Abstract: Throughout his lifetime, the American painter, Chuck Close faced many challenges, including dyslexia and prosopagnosia. This article discusses his education and some of the creative strategies he employed to overcome the obstacles he faced from elementary school through college and graduate school. It also considers the influence of several of his teachers and the ways his learning differences came to influence his artistic process.

Key Words: painter, learning disability, education

Facing Dyslexia

The life of Chuck Close is a story of human challenges and accomplishments in three parts. His childhood, adolescence, and student years in Everett, Seattle, and New Haven, presented both ordinary and unusual psychological, personal, health, and educational struggles. As he entered into the first phase of his professional career as a teacher and artist at the University of Massachusetts at Amherst, he established himself as an original force in American art, breaking away from the mainstream. In the late sixties he turned away from abstract expressionism, and as a photographer, printmaker, and painter, he developed his own brand of large scale hyper realistic portraiture which directly opposed dominant trends in American modern art at the time. Later in 1988, his life shifted again as he had to make major adjustments to the way he lived and worked after experiencing a paralyzing spinal artery collapse. He refers to this health incident which caused his quadriplegia as "The Event." His life is a story of challenge, creativity, persistence, and the adaptation of technology. All of these things allowed him to continue to create and paint the reconstructed visions of human faces that became the art he is known for.

This essay focuses on the first phase of the artist's life, particularly his struggle with dyslexia, prosopagnosia, and a myriad of other childhood health concerns. It examines his educational journey through high school and junior college and the second part of his undergraduate career at the University of Washington. It tracks his graduate school experience at Yale, where through combination of original thought and labor intensive application, he began to emerge as one of America's most innovative artists. It considers the influence of teachers and mentors who were catalysts in Close's work, contributing indirectly to changes that would affect art history.

Chuck Close's experience did not follow a straight trajectory. In addition to the common developmental challenges any child growing up in post-war America would have experienced, he was also confronted with complicated health and educational challenges that probably seemed impossible to overcome at the time that he was a child. As he grew into a young man who would energetically challenge the artistic status-quo, some of the difficulties he faced would serve as a means to help him find solutions and processes leading to innovative visual expressions of the human experience.
As a child Close knew he had a talent for showmanship and the creative side of life. His father, Leslie Durward Close, who was a practical and creative man, supported his son’s interest in puppetry and magic (Finch, 2010a). Home was a safe place that nurtured invention and imagination.

In contrast to home which promoted Close’s creative side, he experienced difficulty in school. He struggled to read and remember the materials he encountered in textbooks. He also had difficulty remembering and identifying the faces of the people he lived with every day. These two challenges that he experienced (and still experiences) are known as dyslexia and prosopagnosia. Dyslexia, which involves several areas of the brain, manifests complexly in individuals. A clear definition of this learning difference, which touches the lives of many, follows. It was developed by a working group of the International Dyslexia Association.

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction (Lyon, Shaywitz, & Shaywitz, 2003, p. 2).

In addition to dyslexia, Close also has prosopagnosia, also known as face agnosia, or face blindness. This disorder has been known since the mid twentieth century (Ellis & Florence, 1990). It affects about 2% of the general population (Yardley et al., 2008). It is a neurological difference that results in an inability or difficulty in recognizing faces, despite adequate vision and cognitive skills to identify other stimuli like objects, letters, or words. Close has stated that he had difficulty recognizing classmates after spending a school year with them (Farley, 2011). The impact of this condition would have complicated efforts to connect with others.

Close faced additional challenges. Along with having near sightedness and lazy eye (Farley, 2011), Close also describes a neuromuscular condition which prevented him from running and using his arms in certain ways. "Not only was I a screwed up student, but I could not excel in sports… so as a kid when we were playing tag and everybody would run, they would run off and leave me. I'd run 25 or 30 feet and my legs would lock up and I would fall down" (Tully, 1987).

Close also experienced childhood illnesses that were layered over these neuropsychological and physiological differences. One of the more significant of these was nephritis, a kidney infection which forced him to spend the better part of his eleventh year convalescing in bed. His father died at about the same time. These were two serious difficulties for a boy in late childhood who was about to face the changes of adolescence (Storr et al., 1998).

While these difficulties likely caused a great deal of frustration, sadness, and complication for Close as a child, the supportive and caring environment his parents provided allowed him to grow in his own direction. Close's father was a creative man who worked as a plumber and a sheet metal worker. He provided young Charles with the tools and props that would make his son happy as he applied his growing understanding of the world in ways that are not ordinarily found in a school curriculum. Amazingly, Leslie found an “art teacher” to give his
young son painting lessons. Charlie's father got to know a young woman who had been a student at the Art Students League in New York. She lived near a diner he frequented in what may have been a house of ill repute. Nonetheless, she provided Charlie with lessons in landscape painting and figure drawing, complete with nude models offering positive reinforcement for the ten year old (Friedman, 2005).

