual era, as well as many of their most important successors who have sustained it.

During the late 1940s and most of the 1950s, the leading artists worked experimentally, by trial and error, as they proceeded in the pursuit of images they judged visually. For Jackson Pollock, Willem de Kooning, Mark Rothko, and their friends in New York, as for Pierre Soulages, Hans Hartung, Nicolas de Staël, and their colleagues in Paris, art was created not in the mind but on the canvas: "One begins with a mark, another mark, a third mark - a splash, a smudge, a drip - until the whole work energetically completes itself and the artist can then see what has been achieved." Gestures and actions were privileged over ideas, for "hand and eye were everything, and for those who can remember that era, the intellect could hardly have been more suspect."[31]

In the late 1950s an abrupt change occurred. The turning point is often considered to have been Jasper Johns' first one-man exhibition at Leo Castelli's gallery in 1958. There Johns presented paintings of flags and targets that "invalidated the aesthetic - or part of the aesthetic - of the most esteemed members of the advanced painting culture of the time... [I]t signaled the end of an era."[32] Ever since Johns' show, most leading artists have worked conceptually,

carefully planning their works prior to making them, in order to express ideas they had formulated in advance. Preconception is so central to this art that Roy Lichtenstein, whose cartoon images might have seemed to have little in common with Frank Stella's early paintings of black stripes, could remark in 1965 that a primary concern of his art was "the same kind of thing that you find in Stella... that before you start painting the painting, you know exactly what it's going to look like."[33] In fact, because for many of these artists "all of the planning and decisions are made beforehand and the execution is a perfunctory affair," a number of them could delegate the production of their works to assistants or other artisans, and a series of major artists, from Warhol and LeWitt to Koons and Hirst, have executed little of their own work.[34]

With the transition from an experimental to a conceptual art, the currency of the advanced art world shifted from the creation of striking images to the presentation of arresting ideas. This change in product implied an equally radical change in methods of production, and consequently in the gestation period of artistic innovation. The trademark images of the Abstract Expressionists and Tachistes developed over the course of years, and often decades, of experimentation, as the artists gradually explored the visual properties of their materials and their own actions. Experience was necessary for mastery of their art. In contrast, the novel ideas of their conceptual successors were typically formulated quickly, in momentary flashes of inspiration. And the most radical new ideas were usually produced by artists who had not been active long enough to become constrained by fixed habits of thought, and who could therefore break away from conventions that more experienced artists automatically followed. Inexperience consequently became a key ingredient for significant innovation in this conceptual era. For the contributions that constituted the landmarks of contemporary art, the wise old master was

suddenly replaced by the brash young genius.

The careers of important conceptual innovators are normally marked by a major early contribution. In many cases, the artist's work deteriorates thereafter, as he either repeats the early innovation or fails in attempts to produce others. In some cases however, conceptual innovators go on to make other significant innovations. These are generally less important than their first contribution, because they are usually more circumscribed by the artist's accumulating experience, but in any case they are likely to be very different from it, for the key to generating new ideas is to tackle problems so different that the artist is forced to use new approaches. The more radically the artist changes problems, the greater the chance to make an important new contribution. The careers of conceptual innovators are therefore usually marked by precocity, and those of great conceptual innovators are also often marked by diversity.

Young Geniuses and Old Masters

> Falloffs in the later work of major artists are so far from unusual as to be the rule in our mercurial culture.
>
> Peter Schjeldahl, 2005[35]

How do the theoretical schemes described above relate to the careers of the artists considered in this study? Understanding this requires examination of the artists individually. Space does not allow this for all 39 artists, but this section will consider the careers of eight of the artists identified as the most important. These will be the seven highest-ranked artists in Table 4, as well as the youngest artist who ranks in the top 20 in that table. In each case, the analysis will consider the relationship between the particular artist's most influential contribution, or contributions, and his age when he executed the relevant work.

As noted earlier, Jasper Johns was a central figure in the transition from the experimental

art of Abstract Expressionism to the conceptual approaches of Pop and Minimalism. Johns' most important works were those he made during the late 1950s. Of the 38 illustrations of his work included in the 13 recent textbooks referred to above, 10 were of paintings he made in 1955, four each were of works from 1958 and 1959, and another five were of works from 1960. Thus more than 60% of his illustrations are of work he produced by the age of 30, and no single later year was represented by more than two illustrations. Johns' paintings of flags and targets were the result of a radical new idea formulated early in the career of a conceptual innovator.

Johns explained that he chose to paint the flag "because I didn't have to design it. So I went on to similar things like the targets - things the mind already knows."[36] And as Leo Steinberg pointed out, it was the way Johns painted these objects that eliminated the need for decisions: "Since they tend to constitute the whole subject of a particular work, *Johns's objects, systems, or signs predetermined the picture's shape and dimensions*."[37] The clarity of Johns' conceptual contributions meant that his innovations were immediately available to other artists. So for example as a senior in college Frank Stella saw Johns' 1958 show, was intrigued by " the idea of stripes... the idea of repetition," and during he next year made his own paintings of stripes. Exhibited at Castelli's gallery in 1960, these Black paintings remain the most important work the conceptual Stella has made in his long career; one of them places him among the top ten artists in Table 2.[38]

During the 1960s many young artists turned away from painting, and Bruce Nauman became a leader in the use of other genres. As Schjeldahl observed in 1982, "Artists in the late 1960s were optimistic about the aesthetic potential of technologies and systems, and Nauman played with most of them - video, film, photography, light, sound, language, mathematics,

holography, and more - to memorable effect."[39] Nauman's extremely diverse body of work is considered to have influenced a series of younger artists in a wide variety of ways; these artists include such prominent figures as Rachel Whiteread, Jenny Holzer, Matthew Barney, Kiki Smith, Cindy Sherman, Vito Acconci, Tracey Emin, and Sarah Lucas.[40] And Nauman's most important innovations tended to cluster early in his career; more than half of the illustrations of his art in the textbooks surveyed for this study were of works he made between the ages of 24 and 27.

There is a common thread in Nauman's work, in that he has persistently used his own body and its actions as his subject.[41] Yet from the beginning of his career, Nauman used the history of art as the direct inspiration for his ideas. Kathry Hixson listed a few examples: "Many of Nauman's works could be interpreted as homages to Jasper Johns's sign-paintings, Joseph Beuys's fat corners, Marcel Duchamp's fountain, Michael Heizer's masculine earth-movings, or Dan Flavin's fluorescent light tubes."[42] After seeing a retrospective exhibition, Schjeldahl observed that "Nauman was never not Nauman... [H]e has made only 'mature' work."[43] This is not surprising, for Nauman's art has never been based on observation and analysis of the outside world, or on the gradual development of techniques, but rather on the sudden production of new ideas inspired by art history, filtered through the prism of introspection about his own body and its immediate environs.

