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Aging Artists on the Creativity of Their Old Age

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ABSTRACT: *Eighty-eight graphic artists in their 60s, 70s, and 80s, nominated as creative by 154 prominent artists, completed an open-ended questionnaire about aging and its effect on their work. Four questions referred to changes in creativity in terms of the quality and quantity of work, sources of new ideas (originality), and approaches to art (style). The artists also were asked about the impact of physical and sensory losses on their work, and on their differences from younger artists. The artists also rated the quality and quantity of their past, present, and anticipated work. A content analysis of the artists' written comments to the 6 questions, and the ratings, gave a highly positive picture of aging's influence on art. Quality and quantity were reported as improving with age, as were the artists' ideas about, and approaches to, art. The presumed handicaps of aging largely were irrelevant or overcome. Few differences were reported with younger artists. Positive views of aging held equally for both men and women, and across the 3 age groups. The optimistic portrait of aging reflected by this sample of visual artists is discussed in terms of its relevance to other kinds of artists and nonartists; the consequences of early retirement; and the place of active older persons, especially artists, in studies of cognitive development.*

Creativity generally is believed to peak, in most areas, around the 30s (Lehman, 1953), with productivity declining by the 40s (Dennis, 1955, 1966). "Many theories of creativity ... predict aging decrements" (Abra, 1989, p. 105). For artists, however, the span may be somewhat longer (Lindauer, 1992b, 1993a, 1993b, in press). Major Western artists who lived to at least age 60 produced masterpieces in their 40s; highly creative efforts continued through their 50s; some artists initiated works of high quality in old age; others sustained a high level of

achievement until they died; and in the case of the old-age style, new forms of creative expression emerged after age 60. Although examples of late and continuing periods of creativity come mainly from painters, they also are found among others in the arts, such as composers and authors (Arnheim, 1990; Jaques, 1965; Munsterberg, 1983).

The long span of creativity among historical artists contrasts sharply with the limited range shown by living nonartists: Declines rather than gains characterize their old age (Allpaugh & Birren, 1977; Cole, 1979; Diamond, 1984; Horner, Rushton, & Vernon, 1986; Smith & Kragh, 1975), although there are some exceptions (e.g., Bullough, Bullough, & Maddalena, 1978) and alternative analyses (Simonton, 1984, 1990).

The contrasting ages of creative accomplishment between historical artists and living nonartists raises a question about contemporary artists: How does aging affect their creativity? Is the relation as negative as it is for nonartists, or is it more like the historical artists? How do creative artists in their 60s, 70s, and 80s view their older work and the effects of aging on their art? Do their answers support or refute the prevailing pessimistic

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mism about the early and short span of creativity and, more generally, cognition's fate in old age?

This investigation examined the relation between aging and creativity through questionnaires completed by 88 graphic artists, aged 60 and older, who were nominated as creative by recognized artists. Because creativity is a difficult concept to define, and even more intractable in artistic and aesthetic contexts, four convergent questions were asked: "As artists aged, did changes occur in (a) the quality of their work, (b) the quantity of their work, (c) their creative process (defined in the questionnaire as the origins or sources of their ideas), and (d) their style (described as their general approach to art)? A content analysis was applied to the artists' self-reports on these four aspects of creativity.

In addition, ratings were obtained on the quality and quantity of their retrospective, current, and prospective work. Two other possible effects of aging also were explored: the older artists' perceived differences with younger artists, and the effects of physical and sensory losses on their work.

Method

Nomination of Artists

Creative and older visual artists were identified by polling a random sample of 435 artists (185 men and 250 women) from *Who's Who in American Art* (1989–1990) who were at least 60 years old. They were asked to nominate one or more visual artists 60 years or older (other than themselves) who were known to them personally, and who, in their opinion, were "particularly creative." A total of 154 nominators (35% of the original pool) agreed to participate; the proportion of men and women in this group was approximately the same as the proportion in the original pool.

They recommended 160 artists (a few nominators listed more than 1). They also (a) rated, on a 7-point scale, the nominees' creativity, intelligence, wisdom, and happiness; (b) completed a 300-item adjective check list of traits for each nominee; (c) indicated the characteristic that led to their choice; and (d) specified how well they knew the nominee. These multiple measures insured that nominations were based on sufficient information and reflection.

The Questionnaire

The questionnaire contained six open-ended questions and two rating scales. (The package of materials mailed to the nominees also contained other questionnaires for different research projects.) The first two questions dealt with the quality and quantity of the artist's work, and whether these had changed as the artist became older, and if so, reasons for change were solicited. Each of these questions was followed by a 10-point rating scale ranging from 1 (*the lowest quality [or quantity] of work*) to 10 (*the highest quality [or quantity] of work*) on which the artists rated, first, the quality of their work over 10 decades, and then its quantity over the same period. The time periods began with "the teens," went through several decades of the past and present, and projected into the future, ending at "100+ years."

The next two questions specifically mentioned creativity. The artists were asked about their sources of new and original ideas (referred to as the *creative process*), and their general approach to art (referred to as *creative style*). If the artists reported their creative process and style had changed with age, they were asked to describe the reasons.

A fifth question dealt with sensory losses and physical declines, insofar as they affected the artist's work. The sixth and last question asked the older artists about major differences between themselves and young artists.

Coding the Qualitative Data

The reasons given for changes with age in quality, quantity, process, and style were coded with a single set of categories and a common coding system developed as follows. A small set of questionnaires ($n = 12$) was drawn randomly and read independently by the three authors of this article. The reasons for change were noted tentatively (e.g., "increased skill," "more motivation"). Discrepancies between the coders were discussed until a consensus was achieved. The reasons for change were refined with two additional subsets of questionnaires ($n_s = 8$ to 10) coded by the same three authors. A relatively high and acceptable degree of consensus was achieved among the three authors (>85% for each of the four questions).

Thirty-five reasons for change were identified and are spelled out in the Results section; a small number

of comments fell into an "other" category. Nearly all artists gave more than one reason for change; the average number of reasons across the questions was a bit above two. Thus, the number of responses given to each of the questions was greater than the total number of artists. Few responses could not be scored. Illustrative of the artists' multiple responses is this 66-year-old man's response to the question about changes in the origins of his creativity:

I am much more confident now than earlier that the creative process (whatever it is) will work for me in due time and will provide me with a worthwhile idea and the means and technical skill to execute it. I can relax and let the process work itself out. Simply knowing that it will, having a "laid back" attitude, actually speeds and intensifies the flow of ideas.

The 35 reasons for change fell into three large groups: 11 referred to the characteristics of the artist (e.g., increased skill); 16 pertained to the artists' work (e.g., the development of a new technique); and 8 were situational (e.g., decreased family responsibilities). The labels for the three groups, like the labels for the 35 reasons, were established by consensus among the three authors.

By grouping several dozen reasons for change into a few large categories, a broad profile of the reasons for change was more easily discerned. This also helped to compensate for possible distortions that could have resulted from reducing the artists' comments into one- or two-word labels. For similar reasons of breadth, the results for the four questions were combined (as well as examined individually).

Responses to questions about the physical and sensory effects of aging and their impact on the artists' work were coded as follows: Physical effects referred to changes in strength, stamina, or movement; sensory effects were either visual or auditory. Responses to the question on differences between young and old artists were placed in one of nine previously established categories (e.g., willingness to experiment). A consensual procedure, similar to the one outlined earlier, was used.

Sample of Artists

Eighty-eight artists (55% of those nominated) completed the questionnaire. Not every question was an-

swered, and some were not answered clearly enough to be scored. Thus, the sample sizes for the content analysis varied for each of the six questions; these are noted in the Results section. The sample sizes for the quality and quantity ratings were based on usable questionnaires from 79 artists, distributed as follows: for artists in their 60s, $n = 34$ (17 men and 17 women); for those in their 70s, $n = 28$ (13 men and 15 women); and for artists in their 80s, $n = 17$ (10 men and 7 women).