Difficulties in School

In school, however, Chuck Close's struggles were significant. When interviewed for the book, *Chronicles of Courage, Very Special Artists* by Jean Kennedy Smith and George Plimpton about artists with disabilities, Close explained his understanding of the extent of his academic difficulties. He described himself as a slow reader with severe comprehension difficulties, unable to remember or recognize information for exams. He felt that people saw him as a "shirker, lazy and dumb" (Smith & Plimpton, 1993, p. 15).

In 1987 Close discussed his difficulties in school with Judd Tully as a part of the audio recordings that were made for the *Smithsonian Archives of American Art* project. During those interviews he bluntly states, "I am dyslexic; no one cared." He reported being able to mirror write from age four and that, like Robert Rauschenberg, he saw an advantage to living with such reversals when he became a photographer and print maker (Gobbo, 2010). "I have no trouble imagining what it looks like the other way, using photos when making portraits or using other reversal processes for printing" (Tully, 1987). In the same interview he states that he has been able to mirror write fluently throughout his life. He also described his problems with facial recognition as a "part of the disability" (Tully, 1987).

Since no one addressed - or probably even knew about - the disability in Oakwood Elementary School or Everett Junior High School in northwest Washington during the early 1950s, Close was forced to develop his own processes for study. He had a great deal of difficulty comprehending and remembering the information he was required to learn in order to get through school. Close describes an elaborate process he developed as follows:

“I used sensory deprivation. I would go into the bathroom where I would -- in the dark -- put a strong light on a plank that I had across the bathtub with a book stand to hold the book and in hot water -- in total silence in the dark -- I would go over, and over, and over whatever it was I was supposed to be memorizing all night long before an exam. Just the very last minute that I possibly could go over the stuff. I was a virtual prune I was so wrinkled from studying. But it was like I had to get rid of all the other distractions and everything else that was going on in order to focus and concentrate and stare at these things. Then in order to remember it I would take a word and I would break it down into letters. Then I would make a sentence. If I had to remember the name of a biological species or something like that-- say the word was -- I don't know what it would be--now, of course, I can't think of anything. [Laughs.] But if it were "plankton" or something like that, then I would put "please leave" da, da, da, and I would have a sentence. Then I would have a visual image of that sentence or it would be pink, long, or something that would be visual. So then when I'd need to recall this I would get the mental image, the mental image would feed me the sentence, then I would extract from the sentence the
appropriate letters and rebuild the word. This worked reasonably well, but it of course ate up a lot of time. So typically on my exams if there were 20 questions, I would have the first 15 questions correct and then of course the last five I didn't have time to do. Now if you are a learning disabled person you can choose to take exams in an untimed way. For instance, you can take SATs and things untimed for people who have this kind of a problem” (Tully, 1987).

Those who teach students with language processing difficulties know the importance of teaching students who have reading comprehension difficulties to chunk larger groups of information down into manageably sized units. Early in life Close independently discovered the important teaching principle of chunking. He also discovered and used the cognitive science principle of mnemonics, a memory technique that allows the learner to translate concepts into formats that will be easier to remember. It is a technique that is now commonly taught to students with learning disabilities (Finch, 2010). The adolescent who developed his own process for reading comprehension and memory, would as an artist many years later come to emphasize process in painting (Close & Dunham, 2007).

Close also used his abilities as a visual thinker and learner to get himself out of the occasional academic jam. He states that, "Art really saved my life because art is how I proved that I wasn't a malingeringer" (Tully, 1987). He goes on to describe a ten foot long map he made that illustrated his understanding of the Lewis and Clark Expedition, which was being covered in his high school history class. For his English class he would make poetry books that included illustrations for every poem being covered.

School Strategies Propel an Innovative Painting Style

Close has stated that he flourished as an artist not in spite of his neurological conditions, but because of them. He has discussed the role his neurological differences contributed to his creative process: "If you break things down into incremental units, be they faces or readings, then it's just one little piece of information at a time” (Farley, 2011).

He is best known as a painter of faces. After he turned away from the influences of abstract expressionism and pop he began using a process to create hyper-realistic two dimensional likenesses of people's faces. His first well known work using this process was the mural sized "Big Nude," based on a photograph using a grid system to reduce the analog photo to smaller units to be transferred to the canvas. A large self portrait cropped in black and white using a similar process was followed in 1970 to create "Keith" using a three color process that resulted in a 9x8 foot canvas of a neutrally expressive face. These developed into the painting style he continued to use in modified forms throughout his career. The process depended upon hundreds of hours of intensive, meticulous, intricate painting.