Lucian Freud is the lone experimental artist among the eight considered in this section. His art requires observation: "I could never put anything into a picture that wasn't actually there in front of me. That would be a *pointless* lie, a mere bit of artfulness." He considers his art a search for an elusive goal, but recognizes that because this goal is unattainable, what is most important is the process of the search:

> A moment of complete happiness never occurs in the creation of a work of art. The promise of it is felt in the act of creation but disappears towards the completion of the work. For it is then that the painter realizes that it is only a picture he is painting. Until then he had almost dared to hope that the picture might spring to life. Were it not for this, the perfect painting might be painted, on the completion of which the painter could retire. It is this great insufficiency that drives him on. Thus the process of creation becomes necessary to the painter perhaps more than it is in the picture. The process is in fact habit-forming.[44]

Freud's avoidance of preconception is such that he not only makes no preliminary studies for his paintings, but he does not even lay out the whole figure of the subject on his canvas as he begins to paint: "I'd rather it ran off the edges than have to cramp the forms."[45] Freud paints only people he knows well, for he wants his "portraits to be *of* the people, not *like* them. Not having the look of the sitter, *being* them."[46]

As Table 6 shows, Freud is the only one of the eight artists considered here who made the majority of his highest-priced works after the age of 50. Freud's method evolved over time. John Russell reported that "whereas in earlier days Freud never over painted, he will now take the image out and start all over, time and time again, till it has the inevitable look that he wants."[47] The power of Freud's work has grown over time, for its strength lies in the progressive rejection of artifice that occurred as the artist gained confidence in his ability to portray people without stylization or pretense. His late work is both his most expressive and his most disconcerting, for as Freud observed, "the task of the artist is to make the human being uncomfortable."[48]

Leo Steinberg quoted Jasper Johns as saying that Robert Rauschenberg was "the man who in this century had invented the most since Picasso."[49] Early in his career, Rauschenberg produced a large number of innovations, all the embodiment of new ideas, and most of which

crossed the boundaries of traditional artistic genres. In a famous statement, Rauschenberg declared: "Painting relates to both art and life. Neither can be made. I try to act in that gap between the two."[50] Rauschenberg's versatility meant that his influence spread widely. An early example is the white paintings he made as a student at Black Mountain College in 1951, which comprised a series of white panels. After seeing the white paintings the composer John Cage wrote his famous *4'33"*, in which a pianist sat in front of an audience for that length of time, without playing a single note. What would prove to be one of Rauschenberg's minor innovations had thus inspired a work that a recent survey of modern American music described as a "landmark" that "requested a new attitude toward listening, and toward the concept of music itself."[51]

Rebus, Rauschenberg's entry in Table 4, was a 1955 painting that contained a variety of collage elements. During that year Rauschenberg attached more and more real objects to his canvases, until the works became three-dimensional and often free-standing, prompting to give them a new name, of "combine." As Table 7 shows, several of these are among the most celebrated works by living artists, as *Bed* and *Monogram* are two of the five works by the 39 artists studied in this paper that appear most often in the art history textbooks surveyed. Rauschenberg made *Rebus*, *Bed*, and *Monogram* before he turned 35, and he made all 14 of his works represented in Table 3 before the age of 40. Although Rauschenberg has continued to make large amounts of art throughout his long career, his significant contributions were made early. As the English critic Richard Cork wrote in 1981, "No *enfant* was more *terrible* than Rauschenberg in his heyday, but the trouble is that even the most precocious child has to grow up."[52] Like his friend Jasper Johns, during the 1960s Rauschenberg was surpassed by a new

generation of young and iconoclastic innovators, who used his innovations for their own ends.

Cy Twombly was a less radical innovator than his contemporaries Johns and Rauschenberg, and his art developed more gradually. He is nonetheless a conceptual artist, whose trademark style is a synthesis of the art of a number of his predecessors. Twombly's most distinctive work began after he settled in Rome in the late 1950s, as he blended the gestural touch of Abstract Expressionism with marks adapted from the work of Jean Dubuffet and Alberto Burri to make images that are often considered as forms of writing or calligraphy.[53]

Twombly's influence on other artists was less widespread than that of Johns and Rauschenberg, and its impact was less sudden than theirs. But over time a number of younger painters, both in Europe and the US, were influenced by his blending of primitive images with sophisticated handling of color. So for example in 1962 the young artists Sigmar Polke and Gerhard Richter incorporated a number of Twombly's devices into their early development of a German version of Pop art.[54]

Jeff Koons is a conceptual innovator who is often placed in a line of descent that includes Marcel Duchamp and Andy Warhol.[55] His art is based on ideas and images he draws from a series of earlier artists, including Duchamp, the Surrealists René Magritte and Salvador Dali, Man Ray, Jackson Pollock, Jasper Johns, and the Pop artists Roy Lichtenstein and James Rosenquist, as well as from magazines and billboards.[56] Koons produces his work systematically. In making paintings, for example, he begins by using a computer to create composites from photographs he has cut from magazines and books. "After I have an image on a computer file that I like, we make a digital slide. And then the slide is projected and we draw out the image on the canvas."[57] A staff of assistants then executes the painting according to Koons' instructions. In

1999, while rushing to meet a deadline for an exhibition at the Deutsche Guggenheim Berlin, Koons had a total of 47 artists working on a series of paintings, each more than 12 square meters in size: “There were a lot of people mixing color. And we had two different shifts, so the studio was going twenty-four hours a day, seven days a week, always with half the staff there working to complete the paintings.”[58]

Arthur Danto has argued that Koons’ most important contribution is his creation of objects that, in Koons’ language, have “the sense of ready-made inherent in them.” These are the statues that resemble the cheap kitsch objects sold at gift shops and souvenir stands, but that are in fact made by highly skilled craftsmen from original designs created by Koons. By designing objects that might have been ready-mades but were in fact drawn from his own imagination, Koons created “commonplace kinds of objects reimagined as surrealistic presences.”[59] Both his work and the public image he has created have been seen as influences on a number of younger artists.[60] So for example not only did Koons influence Damien Hirst in making his famous steel and glass cases, but Hirst also explained that he admired Koons for deliberately constructing “Jeff Koons, the Artist.”[61] Another young British artist, Sarah Lucas, was influenced by Koons’ sexually explicit sculptures and photographs; her sculpture, *Woman in a Tub*, paid tribute to Koons not only in its subject matter but by using the same title he had used earlier.[62] Koons’ conceptual approach to art is reflected both in his eagerness to present works that have outraged many in the art world, whether for their aesthetic qualities or their sexual explicitness, and in the image he has carefully cultivated of the artist as a brash young iconoclast.

Since the early 1960s, Gerhard Richter has used photographs as the basis for many of his paintings. He explained that this reduced the number of decisions he had to make: “When I paint

from a photograph, conscious thinking is eliminated." Drawing an object by hand could lead to distortion and stylization: "By tracing the outlines with the aid of a projector, you can bypass this elaborate process of apprehension." [63] Richter's method and his embrace of preconceived images clearly identify him as a conceptual artist. But his career path is an unusual one. As noted earlier, his position at the top of Table 3 points to the large number of important works he has made. Table 6 furthermore shows that he has made these over an extended period, with concentrations in his 30s and 50s.