Analyses and Treatment of the Data

The statistical analyses of the ratings were done separately for each age group. Otherwise, time periods and age group would be confounded. For example, the 60s decade for the 60 to 69-year-olds was generally their present, whereas it was the past for artists in their 70s and 80s. Analysis of variance, F s, t s, and chi-squares are reported only where the differences were significant at the $p < .05$ value. Chi-square analyses were reported only in cases where the n s were large enough to be statistically meaningful. Gender and age differences were rare and inconsistent, and although reported, the data are presented primarily for all artists, combining both gender and age.

The artists gave many reasons for the changes that occurred with aging. For example, in responding to the question about changes in the quantity of work over time, 1% of the artists gave 10 different explanations. Similarly, with respect to changes in style and process, 20 reasons were mentioned by only 1% to 4% of the artists, and 8 reasons were mentioned by another 6% to 8%. Given the multiplicity of responses, no single explanation was reported by a majority. The relatively few that stood out from the others are reported. A qualitative perspective was added to the data by including quotations from a random sample of 35 artists. These quotations were edited slightly for purposes of clarity, brevity, and grammar, and to avoid redundancies.

Results

Quality of Work

The artists in each of the three age groups rated the quality of their work as improving over the decades, F s

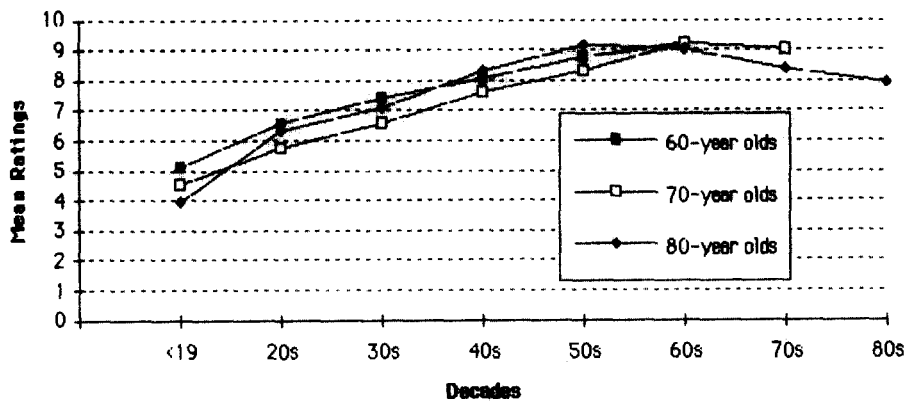


Figure 1. Quality ratings over time.

(5–7, 98–150) ≥ 16.60 , $p < .001$; see Figure 1). The 30s and 40s, considered by many as the peak years for artistic and most other forms of creativity (Dennis, 1955, 1966; Lehman, 1953), were rated lower than were the 50s and 60s, which in fact were the decades with the highest scores. A 60-year-old woman humorously explained her continual improvement: “I’m expecting diminishing capabilities, and since that may be a self-fulfilling prophesy, I work on overcoming that.” An 85-year-old woman, paraphrasing Matisse, declared, “The last you did is always the best.” A 60-year-old artist was looking forward to getting older: “I haven’t yet painted as well as I could and as close to my image of what I strive for.”

For artists in their 70s, however, quality ratings flattened in their 60s; for those in their 80s, there was a slight decline, the only instance in which self-ratings fell below those of the immediately prior years. However, the later years were still rated higher than were the earlier decades.

Nine reasons, reported by 8% to 32% of the artists, accounted for most of the increases in quality. The most prominent explanation of change, reported by 32% of the artists, concerned new learning, which included increased knowledge and additional skills. The artists wrote they had gained more experience, practice, and training through reading, study, and trial and error. “I got better because I studied the works of my contemporaries and peers” (an 83-year-old man). “I increased my involvement with art, so I became more skillful and knowledgeable, and increased my aesthetic standards” (80, man). “I continued to study and to learn—from life and nature” (65, woman). In a rare instance of a gender difference, $\chi^2(1, N = 20) = 4.11$, $p < .05$, men referred

to knowledge-related reasons more often than women did.

The next most frequently given reason for improved quality, at a considerable distance from knowledge-related reasons, was attributed to changing external circumstances; it was reported by 16% of the artists. “The environment can affect one’s art positively or negatively. Your work depends more on what’s outside your head than what’s in it!” (68, woman). The artists referred to new opportunities and ventures, the discovery of different materials, the increased availability of resources and facilities, and growing demands from gallery owners. Changes in external events also meant initiating different modes and styles of living or, most simply, having more space in which to work.

Another major factor, reported by 15% of the artists, was having more time to work. The artists had retired, and family duties were reduced; children had grown up, were out of school, or had moved away. A similar number of artists (13%) attributed increases in quality to new priorities. These were the result of improved financial and economic conditions, revised religious feelings, and the taking on (or reducing of) civic responsibilities (e.g., serving on committees). Priorities also changed, the artists said, because they were relating more to their work than to other people, and to an increasing awareness of what was happening around them in the world at large.

Increased acceptance of themselves, their work, and their abilities also was reported by 13% of artists. Artists wrote they had come to terms with what they were trying to do and the way they did it. “I have a surer hand,” a 65-year-old man put it. They felt comfortable about making mistakes and, indeed, expected to. The

artists did not feel bound by the conventions, by what others said was “good art.” Artists also reported a greater sense of accomplishment, self-confidence, and trust in themselves. They had faith in their abilities and skills. “I can do better than Picasso,” wrote a 71-year-old woman. “If I don’t believe I am his equal, how can I create?” A 63-year-old woman expressed her self-confidence this way:

I now feel free to do what I want in painting. After many years of trying to do salable, “relevant,” or so-called important work, I feel free to be myself and not concern myself about how others might judge me or my work.

Closely related to self-acceptance was a greater acceptance of others and the human condition, reported by 11% of the artists. It was expressed in terms of a greater awareness, discernment, understanding, and appreciation of people in general. The artists admitted to being more sensitive to others. “My art has become more intense and I think more profound due to a greater understanding and appreciating of the human comedy” (83, woman).

Surprisingly, physical factors were mentioned by only 11% of the artists; it ranked seventh among the top nine reasons for changes in quality. When artists wrote about waning energy and declining strength, they added that adjustments had been made to compensate for these losses. For example, a 68-year-old artist wrote that she worked inside her home more often, rather than face the rigors of the outdoors.

Increased motivation led to increased quality among a modest number of artists (10%). “If I do not develop further it will be because I cannot will it. I have willed my development since my 50s,” wrote a 76-year-old man, to which he added, “I have a desire to express myself, a conscious challenge to grow.” Other motivational traits were enthusiasm, commitment, ambition, “being hooked,” and “searching for a way.” Finally, the last of the most noteworthy contributors to quality, mentioned by only 8% of the artists, was maturity, and related terms, like increased growth and development.

Quantity of Work

The artists’ ratings of the quantity of their work, like their ratings of quality, increased over the years in each of the three age groups, $F(5-7, 105-162) \geq 6.97, p < .01$; see Figure 2). As was the case with quality ratings, the highest quantity ratings occurred in the sixth decade, when artists in their 60s and 70s reported their greatest productivity ($M_s = 8.45$ and 9.19 , respectively). A 65-year-old woman explained her sustained activity this way: “I take a positive approach to life and my life. I believe in myself and what I can attain through drive, enthusiasm, and hard work.” Like quality, productivity also flattened or declined slightly after the 60s—for artists in their 70s and 80s—relative to some of their earlier periods. Nevertheless, it was still high, and higher than most earlier decades—including their 30s.