Richter is perhaps most noted for painting representational works based on photographs, a practice he began in 1962. But he has made a number of other distinct contributions. These include the color charts he began to make in 1966, which have been interpreted as a synthesis of Pop art and of late Abstract Expressionism; abstract paintings, initially made by painting from photographic enlargements of small sections of representational paintings, which he began to make in 1970; and paintings with powerful albeit ambiguous political content, most notably the 15 paintings from photographs of members of the urban guerilla Baader-Meinhof group, three of whom died in a German prison in 1977, which Richter made in 1988.[64]

The protean nature of Richter's style recalls the practice of an earlier modern conceptual master. In 1985, Meyer Schapiro reflected that "If the works of Pablo Picasso were not identified directly with his name, if they were shown together in a big exhibition, it would be rather difficult to say that they were the work of one man." Schapiro was puzzled, and troubled, by Picasso's frequent shifts of style: "If you can work in any... way you please, then no one way has a necessity; there is an element of caprice or arbitrariness of choice."[65] In 2002, Arthur Danto remarked that visitors to Gerhard Richter's retrospective exhibition then on display "are certain

to be baffled by the fact that he seems to vacillate between realism and abstraction, or even between various styles of abstraction, often at the same time." Danto recalled that "These vacillations seemed to me so extreme when I first saw a retrospective of Richter's work... that it looked like I was seeing some kind of group show." Danto noted that many artists would reject Richter's behavior: "To change styles too often inevitably would have been read as a lack of conviction."[66]

The frequent and rapid stylistic shifts of both Picasso and Richter are a phenomenon that had long been understood by conceptual artists. So for example as early as 1921 the critic and painter Amedeé Ozenfant wrote a commentary titled "Picasso's Language," in which he observed that "When he paints a picture, he knows what he wants to say and what kind of picture will in fact say it; his forms and colors are judiciously chosen to achieve the desired end, and he uses them like the words of a vocabulary." Ozenfant explained that consequently when Picasso worked in one style, it didn't mean he had abandoned any other: "Because Picasso nowadays paints both cubist and representational works, it has been falsely claimed that he is giving up Cubism; this had caused commotion in the studios and joy among diehards. Can such people not understand that Cubism and figurative painting are two different languages, and that a painter is free to choose either of them as he may judge it better suited to what he has to say?"[67] Schapiro and Danto failed to understand that changes in style mean very different things to experimental and conceptual artists. Experimental artists seek for their one true style, and from their vantage point any quick changes or alternation in styles can only be seen as insincere, but conceptual artists can treat styles as languages, and can consequently shift from one to another as they find appropriate for the occasion. As Picasso explained, "Whenever I have had something to say, I

have said it in the manner in which I have felt it ought to be said."[68]

The large number and broad distribution of Richter's most valuable works over an extended period are testimony to the fact that he is considered to have made important contributions at several stages of his career. Consistent with this, Amy Dempsey's recent guide to styles of modern art gives Richter main entries both under "Super-realism," for the photo-paintings he began to make in the early 1960s, and under "Neo-Expressionism,"illustrated by an abstract painting he executed in 1999. Because of his artistic longevity and his versatility, Richter has had an influence on many younger artists, including painters as different from each other as Chuck Close, David Salle, and Zhang Xiaogang.[69] Richter is widely respected as an artist who has consistently found ways to make significant advances in painting during periods, in the late 1960s and the 1970s, when many young artists were turning away from painting, and he and Sigmar Polke are routinely mentioned as central figures in inspiring the renewed popularity of painting for young artists in both Europe and the US in the 1980s.

Damien Hirst's meteoric rise to prominence began in 1988, when as a second-year art student at Goldsmiths' College he curated *Freeze*, a group show of the work of a number of fellow students, at a vacant building in London's Docklands. The show created immediate interest and has become recognized as a landmark event for its announcement of the young British artists, or YBAs, who are considered by many English observers to have become the leaders of the international advanced art world of the 1990s.[70] A series of group shows soon followed *Freeze*, and from one of them in 1990 Charles Saatchi bought *A Thousand Years*, a work of Hirst's in mixed media: "steel, glass, flies, maggots, MDF, insect-o-cutor, cow's head, sugar, water."[71]

Hirst's approach to art is conceptual: "I like creating emotions scientifically."[72] His works are direct: "Hirst's most successful works have an immediate impact, physically communicating a thought or feeling."[73] His declaration that he wants his paintings "to look like they've been made by a person trying to paint like a machine" echoes Andy Warhol's famous statement that "The reason I'm painting this way is that I want to be a machine," just as Hirst's practice of having his paintings made by assistants follows that of Warhol.[74] The tanks in which Hirst suspends dead animals echo the tanks in which Jeff Koons floated basketballs, just as Hirst's creation of a public persona that complements his work appears to follow Koons' systematic pursuit of personal and professional fame. Thus Hirst openly admits that his art and his public image cannot be considered separately: "With me it's really got to be about the personal life and the art and the fame and how it connects."[75]

Hirst's art draws on a number of central influences. In addition to Koons, these include Claes Oldenburg's sculptures, the geometric art of Minimalism, and Francis Bacon's paintings.[76] Less than two decades into his career, it is still early to trace Hirst's influence, but it is clear that over time he has consolidated his early position as the leading member of the YBAs. In part this is because he has become the archetypal member of the group in the perception of outside observers, but it appears that in this role he has also affected how the other members of the group perceive their own art. Admirers of the YBAs often argue that what distinguishes the new English art of the 1990s, and raises it above the conceptual art being made elsewhere, is its subject matter: instead of simply conducting intramural debates with earlier artists, the YBAs set out "to engage instead with the broad and urgent concerns of everyday life," and "to confront even the most distressing, taboo aspects of existence."[77] And it has been claimed that none of

them engages with larger concerns than does Hirst, who "tackled head-on the eternal themes of life, death, and regeneration, freedom and liberty, beauty and ugliness."[78]

Like many other conceptual artists, Hirst has produced a diverse body of work in a number of media. At 40, he is recognized as a leading artist, if not the leading artist, of his generation. It is unlikely, however, that he will ever produce another series of works that will have a greater impact on the art world than his preserved animals in tanks, or that he will ever make an individual work that will be more widely identified as a trademark piece than his 1991 tiger shark, *The Physical Impossibility of Death in the Mind of Someone Living*.

As noted earlier, seven of the eight artists discussed in this section are conceptual innovators, This is not an accident, for the artists considered in this study are overwhelmingly conceptual. In addition to Freud, the only experimental exceptions to this conceptual predominance are Bourgeois, Serra, Thiebaud and Zao. The one qualification that should be kept in mind is that there may be other important experimental artists working today, already well into their careers, who have not yet been recognized as great artists. Louise Bourgeois affords an example of the late recognition of a great experimental innovator. In 1981, when Bourgeois was 70 years old, an *Artnews* critic wrote that "Perhaps Louise Bourgeois is an idiosyncratic choice for an article on 'emerging' artists. Yet she was the first to come to mind when considering artists of high caliber whose work came to my attention during the past season."[79] Bourgeois' work first reached $1 million at auction in 2002, when she was 91; she had made the work in question 18 years, before when she was 73.

<u>Geography</u>

The fact of working and living in New York constitutes a condition

> favorable to [artistic] success on the highest level.
> Raymonde Moulin, 2004[80]

During the 1950s, it became a commonplace among American critics and scholars that the center of the art world had shifted from Europe to the US, as New York replaced Paris not only as the major market for advanced art, but also as the center of its production.[81] And although Europeans were less inclined to recognize this change, in 1983 a French scholar admitted that after World War II the birth of an American avant-garde had in fact "succeeded in shifting the cultural center of the West from Paris to New York," though he contended that this had been accomplished by more sinister means than Americans believed.[82]

In recent decades there has been a progressive reduction in New York's dominant position as the home of major artists: American artists have increasingly chosen to live elsewhere in the US, and there has been an increase in the number of important European artists, particularly in Germany and England, who have not chosen to move to the US. Overall, however, the US remains the major country for important living artists. Thus 19 of the 39 artists listed in Table 1 were born in the US, and several others, including Bourgeois, Hockney, Oldenburg, and Prince, have spent much or most of their careers here. Eleven others were born in Europe and have remained there, with Germany (Baselitz, Kiefer, Polke, Richter) and England (Freud, Hirst, Ofili) the leading countries. Of the remaining five artists, Dumas was born in South Africa and lives in Holland, Botero and Bravo were born in South America and spend much of their time in Europe, Kusama lives in Japan, and Zao was born in China and lives in France.

An interesting fact about these greatest living artists may provide support for the view of some Europeans that in recent decades there has been a new shift, in which the US has ceased to

be the vital center of the production of advanced art. As Koons turns 50 this year, there are five artists in this group who are currently below the age of 50 (Barceló, Cattelan, Hirst, Ofili, and Tuymans), and none is American. These numbers are not so great as to constitute overwhelming support for a statement like that of Matthew Collings, who declared in 1998 that "young British art now dominates the world."[83] Yet it may be suggestive that two of these five younger artists are English, and that Ofili is the only one of the five who is currently below the age of 40.

Although there are some questions about the geographic center of the production of advanced art, there is less uncertainty about the art world's central marketplace, and the most important geographic locus for the certification of artistic success. Damien Hirst expressed what is probably a widespread attitude in 1996, when he was preparing for his first major New York show. He was already famous in England: he had won the Turner Prize the previous year, and he was making a film that was to be shown at London's Hayward Gallery. As Gordon Burn observed, "Not since the emergence of David Hockney in the early 1960s had a British artist's passage to fame been so rapid and spectacular."[84] Yet in spite of his position as what Burn called "a figure of contemporary London legend," Hirst felt that his resumé was incomplete. When Burn asked him what a success in his forthcoming New York show would mean to him, Hirst replied "It means I can relax. It means I can do it." As the leader of the YBAs, Hirst went on to state the Frank Sinatra Theorem for his followers: "I hope that people do realize that if you can make it there you can make it anywhere. I hope that Angus [Fairhurst] realizes that; I hope that Sarah [Lucas] realizes it." Underlying Hirst's recognition that the New York art world was the most widely recognized arbiter of success, however, was a belief that it was prejudiced against those who declined to become full-time members of it: "There's an easy way to make it

worldwide: move to America. Look at Malcolm Morley and how he did in the 1980s... Malcolm Morley would have been [nothing] if he'd stayed in England. I can't help thinking if Gilbert and George were American, they'd be much more significant."[85]

Art Schools

> Our generation was the first fully educated generation - everybody went to graduate school.
>
> Chuck Close, 1997[86]

The experiences of the artists examined here reflect a number of other significant features of today's art world. One of these is a basic change that has occurred since 1960 in the early career patterns of important artists. Until then, ever since the revolt of the Impressionists against the Ecole des Beaux Arts, few important modern artists had attended formal degree-granting art programs. But since then the situation has changed, as recent generations of conceptual artists have often learned conceptual skills in graduate schools of art. Even casual inspection of the careers of the artists listed in Table 1 reveals a number whose careers were significantly affected by their experience in formal art schools.

Sigmar Polke and Gerhard Richter enrolled in the Düsseldorf Academy of Art in 1961, the same year in which the flamboyant conceptual artist Joseph Beuys accepted a professorship there. Richter recalled that Beuys not only introduced him to the work of Duchamp, but that he challenged him: "he unsettled me, because he didn't play by the rules. He followed different criteria and employed different strategies; he was working for an 'expanded definition of art,' which was not so much a protection as a challenge; a challenge to me too."[87] Beuys was then becoming Europe's leading seer of conceptual art based on performance, and he told his students that painting was a reactionary activity that they could no longer pursue. This prohibition was a

turning point in the early careers of the two young artists: "Polke and Richter thought long and hard about whether they were 'allowed to paint,' decided they were not, and for that reason took it up with a vengeance."[88] Although Polke and Richter did not become followers of Beuys' work, his example of rebelliousness inspired them to perform the most rebellious act they could think of in the early 1960s, of returning to painting. It is also difficult not to see Beuys' influence in the fact that both Polke and Richter would become known for their frequent and rapid changes of style throughout their careers.[89]

Chuck Close, Brice Marden, and Richard Serra are among a number of important American artists who attended the Yale School of Art during the 1960s.[90] Close explained how the conceptual content of the school's curriculum prepared students for the art world: "At Yale we all learned to talk art before we could really make it. Not a bad skill actually. When you do get a great idea at least you can recognize it, articulate it, and exploit it."[91] Ed Ruscha, who attended art school in California, recalled that it was while he was in school that he realized that his approach to art would be conceptual: "The time I did at Chouinard [Art Institute] was helpful... I began to believe that it is not so much what you say that matters, but how you say it. This ruled out so-called emotional painting. Everything should be preplanned."[92]

The most celebrated recent group of art school students were Damien Hirst and the other YBAs who participated in the *Freeze* exhibition in 1988: with the exception only of Rachel Whiteread, who had graduated from the Slade School of Fine Art, all the artists in that show were students at Goldsmiths' College. One of their teachers there, who is often described as the key influence on the YBAs, was Michael Craig-Martin, who had himself attended art school at Yale. Craig-Martin recalled that it was at Yale that he learned that art "needed to be rooted in the

very experience of ordinary life I had thought it sought to escape; that contemporary art existed in a context as complex as that any other historical period."[93] Craig-Martin recently argued that the success of the YBAs was in part a product of their academic training: "I believe that one of the principal reasons the generation of young artists who graduated from Goldsmiths in the late eighties had such an immediate and profound impact on the international perception of British art was that they continued the critical dialogue that had characterized their education into the art world beyond the school. Every exhibition, every interview, every social event became an opportunity to extend awareness and to discuss ideas, feelings, concerns and values. More and more artists were drawn into this dialogue of work and words, and for the first time London could be seen to be generating rather than just responding to the central discourse that characterizes and propels contemporary art of international interest."[94]

Group Work

> Most truly original new art is the result of group activity. It appears that the conjunction of several exceptional talents results in something that is greater than the parts.
>
> Alan Bowness, 1989[95]

A notable fact about the life cycles of important modern artists is that at an early stage of their careers nearly all have collaborated with other young artists who have also become important artists. The artists considered here provide examples of these relationships.