The seven most frequently reported reasons for increased productivity, according to 12% to 33% of the

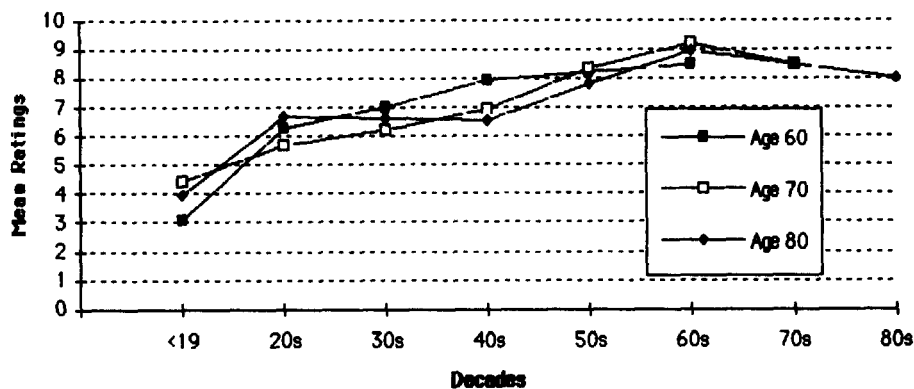


Figure 2. Quantity ratings over time.

73 artists who answered this question, included six that also had been applied to changes in quality: developing new skills and knowledge, changed circumstances, and increased motivation (reported by 14% to 16% of the artists). Physical factors again played a relatively minor role (14%). Of these repeated reasons, having more time was mentioned most often (by 33% of the artists): "I have never really had time to work until now. In the past, I worked at night and any odd time I had; there was no real development of a theme or a series of works" (71, woman). "The more time available for creativity, the more artistic productivity" (79, man). And an 80-year-old woman wrote,

In my teens, I had studies other than art. In my 20s, I was at art school and teaching. In my 30s and 40s, I did full-time teaching. In my 50s, 60s, and 70s, I was doing full-time painting.

Changed priorities, also previously noted as a factor in increased quality, increased productivity too, according to 19% of the artists. "I'm no longer chasing dollar signs or pursuing love affairs" said a 63-year-old woman. "If either arrives, fine; if not, I'm happy this way [as an artist]." A 65-year-old man explained how his priorities changed over the years.

In my teens and 20s, I was preoccupied with dating, mating, earning a living, etc. In those early years, I lacked a focus on artistic production. In my 40s, 50s, and 60s, [changes in] time, interest, and focus increased my artistic production.

Decreased family responsibilities, not prominent in accounts of changes in quality (it was mentioned by only 5% of the artists), increased the productivity of 23% of the artists. Not having to raise a family or worry about children, the artists spent more time on their art. A 76-year-old woman explained, "Art demands a lot of time, and when you are working and raising a family there isn't much free time." Several artists were quick to point out, however, that freedom from family responsibilities did not mean isolation from their family or, indeed, from any other social group. In some cases, new responsibilities were substituted for family responsibilities, such as volunteering, although some wrote that these activities interfered with their work at times.

Quality and Quantity Ratings Compared

The three age groups rated the quality of their work as higher than its quantity, $F_s(1, 4-6) \geq 24.69, p < .003$; separate analyses were done for each age group, for reasons explained earlier. A 66-year-old man explained the difference: "I paint less, in time and intensity. But I think it is better; the quality level is higher." A 71-year-old man was more specific: "In sheer physical production, I simply work about 10% less and hence do 10% less."

Although quality and quantity differed in absolute terms, the two were closely related. Correlations between the two sets of ratings for each of the three age groups were very high; r_s ranged between .90 and .99, $F(1, 4-6) \geq 24.69, p < .003$.

The Sources of Creativity

Most artists (81%) reported that the sources of their creativity had changed with age, with only a few writing, as one 86-year-old man did, that their ideas had become worse: "As I age, all my mental processes, as well as physical ones, degenerate. This affects my creativity adversely." More typically, artists reported new ideas with increased age: "I have definitely become more creative as the years go by, working harder at my art and spending more time with my peers 'brain busting'" (79, man). "My ideas come more quickly as I age" (76, man). A 68-year-old woman was more specific concerning how her ideas changed:

I depend less now on the conscious and visually completed "plan," preferring to let "chance" changes enter into the unfolding of the finished product. Chance, or the subconscious, is my friend and co-creator, held in some check by being careful and aware of Murphy's Law.

The seven most frequently cited reasons for creativity changes, mentioned by 10% to 24% of the artists, are summarized next. The three most frequent, reported first, also were prominent in accounts of changes in the quality and quantity of work, noted earlier.

Cited most often, by 24% of the artists, was self-acceptance. A 65-year-old woman wrote, "I am at ease now. I never worry that I won't succeed; things always

work out. As long as I have faith and patience, I trust myself and go forward armed with this." Self-acceptance was expressed differently by one 70-year-old man: "I used to look for inspiration in the work of others. Now I have no patience for that. I want to enjoy and appreciate the work of others, but for my own work, I listen to my inner voice." Self-acceptance often was paired with self-confidence: "I've been intimidated because I started to paint in my 40s—and I'm still defensive about that late start, but I am gaining in confidence," wrote a 71-year-old woman.

Ranked second in importance as a source of ideas was increased skill and knowledge; it was mentioned by 17% of the artists: "My ideas changed as I have progressed in the study of anatomy, psychology, and elements of design" (80, woman). "I have become more sophisticated, partially due to years of experience and partially from taking classes to improve my skills" (61, woman). "I know more now than I knew as a young man. So I see great progress in my work" (69, man).

References to new skills were typically supplemented with other factors, such as self-acceptance (noted earlier), and as the next quotation illustrates, an ability to handle criticism.

I've learned more concepts and ideas and thoughts; and my automatic responses have become more trained. I've learned to "grab" things as they pop in from my unconscious and not reject them as impossible or ridiculous or stupid. I had to put simple "me" first, before my critics and my super-critical self (66, woman).

Another source of new ideas, which also figured prominently in affecting the quality of work, was the artists' increased understanding of themselves and others. It was mentioned by 14% of the artists.

Four factors, not highlighted in previous questions, emerged as significant. A reduced concern with other people's criticisms or evaluations was reported by 14% of the artists. Artists had become more interested in their own goals and inner sources of satisfaction, and less career oriented. Put another way, the artists had become more self-directed or, in the words of the artists, were turning inward and striving to "be themselves."

Another new account of change, for 12% of the artists, was the result of shifts in the subject matter of their art. For an 85-year-old woman, it was moving from the specific to the general: "As a student and early on,

I studied nature. This gradually developed into a love of space and its divisions, and to represent them as beautifully as I could do it." Other artists were divided on whether their subjects had become more abstract or realistic as they grew older. Some wrote that their art had become more impressionistic and less pictorial, whereas others reported the opposite.

New techniques, according to 10% of the artists, was another source of new ideas. One 60-year-old man reported, "My art has become less intuitive and more pictorially logical." A 67-year-old woman explained how her technique with collages led to different ideas:

My collages are pasted bits and pieces from my other works, plus images from art history, etc., all fused into one solid work, but sometimes torn apart a dozen times until the essence remains. My paintings go through several different images, each made in the process of finding what seems right. I seem to be searching for the soul of the work.

In discovering new colors, materials, and media, finding different ways of treating light, and learning new brushstrokes, the artists' thinking about art changed. "Through years of work devised to solicit a greater sensitivity to design, composition, and color, I have improved [my ideas]," said an 81-year-old man, adding, "Creativity is a cumulative process." Changes in technique often came about from physical necessity: "I do an impression, rather than a careful and exact painting or drawing, because my lack of manual dexterity makes it difficult to do an exact copy." The 80-year-old woman who wrote this added, "But I also don't really enjoy doing that."

Related to both subject matter and technique as a source of new ideas were reports of becoming more experimental (noted by 10% of the sample). With increasing age, the artists wrote they were more willing to try new things, to test out different possibilities, and to develop varied rather than stereotyped ways of working.

It bears repeating that the reasons for change cited in regard to the creative process, as elsewhere, were not written in isolation. The artists gave several explanations, with only the most prominent ones reported here. The intricacies and subtleties of artists' comments are illustrated in this lengthy and complex statement by a 63-year-old woman:

Experience has given me a broader base to work from. I've learned to control my technique and equipment more, although I feel I have not worked hard enough. The answer to expertise is production. The more mistakes you make the more good results will appear if you keep working, along with a modicum of talent. I feel the need to do more experimentation. Doing things four times has only happened in recent years. My only complaint is I don't have time (life's too short) to paint everything twice.