Sigmar Polke and Gerhard Richter worked closely together as students in Düsseldorf. In 1963, with two other fellow students, they rented a condemned building for the first public exhibition of their own art, which they announced as the unveiling of what they called "German Pop Art," or "Capitalist Realism." Their press release for the show declared that "Pop Art has

rendered conventional painting - with all its sterility, its isolation, its artificiality, its taboos, and its rules - entirely obsolete." In notes written in 1964, Richter explained that "Contact with like-minded painters - a group means a great deal to me: nothing comes in isolation. We have worked out our ideas largely by talking them through... One depends on one's surroundings. And so the exchange with other artists - and especially the collaboration with [Konrad] Lueg and Polke matters a lot to me: it is part of the input that I need." Nearly three decades later, in looking back at that early collaboration, Richter put greater emphasis on a different stimulus he received from his relationship with Lueg and Polke: "There were rare and exceptional moments when we were doing a thing together and forming a kind of impromptu community; the rest of the time we were competing with each other."[96]

Early in his career, Robert Rauschenberg worked closely with a series of other artists, influencing them, and being influenced by them. In 1952-53 Rauschenberg traveled with Cy Twombly to Rome, and later to Morocco. Branden Joseph noted that in a work Rauschenberg executed in 1954, he used black crayon to make marks similar to those Twombly had developed. The following year, in *Rebus* he included a drawing by Twombly.[97] Rauschenberg returned to the US in 1953, where his paintings inspired his friend John Cage to compose *4'33"*, discussed above. In 1954 Rauschenberg met Jasper Johns, and the two spent most of the next seven years living and working together. This period spanned the most important portion of both of their careers, when they were making the key works that would revolutionize contemporary art. Rauschenberg recalled that "He and I were each other's first serious critics... Jasper and I literally traded ideas. He would say, 'I've got a terrific idea for you,' and then I'd have to find one for him."[98]Johns later told an interviewer, "I was close to Bob's working situation during those

years and certainly offered my opinion about anything I happened to see." He freely acknowledged Rauschenberg's impact on him: "I suppose I learned more about painting from Bob than I learned from any other artist or teacher, and working as closely as we did and more or less in isolation, we developed a strong feeling of kinship."[99] And in a comment that stands for the experiences of many advanced artists in these early alliances, Rauschenberg told a friend that at a time when he and Johns were creating radically innovative art with little encouragement from the art world at large, the two gave each other "permission to do what we wanted."[100]

Conclusion

> Getting seventeen million dollars for a single painting - this is power.
>
> Jeff Koons on the auction price of Jasper Johns' *False Start*[101]

> I think people always buy good art, and I think I've always been aware of that.
>
> Damien Hirst, 1992[102]

Art scholars and critics often claim that markets for art are irrational, and that the value an artist's work brings at auction is unrelated to the real importance of that artist's work. These claims are wrong. Recent research has shown, for example, that auction outcomes sensitively reflect the relative quality of artists' work over the course of their careers.[103] The present study has shown that auction outcomes can systematically identify today's greatest living artists. The most valuable art is made by the greatest artists, and Jasper Johns, Bruce Nauman, Lucian Freud, Robert Rauschenberg, Cy Twombly, Jeff Koons, and Gerhard Richter must figure prominently in any account of those who have made the most important contributions to modern art in the past half century.

This study has also underscored that fact that the most important art of the past fifty years has overwhelmingly been conceptual. Unlike the visual art of Pollock, de Kooning, and the other Abstract Expressionists, the art of Johns, Rauschenberg, and their successors has been based on ideas. What this has meant in turn is that their most important work has generally been done early in these artists' careers: Pollock and his contemporaries were seekers whose greatest contributions were made late in their lives, but the greatest artists alive today, who have dominated advanced art since the late 1950s, have been finders who have confidently and consciously made radical innovations at early ages.

Notes

I thank Robert Jensen for discussions, Chingyi Hwang for research assistance, and the National Science Foundation for financial support.

1. Peter Watson, *From Manet to Manhattan: The Rise of the Modern Art Market* (New York: Random House, 1992), p. xxvi.

2. Sandra Salmans, "The Fine Art of Yale," *New York Times*, April 24, 2005.

3. Robert Hughes, *Nothing If Not Critical* (New York: Penguin, 1990), p. 237.

4. Meyer Schapiro, *Modern Art: 19th and 20th Centuries* (New York: George Braziller, 1982), p. 224.

5. Robert Jensen, *Marketing Modernism in Fin-de-Siècle Europe* (Princeton: Princeton University Press, 1994), p. 18.

6. Virginia Woolf, *Roger Fry* (San Diego: Harcourt Brace Jovanovich, 1968), p. 159.

7. Peter Schjeldahl, *The "7 Days" Art Columns, 1988-1990* (Great Barrington, MA: The Figures, 1990), p. 93.

8. Alan Bowness, *The Conditions of Success: How the Modern Artist Rises to Fame* (New York: Thames and Hudson, 1989), p. 11.

9. Greg Allen, "The X Factor: Is the Art Market Rational or Biased?" *New York Times*, May 1, 2005.

10. Anthony Haden-Guest, *True Colors: The Real Life of the Art World* (New York: Atlantic Monthly Press, 1996), p. 151.

11. Peter Wollen, *Paris Hollywood* (London: Verso, 2002), p. 217.

12. Auction prices were obtained from *Le Guide Mayer* (Lausanne: Sylvio Acatos, annual) and from Artnet.com.

13. All prices are nominal. Adjustments for changes in the price level would have little effect on the rankings.

14. Walter Sickert, *The Complete Writings on Art* (Oxford: Oxford University Press, 2000), p. 253.

15. Arthur Danto, *The Madonna of the Future: Essays in a Pluralistic Art World* , (Berkeley: University of California Press), p. 236.

16. Sam Hunter, John Jacobus, and Daniel Wheeler, *Modern Art*, 3e (Upper Saddle River, NJ: Prentice Hall, 2004), p. 301.

17. Leo Steinberg, *Other Criteria: Confrontations with Twentieth-Century Art* (Oxford: Oxford University Press, 1972), p. 85; Danto, *The Madonna of the Future*, p. 273.

18. Arthur Danto, *Unnatural Wonders : Essays from the Gap Between Art and Life* (New York: Farrar, Straus, Giroux, 2005), pp. 184-85.

19. Irving Sandler, *Art of the Postmodern Era: From the Late 1960s to the Early 1990s* (New York: Harper Collins, 1996), p. 450.