Omitted from these accounts of the artistic process are reasons that occurred too infrequently to be emphasized. A few, however, deserve some mention because they were expressed so cogently. For example, a 76-year-old man wrote that new ideas came from the demanding nature of his work:

I have found that I create best when under considerable stress and urgency, deadlines, and when necessary. I am not saying I am ordinarily lazy, but the creative juices flow more readily when I am working under pressure and focused.

A 69-year-old woman offered a religious reason, tinged with some humor. "I'm more aware that I cannot create without God's help, especially if the piece doesn't work."

The Artists' General Approach to Their Work

Most of the 88 artists (76%) reported that the general approach taken to their art, or style, had changed as they aged. Like their comments about quality, quantity, and process, reviewed previously, the changes over time were viewed positively:

My approach is more thorough, or "finished." I don't feel stuck in any particular way of working, except on rare occasions, and then I am often stimulated to start something anew. There are slumps from time to time, but the general direction is forward. (63, man)

The five most frequently cited reasons for changes in style, reported by 9% to 19% of the artists, also were

highlighted in previous answers. For example, most artists (19%) referred to increased knowledge: "I'm better at everything" (69, woman) An 83-year-old man was more specific:

I have done an intense study of the works of masters I love and who I always look to for guidance and direction. Since my 50th year I've incorporated Old Master realism, impressionism, expressionism, and abstractionism into my personal statement.

In a similar vein, a 69-year-old man reported that although he had "completed his studies of the Old Masters; the 17th-century classics; and the Dutch, Spanish, and Italian schools," he nevertheless felt that "a continual process of study was necessary. Technically, I can never know enough."

Technique, another oft-repeated response noted earlier, accounted for style changes among 18% of the artists: "I've just recently decided to use straight oils, no black oil. It's too complicated and limiting. I also now paint directly on canvas with no preliminary sketches" (60, man). Technique often was combined with other explanations, such as self-acceptance, courage, freedom, and deliberateness. The point is illustrated in the following two quotations by men in their 60s:

Occasionally, I have flirted with a traditional realistic style, which I can do very well. But that's only been when for some external reason, such as a lack of acceptance or understanding of what I am trying to do in abstraction, got to me. The style I continue to come back to is more abstract each year.

My work has become more pictorially definite. My concept of pictorial space is richer because of the visual experiences I have gained in museums, intellectual experiences from reading, and the interplay with a few artist friends.

Three women, aged 71, 76, and 80, also reported on how technical factors had changed their style: "I think I learned a lot from the minimalists, but I have no desire to work as they did, as I was forced to in college." "I have become more thoughtful and deliberate and much more aware of what I am trying to express. Now my

focus is on subjects I really know, and I no longer tend to romanticize.” “I now have the courage to do my impression rather than feel tied down to making an exact copy of what I see.”

The artists wrote extensively about technique, perhaps because it was more concrete and less subtle than other reasons and therefore could be more easily expressed in writing. To illustrate, what follows are three statements by three women aged 63, 66, and 67, respectively.

I have gone through a period of careful observation and recording. I am ready to break loose again with richer colors and designs. Collecting Social Security makes me relax more. I can dare to make a mistake. I've always had heroes and role models, but I did not try to copy their work or style, but instead tried to understand their approach.

For a while, in my 40s, I left honesty and tried for style. Another starving artist told me I had to return to honesty and the style would evolve naturally as the night follows the day. I began to faithfully put down the first thing in my mind or in sight and not reject it as trite because it had already been done. I had to realize that my “Blue Child” was my child, not a copy of Picasso's, so my style could evolve from me. I began all over as a child or a caveman. You have to shed all your schooling. I am now making huge paper columns, painting them, crushing them, and cutting them to make people out of them. This is an attempt to turn authoratative decadence into a personal feeling. Since I became a grandmother at 58 my personality changed, and I became happier. My production, in size and amount, skyrocketed. A dire lack of a means of living (economics) will be the only thing to stop me from continuing.

I have freed myself from certain past constraints. I allow the accidental to occur. I almost search for the accidental. I no longer worry about revealing my psyche to the world. I feel a great *urgency* to say and express some powerful feeling—an accumulation of a lifetime of emotions.

Stylistic changes also were due, according to 13% of artists, to increased maturity. As was usually the case,

it was combined with other reasons, such as having more time and changed circumstances: “There have been various stages in my work. My best works have been the last ones. Maturity, time to concentrate, and a peaceful way of life have all contributed to my growth and progress” (65, man).

Also mentioned by a modest number of artists (12%) was an increased acceptance of themselves, their work, and their creative ability. These accounts, like others, were combined with other reasons, such as increased self-criticism, more confidence, greater selectivity, and a different sense of time, as illustrated in the following quotations by two 80-year-old women:

I used to be more casual and less critical of the finished product. Now I know how well I can do, and I want to do that well every time. I'm also more selective about what I want to use my time on; nothing second rate. One has a sense of limited time and the value of that time. We won't be well or live forever.

I went from a pure love and looking at nature to a realization that I was creating a new object. I put down on the canvas what I am trying to say in the simplest way, in the most beautiful color, and with the best pattern or relationships that I can.

The last of the major reasons for stylistic change was increased motivation, or drive, reported by 9% of the artists.

Infrequently mentioned was the role of physical factors, perhaps because it was adequately compensated for, as attested to by the following statement.

I used to work outside in all kinds of weather. Now I can't take it, it's physically too exhausting. Instead, I use color slides as references and work in my studio for the most part. Also I work much more slowly and with greater deliberation. (76, man)

Also rarely mentioned, here and in response to other questions, were specific references to an old-age style, a characteristic of some aging historical artists (Lindauer, 1992b, 1993a). The closest allusion to an old-age style came from a 77-year-old woman, who said, “As I aged my style evolved, but never really changed.”

We directly asked artists to make comparisons between young and old artists (reported in the next section), but none mentioned any peculiar, unique, or typical feature that distinguished the two age groups. Differences with young artists, as will be noted, were more a matter of degree than of sharp or revolutionary breaks with the past.

Indeed, for one 66-year-old woman, radical changes would have been unacceptable for commercial reasons. "If my style changes too much, buyers will reject my work." A 63-year-old man rejected the idea of change on artistic grounds: "What's important is developing and striving for some kind of excellence in a particular direction. I've never been impressed with artists whose styles are always changing."

Comparing Reasons for Changes in Creativity With Aging

The artists gave a number of different reasons for changes in creativity with increasing age, depending on what aspects they were asked about: quality, quantity, process (originality), or style (approach). The four sets of answers, taken together, give a broader perspective on creativity than does any one set alone. Consequently, an overall view of the effects of aging on artistic creativity in old age was obtained by combining the four sets of data: The number of artists reporting a reason for change on each of the four questions was ranked, and

these were averaged. Of the 32 reasons for change, 15 had the highest ranks; they are reported next.

Five broad reasons for changes in creativity were prominent (Figure 3), with increasing knowledge foremost among them (referred to as SKILL in Figure 3; *m* rank = 2.00). According to 32% of the artists, it mainly affected quality; to a lesser degree it also affected the other three aspects of creativity (it was mentioned by 16% to 19% of the artists).

In second place, at a considerable distance from SKILL, were references to self-acceptance (ACCEPT; rank = 4.38). It affected mainly the creative process (24%) and, more distantly, in the artists' style and quality (12% to 13%); it had little impact on quantity.

The remaining three of the five most prominent reasons for change fell at a distance from both SKILL and ACCEPT, but they were close to one another. Physical reasons for change (PHYSIC; rank = 7.25) mainly affected the quantity and quality of work (according to 11% and 14% of the artists, respectively). Available time (TIME; rank = 7.75) mostly contributed to the quantity of work (33%), and then to quality (15%). New circumstances (CIRC; rank = 8.35) affected quality and quantity about equally (16% and 14%, respectively).

Distinguished from the previous five reasons for change, and forming a subset of their own, were four additional contributors to change (Figure 4). Motivation (MOTIVE; rank = 9.88) had a rather uniform

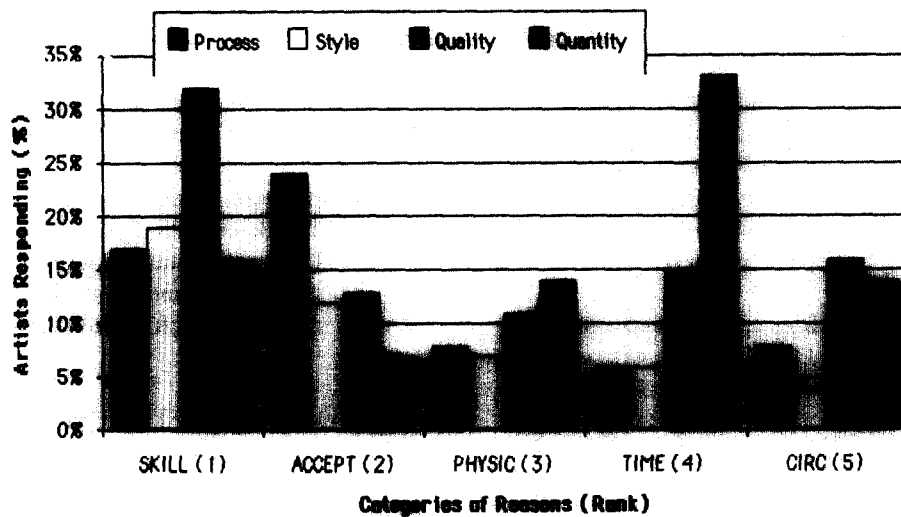


Figure 3. Most frequent reasons for changes in creativity. SKILL = increasing knowledge; ACCEPT = self-acceptance; PHYSIC = physical; TIME = available time; CIRC = new circumstances.

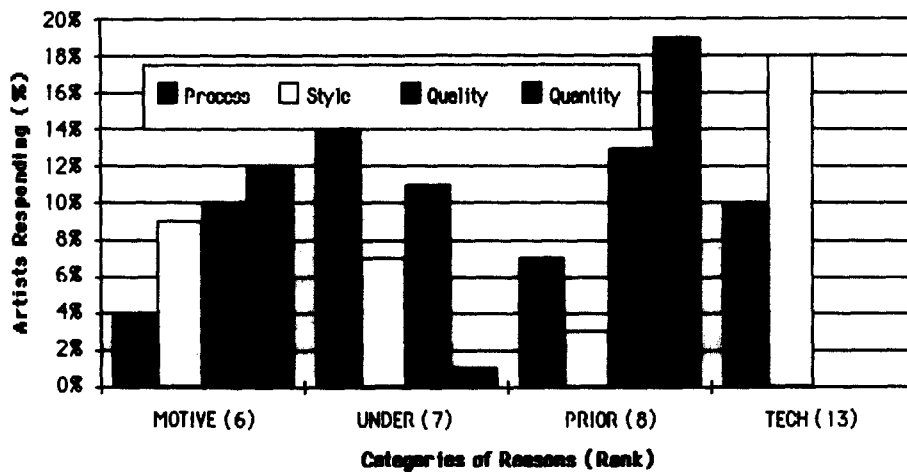


Figure 4. Less frequent reasons for changes in creativity. MOTIVE = motivation; UNDER = artists' understanding of themselves and others; PRIOR = changing priorities; TECH = technique.

impact on style, quality, and quantity (9% to 12%). The artists' understanding of themselves and others (UNDER; rank = 10.13) was reported fairly evenly in the contexts of process (14%) and quality (11%). Changing priorities (PRIOR; rank = 10.88) accounted for changes in quantity and quality (19% and 13%, respectively). Technique (TECH), despite a rather low mean rank (22.88)—13th among all reasons—nevertheless was fairly important for changes in style (18%) and process (10%).

The remaining six reasons for change of some note pointed to only one aspect of creativity. Maturity (rank = 11.75) stood out as an explanation for changes in style (13%). Concern for excellence (rank = 12.75) accounted for changes in the creative process (14%). Occurring less frequently was a willingness to be more experimental (rank = 20.75), which contributed to changes in the creative process (for 10% of the artists). Becoming increasingly abstract had a marginal effect on style (9%). Shifts in family responsibilities (rank = 24.75) accounted for a substantial number of changes in quantity (23%). Finally, new subject matter (rank = 25.38) affected the process of creativity among a modest number of artists (12%).

Thus, a fairly limited number of reasons—no more than 15 and perhaps as few as 5—accounted for most of the age-related changes reported by artists across four aspects of creativity. Nearly half (7) referred to changes of the self (knowledge, maturity, self-acceptance, self-understanding, motivation, a concern with excellence, and physical abilities). The remaining 8 reasons per-

tained equally to work (technique, experimentation, abstraction, and subject matter) or the situation (reduced family responsibilities, new priorities, time available, and external circumstances).

What Was Not Said About Creativity

The analysis builds on what artists actually wrote about changes in creativity with increasing age. Deserving of some mention, too, is what they did not report. Granted, reading between the lines of nonexistent data must be done cautiously because the unsaid may have been implied. For example, the term *creativity* was mentioned rarely, but it may have been embedded in a term such as *excellence*. Nevertheless, despite these unavoidable ambiguities, some of the presumed effects of aging that may *not* occur are thrown into relief by an elliptical reading of the data.

Little was said about the effects of one's impending death on artistic creativity. Aging artists did not write about taking life less (or more) seriously, having a sense of time running out, or feeling more (or less) urgency or deliberateness. Similarly, few artists spoke about working harder, quicker, or faster as their lives neared completion; or of giving their art more attention, focus, or concentration as the end approached. The artists did not consciously, in their comments, see last works as testimonies to their lives (i.e., as swan songs). Not many artists were concerned, if we take their written accounts at face value, about becoming less (or more) creative, intuitive, insightful, anxious, profound, or challenged

as they grew older and approached death. Alternative positions on the possible effects of death on the creative process, however, have been posed by Abra (1995) and Jaques (1965).

Other Age-Related Changes

The Differences Between Young and Old Artists

Most of the artists (86%; $n = 87$) believed that young and old artists differed from each another: "Of course there are differences, just as there are between the young and the old on anything" (65, man). A small number (16%), however, qualified their answer, insisting that it depended on the particular artist, as this 87-year-old man did:

Some insist on continuing their success and settle for more of the same. Others change as they develop and experiment and discover themselves. So many young artists want "instant success." Some old artists are superannuated and static, other old artists grow in education, experiences, exposure, and experimentation.

He went on to point out a major difference:

It is easier now for an ambitious young artist to get attention through publicity and the public's enthusiasm for the "New." It is very difficult for the young to get good solid training in techniques and to be conversant with the great art of the past—to see where he stands, belongs, in a tradition.

Only a few artists claimed that age differences in art were nonexistent: "There are only good artists—whether young or old. If they are not doing good work, they are not artists in my opinion" (61, man). A 71-year-old woman wrote that any differences were "all in the mind." A 62-year-old man held a mixed opinion: "The old still have the same brain as the young, and hopefully, as long as they have control of their hands they can produce their work. The only difference would be the style or type of art they produce."

Of the artists who alluded to age differences, fewer than half (45%) specified what it was; the majority either implied a distinction or were unclear on which

age group differed. Despite the relatively small number of codable responses, this question (and the one that follows on physical factors) provoked the most extensive, clearest, and easiest to categorize reactions, compared to the previous four on creativity. Perhaps matters related to age (and health) were easier to articulate than were questions about quality, style, and similarly subtle matters. Like previous questions, however, multiple rather than single reasons were noted. "Older artists produce more genuine expressions of themselves, they have more developed skills, and they are freer to choose what they do" (80, woman).