20. Schjeldahl, *The "7 Days" Art Columns*, p. 81.

21. Richard Cork, *Breaking Down the Barriers: Art in the 1990s* (New Haven: Yale University Press, 2003), p. 428.

22. Schjeldahl, *The "7 Days" Art Columns*, p. 81.

23. Danto, *Unnatural Wonders*, p. 286.

24. Bowness, *The Conditions of Success*, p. 11.

25. Edward Lucie-Smith, *Movements in Art Since 1945*, new edition (London: Thames and Hudson, 2001), pp. 176-77; Nicola del Roscio, *Writings on Cy Twombly* (Munich: Schirmer/Mosel, 2002), pp. 251-52; Jonathan Fineberg, *Art Since 1940*, second ed. (New York: Harry N. Abrams, 2000), pp. 297-300. On Andrew Wyeth as a museum artist, see Helen Franc, *An Invitation to See: 150 Works from the Museum of Modern Art* (New York: Museum of Modern Art, 1992), p. 115.

26. Bowness, *The Conditions of Success*, p. 11. For research supporting the existence of a positive relationship between prices and artistic importance, see Bruno Frey and Werner Pommerehne, *Muses and Markets* (Oxford: Basil Blackwell, 1989), p. 93; Olav Velthuis, *Talking Prices* (Princeton: Princeton University Press, 2005), p. 113.

27. Harold Rosenberg, *Art on the Edge* (Chicago: University of Chicago Press, 1983), p. 80.

28. The books used were all those that could be found that were published since 2000 and included surveys of the history of art of the last 50 years.

29. Danto, *Unnatural Wonders*, p. 99.

30. For a more detailed discussion of conceptual and experimental innovation, see David W. Galenson, *Painting outside the Lines: Patterns of Creativity in Modern Art* (Cambridge: Harvard University Press, 2001), Chapter 5.

31. Danto, *Unnatural Wonders*, p. 98.

32. Danto, *The Madonna of the Future*, p. 236.

33. David Sylvester, *Interviews with American Artists* (New Haven: Yale University Press, 2001), p. 224.

34. The quoted passage is from Adachiara Zevi, *Sol LeWitt: Critical Texts* (Rome: Inonia, 1994), p. 78.

35. Peter Schjeldahl, "String Theory: Jasper Johns's New Work" *New Yorker (*May 30, 2005), p. 96.

36. Sylvester, *About Modern Art*, p. 222.

37. Steinberg, *Other Criteria*, p. 37.

38. William Rubin, *Frank Stella* (New York: Museum of Modern Art, 1970), p. 12. For a critical evaluation of Stella's career, see David W. Galenson, "Was Jackson Pollock the Greatest Modern American Painter? A Quantitative Investigation," *Historical Methods*, Vol. 35, No. 3 (Summer 2002), pp. 117-28.

39. Robert Morgan, ed., *Bruce Nauman* (Baltimore: Johns Hopkins University Press, 2002), p. 191.

40. Morgan, *Bruce Nauman*, pp. 96-98; Amy Dempsey, *Art in the Modern Era* (New York: Harry Abrams, 2002), p. 244; Charlotte Mullins, *Rachel Whiteread* (London: Tate Publishing, 2004), pp. 72-73; Mandy Merck and Chris Townsend, eds., *The Art of Tracey Emin* (London: Thames and Hudson, 2002), p. 76; Matthew Collings, *Sarah Lucas* (London: Tate Publishing, 2002), pp. 446.

41. Morgan, *Bruce Nauman*, p. 22.

42. Morgan, *Bruce Nauman*, p. 109.

43. Morgan, *Bruce Nauman*, p. 101.

44. Andrea Rose, *Lucian Freud Paintings* (London: British Council, 1987), pp. 13, 17-18.

45. Rose, *Lucian Freud Paintings*, p. 22.

46. Fineberg, *Art Since 1940*, p. 162.

47. Rose, *Lucian Freud Paintings*, p. 27.

48. Rose, *Lucian Freud Paintings*, p. 19.

49. Steinberg, *Other Critera*, p. 90.

50. Danto, *Madonna of the Future*, pp. 276-77.

51. Calvin Tomkins, *Off the Wall: Robert Rauschenberg and the Art World of Our Time* (Garden City, NY: Doubleday, 1980), p. 71; Kyle Gann, *American Music in the Twentieth Century* (New York: Schirmer Books, 1997), p. 127.

52. Richard Cork, *New Spirit, New Sculpture, New Money: Art in the 1980s* (New Haven: Yale University Press, 2003), p. 253.

53. E.g. see Del Roscio, *Writings on Cy Twombly*.

54. Thomas Crow, *The Rise of the Sixties* (New Haven: Yale University Press, 1996), pp. 98-99; Gerhard Richter, *The Daily Practice of Painting: Writings and Interviews, 1962-1993* (Cambridge: MIT Press, 1995), p. 136.

55. E.g. Danto, *Unnatural Wonders*, p. 287.

56. Sylvester, *Interviews with American Artists*, pp. 331-57.

57. Sylvester, *Interviews with American Artists*, p. 347.

58. Sylvester, *Interviews with American Artists*, p. 349.

59. Danto, *Unnatural Wonders*, pp. 298-99.

60. E.g. see Jeff Koons, *The Jeff Koons Handbook* (New York: Rizzoli, 1992), p. 28.

61. Louisa Buck, *Moving Targets 2: A User's Guide to British Art Now* (London: Tate Publishing, 2000), p. 28; Damien Hirst and Gordon Burn, *On the Way to Work* (New York: Universe, 2002), p. 60.

62. Matthew Collings, *Sarah Lucas* (London: Tate Publishing, 2002), pp. 96, 118-20.

63. Richter, *The Daily Practice of Painting*, pp. 30, 35.

64. Crow, *The Rise of the Sixties*, pp. 97-98; Robert Storr, *Gerhard Richter: Forty Years of Painting* (New York: Museum of Modern Art, 2002).

65. Meyer Schapiro, *The Unity of Picasso's Art* (New York: George Braziller, 2000), p. 1.

66. Danto, *Unnatural Wonders*, p. 182.

67. Marilyn McCully, ed., *A Picasso Anthology* (Princeton: Princeton University Press, 1981)pp. 146-48.

68. Alfred Barr *Picasso: Fifty Years of His Art* (New York: Museum of Modern Art, 1946), pp. 270-71.

69. Michael Kimmelman, *Portraits* (New York: Modern Library, 1999), p. 233; David Thistlewood, ed., *Sigmar Polke* (Liverpool: Liverpool University Press, 1996), p. 109; David Barboza, "A Chinese Painter's New Struggle: To Meet Demand," *New York Times* (August 31, 2005), p. B7.

70. Rosie Millard, *The Tastemakers: U.K. Art Now* (London: Scriber, 2002), p. 43; Matthew Collings, *It Hurts: New York Art from Warhol to Now* (London: 21 Publishing, 1998), p. 33.