Younger and older artists, according to the latter, were distinguished in eight major ways. Most often mentioned (by 37% of the artists) were differences in knowledge (a major contributor to change, too, for each aspect of creativity; see SKILL, Figure 3). "Young artists simply have not had time enough to live, observe nature and think about picture making," wrote a 71-year-old man. In this context, knowledge not only referred to differences in skills, training, and background, but also to experience, thinking, observation, understanding, profoundness, and thoughtfulness. The following reports, from two women aged 66 and 68, respectively, amplify the meaning of this difference in knowledge.

Young people have not had enough primary and direct life experiences, no matter how brilliant their minds are. They have not had time to study, read, absorb, and integrate past accomplishments in history, and by other artists, into their own efforts.

The more one reads, looks at art, learns, listens to great music old and new, relates to others, suffers pain and joy, the more all of this is reflected in the [older person's] work.

The artists' belief that age brings greater knowledge, however, did not necessarily mean better art. "Old artists, by virtue of their experience, know more—but they are not necessarily more talented," according to a 76-year-old man. Gains in knowledge, a 63-year-old man wrote, could also be a mixed blessing:

Older artists have attained some wisdom and depth over the years. But as a young artist, I had the feeling there was no tomorrow and I could

achieve anything in my work. There's a good feeling about being a young artist that I miss very much and I can't duplicate as an older man.

Increased knowledge and increased age were tied together for most artists (64%). For the remainder, however, knowledge favored the young: They had "special" knowledge because they were born, raised, educated, and trained in a time period that gave them certain advantages over older artists, such as more freedom and increased opportunities.

A second major age difference (reported by 33% of the artists) referred to a greater willingness to experiment. About an equal number of artists assigned experimentation to both younger and older practitioners (48% and 44%, respectively).

Older artists were more willing to take chances and be innovative. The artists said they were "free[er], daring, spontaneous, able to do new things, uninhibited, and adventuresome." Older artists, too, did not follow rules or do art in a routine way.

On the other hand, younger artists could be more experimental than older ones. "Young artists want to do something new. They want to establish their identity apart from older artists. Older artists tend to not want to do something new. Only a few break new ground" (65, woman). "Young artists are struggling to find a way to work that they feel good with. Older artists are less experimental, although there are many exceptions, for example, Picasso and others" (76, man).

Younger artists tend to be more innovative. They were usually taught to be freer. We were pretty hidebound in that good drawing was stressed, and also we were hindered by the "you NEVERS"—and "you ALWAYS." Now you do whatever works for you, and this is hard to learn for the "old-timers." (80, woman)

The third most frequently mentioned age difference, reported by 21% of the artists, focused on career orientation. Most artists (75%) wrote that younger colleagues were striving for reputation and wealth. The older artists were no longer obsessed by having a career, by nagging and driving ambitions, and by pressures to succeed:

Younger artists, on the whole, are more daring and hurried. They want to attain recognition and

wealth while still young. Older artists know the ways of the art world, and know that if they achieve recognition it will interfere with their more profound feelings, and they will not be able to develop to full maturity slowly and surely. (83, man)

Experimentation at the cost of learning, for the sake of career advancement, is my criticism of younger artists. From what I see and hear, younger artists seem to carry a pathological reticence to emulate anyone who was considered great over 30 years ago. Their goals seem to be innovation and making money! Fools! (66, man)

Energy level was another, but relatively minor, difference (reported by 19% of the artists). High energy was attributed mainly, but not exclusively, to younger artists (67%), and it was not necessarily a virtue. "The younger artists usually express a lot of energy in their work, but as an artist matures he learns to rely upon his knowledge of life more and his experiences in dealing with it," wrote a 76-year-old woman.

A modest number of artists (16%) mentioned maturity, or related terms, like a greater reflectiveness and calmness in old age, as distinguishing them from younger artists. "As in life," wrote an 85-year-old woman, "the young person is more dashing, etc., but in later life, the old person is more thoughtful." A similar point was made by a 61-year-old woman. "The older artist is able to enjoy what she is doing more because many of life's conflicts are behind and they have adjusted. The young artist is still struggling to find out what they are." A 66-year-old man summed up the case for maturity:

"Older is better" is, of course, a cliché. But I believe it is true in the arts: Greater depth of understanding—of nature, society, and of one's self—comes with age. An age that is alive and alert can't help but make for greater art. The older artist is also less likely to be seduced by the tricks of the market place.

Maturity was interpreted as independent of age by about a third of the artists who mentioned it. Others pointed out that maturity did not work automatically, without the presence of other traits:

Maturity cannot coexist with inflexibility and rigidity. The very young artist is too immature to think things out. It takes years to really assimilate and judge. With older artists, though, the problem is you have to watch out for an inability to try something new or to close down [your] horizons. (71, woman)

Another age difference favoring the older artist lay in self-acceptance, reported by 13% of the respondents. It often was linked with self-confidence, as this 80-year-old woman wrote: "As a young person I lacked the complete confidence I now have, and it keeps on coming." Acceptance also meant being able to express oneself: "Older artists produce more genuine expressions of themselves because they have developed skills, and they are freer to choose what they do" (80, woman).

Modest mention (by 11% of the artists) was made of creativity. However, the comments were mixed or unclear as to where the age advantage lay. A clearer distinction, also noted by 11% of the artists, was the elderly's greater ability to concentrate on their work. Typically, concentration was tied to other traits: "As you age you get slower, more thoughtful ... but you can focus more sharply on fewer things" (77, woman).

The last major age difference (reported by 8% of the artists) was that old artists had mellowed with age, implying that they had become less critical of themselves and others. A softening attitude, however, occasionally was replaced by some bitterness: "The young ones want to sweep you into a corner and hope you'll go away. They are very critical and they sure are out to take away the opportunities that could come my way" (69, woman).

Some expected age-related traits were hardly mentioned. Only 1% to 5% of the artists referred to age distinctions based on idealism, sensitivity, speed of working, the effects of the past, the enjoyment of one's work, or the sureness of one's hand. Only a handful of artists thought that materialism was a major age distinction, although one 66-year-old woman was an exception: "In our culture, the older artist has long ago given up because of a lack of money to support his efforts. Our society is youth oriented."

The Sensory and Physical Effects of Aging on the Artists' Work

Although a significant number of artists (33%) wrote that their work was not impacted by physical and sen-

sory losses, over half the artists (60%) were. An 85-year-old woman wrote, "Now being 85, with a bad heart and feeble, I can't do as much as I did before." She added, "but the need to do is still there." One 67-year-old woman anticipated losses: "I have no [physical or sensory losses] yet, although I expect that I will lack the energy and sustaining power with very old age."

However, the effects of these losses were not considered serious:

Even though I am quite deaf in one ear and totally deaf in the other (I have two hearing aids), I spend more time now (and have the past 4 years) at my easel and drawing board. I spend from 10 to 14 hours alone in my studio except for lunch and dinner and an hour or two watching television. (73, man)

My vision is still 20/20, and I may have a cataract started. I can stand up and even kneel down a little better than I could in the early 1980s. My hands are still OK. My memory is not as good as it used to be. But I think my standards are unaltered. (83, man)

Losses were more often sensory than physical, according to 65% and 22% of the artists who reported these problems, respectively. Sensory losses were more often visual than auditory (58%). In either case, compensations were the rule: "I can't see as well as when I was young," reported a 62-year-old man, "but I have glasses and magnifiers so I feel I can control the mechanical part of producing my artworks."

For 77% of the artists, physical effects were mainly reduced strength and energy, rather than, for example, restricted movement. These losses, too, were compensated for: "So far," wrote a 72-year-old woman, "I have only slightly diminished energy to contend with—but that is no problem. I just work for shorter lengths of time and in the morning when my energy is highest." A 76-year-old man was more specific about how he coped: "I spent years working on location, outdoors, and using my car. My physical limitations make that way less practical. Now I use a camera and quick sketches on location and do most of my painting in the studio."

Whatever the type of impairment, artists consistently overcame them. "I tire a bit earlier in the day," said a 71-year-old man. "I recognize that and don't

concern myself with it.” Other kinds of compensatory strategies are illustrated by three women, aged 68, 77, and 87, respectively.