71. Henry Meyric Hughes, *From Blast to Freeze: British Art in the 20th Century* (Wolfsburg: Hatje Cantz, 2002), p. 293.

72. Hirst and Burn, *On the Way to Work*, p. 13.

73. Virginia Button, *The Turner Prize: Twenty Years* (London: Tate, 2003), p. 114.

74. Button, *The Turner Prize*, p. 116; Steven Madoff, ed., *Pop Art* (Berkeley: University of California Press, 1997), p. 104; Hirst and Burn, *On the Way to Work*, p. 82.

75. Hirst and Burn, *On the Way to Work*, p. 95.

76. Buck, *Moving Targets 2*, p. 28; Jerry Saltz, *Seeing Out Loud* (Great Barrington, MA: The Figures, 2003), p. 324.

77. Julian Stallabrass, *High Art Lite: British Art in the 1990s* (London: Verso, 1999), p. 8; Richard Cork, *Breaking Down the Barriers: Art in the 1990s* (New Haven: Yale University Press, 2003), p. 128.

78. Hughes, *Blast to Freeze*, p. 294; Saltz, *Seeing Out Loud*, p. 220.

79. Deborah Wye, *Louise Bourgeois* (New York: Museum of Modern Art, 1982), p. 33.

80. Katy Siegel and Paul Mattick, *Art Works: Money* (New York: Thames and Huson, 2004), p. 88.

81. For discussion see David W. Galenson, "The New York School versus the School of Paris: Who Really Made the Most Important Art After World War II?" *Historical Methods*, Vol. 35, No. 4 (Fall 2002), pp. 141-54.

82. Serge Guilbaut, *How New York Stole the Idea of Modern Art* (Chicago: University of Chicago Press, 1983).

83. Collings, *It Hurts*, p. 36.

84. Hirst and Burn, *On the Way to Work*, p. 41.

85. Hirst and Burn, *On the Way to Work*, pp. 40, 55.

86. Robert Storr, *Chuck Close* (New York: Museum of Modern Art, 1998), p. 86.

87. Richter, *The Daily Practice of Painting*, p. 137, 166.

88. Thistlewood, *Sigmar Polke*, p. 34.

89. Thistlewood, *Sigmar Polke*, pp. 1-18.

90. David W. Galenson, "Anticipating Artistic Success: Lessons from History," *World Economics*, Vol. 6, No. 2 (April-June 2005), pp. 11-26.

91. Storr, *Chuck Close*, p. 30.

92. Ed Ruscha, *Leave Any Information at the Signal: Writings, Interviews, Bits, Pages* (Cambridge: MIT Press, 2002), p. 11.

93. Buck, *Moving Targets 2*, p. 143.

94. Michael Raeburn, ed., *Vision: 50 Years of British Creativity* (London: Thames and Hudson, 1999), p. 145.

95. Bowness, *The Conditions of Success*, p. 51.

96. Richter, *The Daily Practice of Painting*, pp. 15-16, 24, 256.

97. Branden Joseph, *Random Order: Robert Rauschenberg and the Neo-Avant-Garde* (Cambridge: MIT Press, 2003), p. 112. *Rebus* was recently acquired by the Museum of Modern Art, which placed it on display next to a large work by Twombly.

98. Tomkins, *Off the Wall*, p. 118.

99. Johns, *Writings, Sketchbook Notes, Interviews*, pp. 235, 280-81.

100. Tomkins, *Off the Wall*, p. 118.

101. Matthew Collings, "Jeff Koons," in *Writers on Artists* (New York: DK Publishing, 2001), p. 47.

102. Hirst and Burn, *On the Way to Work*, p. 30.

103. Galenson, *Painting outside the Lines*; Galenson, *Old Masters and Young Geniuses: The Two Life Cycles of Artistic Creativity* (Princeton: Princeton University Press, 2006).

Table 1: Alphabetical List of Living Artists Who Have Made At Least One Work that Has Sold at Auction for $1 Million

	Date of birth	Place of birth	Current age
Barceló, Miquel	1957	Spain	48
Baselitz, Georg	1938	Germany	67
Botero, Fernando	1932	Columbia	73
Bourgeois, Louise	1911	France	94
Bravo, Claudio	1936	Chile	69
Cattelan, Maurizio	1960	Italy	45
Close, Chuck	1940	US	65
Dumas, Marlene	1953	South Africa	52
Freud, Lucian	1922	Germany	83
Hirst, Damien	1966	England	39
Hockney, David	1937	England	68
Johns, Jasper	1930	US	75
Koons, Jeff	1955	US	50
Kelly, Ellsworth	1923	US	82
Kiefer, Anselm	1945	Germany	60
Kusama, Yayoi	1929	Japan	76
Le Brocquy, Louis	1916	Ireland	89
Marden, Brice	1938	US	67
Nauman, Bruce	1941	US	64
Noland, Kenneth	1924	US	81
Ofili, Chris	1968	England	37
Oldenburg, Claes	1929	Sweden	76
Polke, Sigmar	1941	Germany	64
Prince, Richard	1949	Panama	56
Rauschenberg, Robert	1925	US	80

Table 1, continued

	Date of birth	Place of birth	Current age
Ray, Charles	1953	US	52
Richter, Gerhard	1932	Germany	73
Rosenquist, James	1933	US	72
Ruscha, Ed	1937	US	68
Ryman, Robert	1930	US	75
Serra, Richard	1939	US	67
Stella, Frank	1936	US	69
Tansey, Mark	1949	US	56
Thiebaud, Wayne	1920	US	85
Tuttle, Richard	1941	US	64
Tuymans, Luc	1958	Belgium	47
Twombly, Cy	1927	US	78
Wyeth, Andrew	1917	US	88
Zao Wou-Ki	1921	China	84

Source: Except where noted, this and subsequent tables are based on auction data obtained from *Le Guide Mayer* (Lausanne: Sylvio Acatos, annual) and Artnet.com.

Table 2: Ranking of Artists by Their Single Highest-Priced Work

	Artist, title, date	Price (millions)	Sale date
1	Johns, *False Start*, 1959	$17.05	1988
2	Nauman, *Henry Moore Bound to Fail (Back View)*, 1967	9.91	2001
3	Freud, *Red Haired Man on a Chair*, 1963	7.70	2005
4	Rauschenberg, *Rebus*, 1955	7.26	1991
5	Twombly, *Untitled*, 1970	5.62	2002
6	Koons, *Michael Jackson and Bubbles*, 1988	5.62	2001
7	Richter, *Drei Kerzen*, 1982	5.40	2001
8	Stella, *Tomlinson Court Park*, 1959	5.06	1989
9	Close, *John*, 1972	4.83	2005
10	Wyeth, *Battle Ensign*, 1987	3.82	2005
11	Ruscha, *Damage*, 1964	3.59	2004
12	Dumas, *The Teacher (Sub a)*, 1987	3.34	2005
13	Hockney, *Seated Woman Being Served Tea by Standing Companion*, 1963	3.28	2005
14	Thiebaud, *Freeways*, 1979	3.09	2002
15	Cattelan, *La Nona Ora*, 1999	3.03	2004
16	Kelly, *Chatham XIII*, 1971	2.92	2004
17	Marden, *10 (Dialog 2)*, 1988	2.47	2003
18	Zao, *Juin-Octobre 1985*, 1985	2.32	2005
19	Ryman, *Summit*, 1978	2.31	1989
20	Hirst, *The Fragile Truth*, 1998	2.23	2004
21	Ray, *Male Mannequin*, 1990	2.21	2000
22	Noland, *Empyrean*, 1960	2.04	1989
23	Le Brocquy, *Traveling Woman with Newspaper*, 1948	1.73	2000
24	Polke, *Bavarian*, 1965	1.70	2005