I miss the kind of reluctant help my late husband could give in making presentation “props” and transportation. This is not a devastating loss, though. I simply transfer or emphasize art activities that require less of the above. As an artist, I may be better off than before, with complete independence.

I can no longer make very large projects, but making small things can be rewarding also. My energy has diminished somewhat, and a lot of time has been lost recovering from surgery, but I have never stopped working. I have a compulsion to make things of my own design. I am fortunate in that my mind seems to be intact.

So far, no loss due to age has evidenced itself, although it’s more difficult to carry heavy pieces, especially for exhibitions and displays. On the positive side, I am more selective due to years of experience. My back tires, hence I spend fewer hours at the bench.

For one 66-year-old woman, overcoming physical adversities made her a better artist:

I wouldn’t object to a slow up in quantity because of my heart–brain problem [she had an unspecified injury or surgery], but I will not be able to live through a stoppage of my quality. My whole later life has been a concerted effort of body, history, heart, and experience. No aging process has affected me, nor will. I have always been hard of hearing or deaf, so it is hard to say if there is an effect. An artist is forced to be isolated. Since it is difficult for me to work with people, I am in forced isolation to a great extent. Getting deafer has improved my art but maybe not me.

Finally, for some artists, having a disability was less important than was their attitude toward it: “My eyes are getting worse, but that’s just an excuse,” wrote a 66-year-old man. Declines also were noted as relative, cutting down on what was still a rather heavy workload, as this comment from a 69-year-old woman reveals: “I can no longer work a 15-hour day.”

Discussion

The visual artists were quite clear about what happened to their work as they grew older: It got better. Ratings of quality and quantity, for example, continually increased through the 6th decade of their lives. Indeed, for artists in their 60s, the later years were considered the best ones. Although the ratings flattened or declined slightly in the artists’ 70s and 80s, they remained higher than they were in their 30s and 40s. Quantity was dampened somewhat more than quality with aging, presumably because physical and sensory losses had a greater impact on work habits than on thinking. Male and female artists, with rare exception, evaluated their artistic performance over time fairly similarly. Age distinctions between artists in their 60s, 70s, and 80s were minor too. In short, the impact of aging on artistic expression were described in positive terms, irrespective of age group or gender.¹

The artists’ accounts of these quantitative and qualitative changes also were positive, as were explanations of shifts in style (the general approach they took to their art) and the sources of their (original) ideas. With increasing age, the artists said they had learned more about themselves and their craft, had become more accepting of who they were and their work, and had a better understanding of what they did and the kind of person they were. The artists also became more concerned about, and involved with, events in the world and the people around them.

Age benefited the artists’ work in other ways. Not only did their art become more mature, as might be expected, but they also gave it more time and attention, mainly because they did not have to raise a family or go to a job. Altered circumstances attendant on aging also revised their priorities, giving art more prominence and invigorating their motivation. Personal and situational changes worked together, leading to new techniques, greater conceptual freedom, increased abstraction, more experimentation, and revised subjects. Increased

¹An anonymous reviewer noted that Vasari, whose 15th-century *Lives of the Most Excellent Painters, Sculptors and Architects* was one of the most influential books ever written about the history of art, reported that he wished Titian had stopped painting years earlier because his early works were the best and his late style would detract from his reputation. Of course, the reviewer added, “now we know that his late paintings are among the finest he produced.”

creativity with aging, in short, occurred for rather straightforward and practical reasons.

There was some concern, however, with health and physical matters, which ranked third overall in importance. Debilities and ailments affected the visual sense, productivity (rather than quality), and were most critical in the artists' 70s and 80s. However, sensory and motor losses, poor and declining health, and reduced and lowered energy were compensated for, adjusted to, or worked around. For example, as artists became frailer, they shifted to an easier medium, reduced the amount of time they worked, varied the time of day at which they painted, or changed the location of their work. Infirm artists, for instance, painted at home, relied more on memory, or used photographs instead of going out into the field. Physical and sensory impairments may have had an impact in areas unrelated to art, such as shopping or social activities, but the respondents were not questioned concerning these areas.

Almost half the reasons for change were about the self (i.e., self-acceptance and self-understanding, a concern for excellence, motivation, maturity, and, most frequently, increased knowledge). The other reasons for change were about equally divided between craft and situational factors. The former referred to new techniques, shifts in subject matter, increasing abstraction, and experimentation. The latter, situational factors, referred to having more time, changes in family responsibilities, and increased demands for their work from gallery owners.

The three groups of reasons, however, were not independent of one another. For example, having more time, a situational factor, also changed the way artists worked, which is a matter of craft. Similarly, reduced family responsibilities, a situational factor, could indirectly affect motivation, which is related to the self.

Many of the specific reasons for change applied equally to the four areas of creativity (e.g., skill), but there were exceptions. Thus, altered family responsibilities accounted for increased quantity more than it did increased quality. Changes in the sources of ideas evoked the largest number of explanations of relatively equal weight: a better understanding of the human condition, a decreased concern with critics' reactions, a shift to more abstract work, a willingness to try out new techniques, and a openness to experimentation. When asked about changes in their approach to work, two major reasons were given: maturity and motivation.

Reasons for change, whether looked at globally or for each question, are remarkable for not being very subtle, profound, or grand. No mention was made of new ways of thinking, radical changes in a philosophy of life, or abrupt shifts in personality. Hardly any artists wrote about the challenges of growing old or about feeling the need to make their work more complex or exciting. Little was said about freedom, spontaneity, intuition, or insight. Little, if anything, was made of the unconscious, anxiety, or taking life more (or less) seriously. Notably infrequent, too, were statements about the crucial role of critics, the public, the marketplace, or the audience. Similarly rare were allusions to spirituality, becoming more profound, depth, getting to essentials, or wisdom.

The low frequency of the more dramatic (some would say "mysterious") possibilities for changes in creativity are difficult to explain. The ambiguous nature of personal reports, or the vagaries of self-completed questionnaires, may account for the low profile or omission of certain themes. These methodological factors also may account for the few allusions to death or related topics, such as immortality, an increased sense of urgency, or a feeling of having to work more quickly with the approach of death.

Some mention was made of old age, but not in the context of an old-age style. The older artists perceived changes in themselves, in the quality and quantity of their art, and in their general approach and source of ideas, as slow and natural, rather than as radical and drastic; they were evolutionary rather than revolutionary.

The failure to find reports of an old-age style may be the result of several factors. First, the sample was small, and the old-age style is a relatively rare phenomenon. Lindauer (1993b) estimated it as occurring in no more than 20 to 30 artists among nearly 300 of the world's greatest Western artists. Second, discerning an old-age style requires a long-term perspective. Future critics, looking back at a lifetime of work years after the artists' deaths, are in the best position to evaluate discontinuities between younger and older productions. Finally, because the sample was self-selective, perhaps artists who saw themselves as having an old-age style did not participate (for reasons unknown).

The older artists' continuity with their earlier work was indicated by the few differences they saw between themselves and younger artists. Late-life works were not judged as radically different from younger artists'

efforts or their own earlier work; their art was not seen as typical of their age in either subject or style. A few artists did mention in passing the possibility of a special style in old age, but only to reject that notion.

The artists did emphatically affirm the enhancing rather than debilitating effects of aging. Thus, older artists thought of themselves as more motivated than younger ones, as having a greater willingness to experiment, and as taking more chances. Younger artists were seen as more concerned with their careers, less accepting of themselves, not as focused on their work, and less creative.

Only one negative age-related comparison was reported, and it was not unexpected: Older artists saw themselves as having less energy than younger artists. Otherwise, the two age groups were thought to be equivalent in their willingness to criticize others' work. Oddly, older artists did not necessarily see themselves as favored by experience; they had mixed feelings. Predictably, they reported *more* experiences, but not necessarily *better* experiences. Younger artists, they explained, had educational advantages.