Table 2, continued

	Artist, title, date	Price (millions)	Sale date
25	Baselitz, *Partisan*, 1965	1.65	2005
26	Botero, *La Casa de las Gemelas Arias*, 1973	1.54	1992
27	Tuymans, *Sculpture*, 2000	1.47	2005
28	Oldenburg, *Sewing Machine*, 1961	1.46	2004
29t	Bourgeois, *Blind Man's Buff*, 1984	1.44	2002
29t	Bravo, *Paquete Marfil*, 1967	1.44	2002
31	Barceló, *Autour du Lac Noir*, 1990	1.44	2002
32	Rosenquist, *Be Beautiful*, 1964	1.25	2005
33	Tansey, *The Key*, 1984	1.24	2004
34	Serra, *Untitled*, 1984	1.22	2001
35	Kusama, *No. B, 3*, 1962	1.19	2005
36	Kiefer, *Athanov*, 1991	1.16	2001
37	Tuttle, *Letters*, 1966	1.05	2002
38	Prince, *A Nurse Involved*, 2002	1.02	2005
39	Ofili, *Afrodizzia*, 1996	1.00	2005

Table 3: Ranking of Artists by Total Number of Works Sold at Auction for $1 Million or More

	Artist	N		Artist	N
1	Richter	53	18t	Polke	3
2	Johns	39	18t	Ryman	3
3	Twombly	28	18t	Thiebaud	3
4	Koons	20	24t	Botero	2
5	Freud	16	24t	Bourgeois	2
6	Rauschenberg	14	26t	Kiefer	1
7	Marden	9	26t	Kusama	1
8	Ruscha	8	26t	Le Brocquy	1
9	Hockney	7	26t	Noland	1
10t	Kelly	6	26t	Ofili	1
10t	Wyeth	6	26t	Oldenburg	1
12t	Cattelan	5	26t	Prince	1
12t	Close	5	26t	Ray	1
12t	Stella	5	26t	Rosenquist	1
15t	Barceló	4	26t	Serra	1
15t	Hirst	4	26t	Tansey	1
15t	Nauman	4	26t	Tuttle	1
18t	Baselitz	3	26t	Tuymans	1
18t	Bravo	3	26t	Zao	1
18t	Dumas	3			

Table 4: Ages of Artists When They Executed Works Listed in Table 2

	Artist	Age		Artist	Age
1	Johns	29	21	Ray	37
2	Nauman	26	22	Noland	36
3	Freud	41	23	Le Brocquy	32
4	Rauschenberg	30	24	Polke	24
5	Twombly	43	25	Baselitz	27
6	Koons	33	26	Botero	41
7	Richter	50	27	Tuymans	42
8	Stella	23	28	Oldenburg	32
9	Close	32	29t	Bourgeois	73
10	Wyeth	70	29t	Bravo	31
11	Ruscha	27	31	Barceló	33
12	Dumas	34	32	Rosenquist	31
13	Hockney	26	33	Tansey	35
14	Thiebaud	59	34	Serra	45
15	Cattelan	39	35	Kusama	33
16	Kelly	48	36	Kiefer	46
17	Marden	50	37	Tuttle	25
18	Zao	64	38	Prince	53
19	Ryman	48	39	Ofili	28
20	Hirst	32			

Table 5: Ages of Six Artists When They Executed Their Most Valuable Work and in the Year in Which their Work is Most Often Illustrated in Textbooks

Artist Age:	Most valuable work	Most textbook illustrations
Johns	29	25
Nauman	26	30
Rauschenberg	30	30
Koons	33	33
Stella	23	23
Close	32	39

Source: Age at most valuable work: Table 4.
Age at most illustrations: Cory Bell, *Modern Art* (New York: Watson-Guptill, 2000); Jonathan Fineberg, *Art Since 1940*, second ed. (New York: Harry N. Abrams, 2000); David Hopkins, *After Modern Art*, *1945-2000* (Oxford: Oxford University Press, 2000); Martin Kemp, ed., *The Oxford History of Western Art* (Oxford: Oxford University Press, 2000); Bernard Blistène, *A History of 20th-Century Art* (Paris: Flammarion, 2001); Edward Lucie-Smith, *Movements in Art Since 1945*, new ed. (London: Thames and Hudson, 2001); Klaus Richter, *Art* (Munich: Prestel, 2001); Michael Archer, *Art Since 1960*, new ed. (London: Thames and Hudson, 2002); Amy Dempsey, *Art in the Modern Era* (New York: Harry N. Abrams, 2002); Hugh Honour and John Fleming, *The Visual Arts: A History*, sixth ed. (New York: Harry N. Abrams, 2002); H. H. Arnason, *A History of Modern Art*, fifth ed. (Upper Saddle River, NJ: Prentice Hall, 2004); Sam Hunter, John Jacobus, and Daniel Wheeler, *Modern Art*, third ed. (New York: Vendome Press, 2004); Pascale Le Thorel-Daviot, *Nouveau Dictionnaire des Artistic Contemporains* (Paris: Larousse, 2004).

Table 6: Percentage Distributions of Ages of Artists When They Executed Works That Later Sold at Auction for at Least $1 Million

Artist	20-9	30-9	40-9	50-9	60-9	70-9	80-9	Total
Johns	28	38	18	13	3	0	-	100
Nauman	25	0	75	0	0	-	-	100
Freud	6	13	19	25	26	6	6	100
Rauschenberg	7	93	0	0	0	0	-	100
Twombly	4	37	59	0	0	0	-	100
Koons	5	75	20	-	-	-	-	100
Richter	0	42	8	42	8	0	-	100
Hirst	25	75	-	-	-	-	-	100

Table 7: Ranking of Individual Works by 39 Artists that Are Most Often Illustrated in Textbooks Surveyed for this Study

	Artist, title, date	n	Artist's age when work executed
1t	Rauschenberg, *Bed*, 1955	8	30
1t	Serra, *Tilted Arc*, 1981	8	42
3	Johns, *Target with Plaster Casts,*1955	6	25
4t	Nauman, *Self Portrait as Fountain*, 1967	5	26
4t	Rauschenberg, *Monogram*, 1959	5	34

Source: see Table 5 for textbooks surveyed.