Aging contemporary artists, therefore, gave a rather sanguine account of their creativity—a picture that contrasts with historical artists, about whom experts have found an early peak in the 30s (Lehman, 1953), and declining productivity by the 40s (Dennis, 1955, 1966). Studies of living nonartists, too, show an inverse relation between aging and creativity (e.g., Horner et al., 1986).

The range of artistic creativity recently has been revised upward, but only to the 40s and 50s (Lindauer, 1993a). There are also a few exceptions to the early and brief span of creativity among some historical figures, artists as well as others (e.g., Bullough, Bullough, & Maddalena, 1978). Alternate accounts of creativity's apparent early decline also have been posed (Simonton, 1984, 1990). This study of living artists, however, offers the most direct evidence for sustained creativity.

Thus, the artists in this study did not rate their 30s, 40s, or 50s as the time of their greatest creativity. Instead, creativity was reported as increasing continually. The discrepancy between living artists' self-evaluations and the historical record for most artists, as well as others, might be resolved in one of several ways.

Contemporary artists purposefully may have biased their responses to give a positive impression of themselves and their work. However, artists are known for their individualism (e.g., MacKinnon, 1975). Further-

more, it is unlikely that nearly 90 artists, of both sexes, and distributed over three age spans, could have responded so uniformly to six sets of questions.

The discrepancy between historical and contemporary artists may lie in the nature of the two samples. The artists in this study, although considered creative by recognized artists, did not include, as far as can be determined at this time, great artists whose works will be enshrined in museums in the future. The number who will be remembered 50 years after their deaths is unknown. To the extent ordinary artists dominated the sample, perhaps they are more optimistic than were the (more tortured?) great figures from the past.

Who is to say, however, who the first-rate artists of today are, and of these, which will be remembered tomorrow (Berlind, 1994)? Rembrandt died in relative obscurity, among many notable figures who died relatively unrecognized. A considerable amount of time must elapse, the history of art tells us, before artists can be judged as maintaining, losing, or enhancing their reputations. A passage of 50 or more years may have to pass before reliable judgments can be made about artistic creativity.

The discrepant profiles between living and dead artists may reflect the contrasting methods used to study them. The historical pattern is based on archival records, productivity counts, and expert opinion, whereas the contemporary picture is a product of self-analysis. Which is a more reliable source? The answer is not self-evident.

Runco (1995) compared self-reports by creative individuals (not artists) with expert observations. He concluded that "Creatives may themselves be the best qualified to judge their solutions and products. . . . They are the best informed" (p. 386). A similar juxtaposition, couched in objective and subjective terms, arises in the larger context of cognition. According to a study by Williams, Denney, & Schadler (1983) "Older adults commonly report growth in practical abilities over the years, even though their [tested] academic abilities decline" (Sternberg, Wagner, Williams, & Horvath, 1995, p. 913). Furthermore, the same study reported that although test performance on cognitive abilities peaked early, 76% of the older adults believed that their ability to think, reason, and solve problems had increased (20% reported no change, and only 4% reported a decline). When shown their low scores, the older adults pointed out that they were not solving "school" problems, but those from everyday life and the practical

world. (Applicable here, too, is the distinction between fluid intelligence, in which younger people stand out, and crystallized intelligence—which depends on accumulated knowledge—on which older adults excel; Horn & Cattell, 1966.)

Contemporary artists' glowing reports about aging, in contrast to their historical counterparts, is most likely the result of living in a time that is more favorable to their work. They have better health care, more educational opportunities, and improved financial resources than their illustrious predecessors. Living in a developed and advanced society, Western artists of the 20th century are able to work longer, harder, and better than their forebears. These advantages also may suppress the emergence of an old-age style, at least until later than 60, the age at which it traditionally is said to occur among historical artists.

This is not to argue that improved social and economic circumstances necessarily result in a plethora of great artists producing dozens of highly creative works. Most will agree that artists have a harder time earning a living than do individuals in most other occupations. Furthermore, some creative individuals may need troubling times to inspire great works (Simonton, 1990), and certain artists may have to "suffer for their art" (Jamison, 1994; cf. Lindauer, 1994).

Discrepancies between the profiles of living and historical artists, in the final analysis, are difficult to resolve. A meaningful comparison requires that artists from the past and present be matched on a range of largely unknown personal and social variables. However, one has to wonder if historical artists, had they been asked, would have agreed with contemporary judgments about their greatest works, or on the time periods at which they were most creative.

The future status of the highly competent living artists sampled in this study, notwithstanding their positive self-evaluations, must remain unknown. This uncertainty, although unavoidable, does not detract from their encouraging reports about aging. These must be weighed, albeit cautiously, against the early decline of creativity attributed to Western artists of the past.

The case for creativity in old age would be strengthened if other kinds of artists—composers, novelists, dancers, filmmakers, and so on—could be studied systematically, rather than, as is usually the case, informally through anecdotes and autobiographies, or indirectly, by counting their life's work or having them judged by experts long after their deaths (Berlind, 1994;

Bertman, 1989; Feldman, 1992; Foote, 1994). Whether different kinds of living artists would be as optimistic about aging and its consequences as are visual artists remains an open but answerable question.

Unfortunately, artists have not been systematically asked about aging and its impact on their careers. Indeed, old artists rarely are included in any kind of research on old age. Instead, older participants are recruited who, if not hospitalized or disadvantaged in physical, mental, or economic ways, are retired. No longer actively engaged in their life's work, the typical retiree's mental abilities are not likely to be as sharp as are those of artists and others who remain active in their professions.

Retirees are, therefore, at a disadvantage when given the artificial kinds of laboratory tests of cognition on which undergraduates excel (e.g., Salthouse, 1989; cf. Cornelius & Crespi, 1987). These demand fast, single, and correct responses following exposure to unrelated lists of isolated words or fragmented stimuli on a strictly paced time schedule.

Older artists, among others still working at their lifelong creative careers, may perform better than unemployed retirees on the narrow band of cognitive tasks typically employed in laboratory settings. Old artists, scientists, and scholars who have continued to work at their skills beyond the normal years of retirement may, therefore, be good candidates for laboratory studies of aging. Long-term and continuing practice in productive careers may help older individuals overcome the time-bound demands of unfamiliar, unusual, and restricted materials and procedures.

Indeed, why test the elderly in such limited ways at all? Why not show them art? It calls for expressive, reflective, and contemplative modes of thought, qualities said to be the strengths of old age. Art also requires an open-minded attitude if its multiple possibilities and layers of meaning are to be meaningfully explored. Broad strategies of thinking may compensate for younger participants' faster response rate. Thus, some of the cognitive differences between the old and young may be reduced, if not erased, when art is substituted for ordinary materials.

The performance of old and young participants were equivalent in recent studies on an array of artistic tasks. To illustrate: Younger and older viewers similarly rated, identified, and differentiated several styles of art (Lindauer, 1992a). Older participants, as expected, took longer to finish, but that was because they had more to

say than did younger participants about what they were seeing and doing. In another study of 20- to 80-year-olds' involvement in the arts and arts-related activities, such as writing poems, painting, and attending concerts, more similarities than differences were found (Lindauer & Perlmutter, 1992). Self-evaluations of creativity were also about the same across the different ages.

Conclusion

For the elderly artists in this study, fully involved as they were in a creative activity, their work improved as they aged. They continued to develop their artistic skills and knowledge, as well as to improve themselves. They had a more positive view of their work, and also of themselves and their relationships with others. The same benefits may be found among aging artists working in other media (and serve as an incentive to nonartists picking up art in old age for the first time), as well as to scientists, scholars, and others who continue to work on creative projects throughout their lives. Creative efforts in old age may transform our knowledge about ourselves and others.

In any event, what can be said with some certainty about the reports of older artists, for whom creative work was a lifelong activity, is that excellence in old age is possible; that continual learning does take place; and that changes with age can be for the better. Declines in old age are not inevitable, and stability is not necessarily the only ideal; improvements also can occur. In other words, successful aging is possible (Perlmutter, 1988, 1990). For those who work in creative ways beyond their 60s, old age has its virtues: Higher order capacities can be sustained, if not enhanced, and they may emerge for the first time.

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