Knowing himself, his strengths and weaknesses, Close adhered to this reductionist approach that was dependent upon very small units. Basically, he was taking the details of a face, which most humans use to identify others, and reducing it so that a complicated visual event becomes a flat plane in thousands of increments. Essentially this process is similar to the way that he tackled his school reading assignments. He captured sections of reading with his literal
attentional flashlight while using the sensation or non sensation of warm water to filter out distracting sensory input. He broke the whole thing down into elements and used mnemonics to load it into his memory for later use.

Of course this took a tremendous amount of time and required a great deal of effort but it worked. Time and effort are two elements of life Chuck Close has always understood. He has always emphasized getting down to work and sticking with the process while having a willingness to take on large projects. He explained at one point much later that his work was time consuming. One painting could take up to a year, and the way of thinking he used was an outgrowth of his learning disabilities. When something is too big to deal with it has to be broken down into bite sized pieces. His work resembled that of a writer using individual words or a builder using individual bricks as they create a product (Smith & Plimpton, 1993).

Teachers as Catalysts and Mentors

When considering children and adolescents, like Chuck Close, who have struggled with learning and social challenges due to neurological differences in the way Chuck Close did, it is worth examining individuals who encouraged them to grow their talents. These figures are important because they have spurred struggling young people to find their gifts even when they are being overlooked by others. In other words, mentors can inspire hope amidst failure for people like Chuck Close.

The teachers and mentors who influenced Close, contributed to the face of twentieth century art in America. Early support came from Close's parents who understood and promoted his interest in illusion and desire for visual expression. His parents, particularly his mother, Mildred Wagner Close, who had a complicated relationship with her only son after his father's death, always nurtured his creative side.

Having struggled through high school, the young Close barely managed to graduate. He was unable to complete the courses that would usually be prescribed for a young person interested in college or university. Guidance counselors recommended that he train to be an auto body worker (Finch, 2010b). At the age of 18, Chuck was a big fan of Mad Magazine and wanted to buy a nice car, so he thought, “Why not become a commercial artist?” He thought that perhaps at one time he might draw a cover for Time Magazine (Tully, 1987). His high school grades were mediocre and he had no chance of being admitted to the University of Washington.

Everett Junior College

Close benefitted from two instances of good luck. First, Washington had a junior college system with an open admissions policy. Everett Junior College accepted him as they would accept any other state resident who had graduated from high school. Close told his biographer, "I am a product of open enrollment" (Finch, 2010b). He explains his admission to college as having happened despite his learning disabilities (Smith & Plimpton, 1993).

The second piece of luck came when he met Russell Day. Day was the enthusiastic and dedicated chair of the art department at Everett Junior College. Close credits Day, whose former
students included the glass artist Dale Chihuly (Luplow, 2012), with saving him from what might have been a boring middle class life. Russell Day has been recognized for his dedication to the teaching of art. He was reported to be a little eccentric at times, for example wearing a toupee like a hat when he felt like it (Roush, 2012). Day has spoken about his love of teaching, recognizing what students bring to his classes, and staying aware of their potential (Lepper, 2008).

Meeting the right teachers was an important component in Close's development as an artist, but as in most situations that lead to success, effort and understanding played a role as well. As a young student Close became aware of what was necessary for an individual with learning disabilities to survive in the academic world. He said that he, "...realized I could find my own way to skin a cat—by doing work for extra credit, different kinds of projects, figuring out in which classes I could be successful" (Smith & Plimpton, 1993, p.16). His quest for creative solutions to his academic problems brought him to the classrooms and studios of several creative teachers who had a powerful influence on his development as an emerging artist.

At Everett Junior College Close met Don Tomkins and Larry Bakke who became important influences. Tomkins who Close refers to as his mentor while at junior college, was also one of Day's students. Tomkins designed jewelry and was known for pushing the limits of the medium to include elements like glass. When he returned to the college to teach, Close took metal courses from him. Larry Bakke taught Close life drawing and painting, and reviewed his final portfolio. Close graduated from Everett Junior College with an associate's degree in 1960.

University of Washington

The art student's next stop was the University of Washington (UW). Although situated on the other side of the continent from New York, which many perceived to be the center of the art world at the time, the University's faculty included influential artists who helped to shape Close's rapidly growing understanding of art, and the technical skills he would come to rely on as an artist. Two painters, Mark Tobey and Morris Graves who had become influential in northwestern art, were members of UW's art department. Their classes would have a great effect on Close as a developing artist.

Tobey and Graves turned to the East rather than New York's east coast for inspiration, and were strongly influenced by the Asian experience and philosophy (Finch 2010a). Tobey, an abstract expressionist who won the Venice Biennale award in 1958 was influenced by Zen Buddhism and Bahia World Faith. He searched for the spiritual in art and was invited by Josef Albers to work as a guest critic at Yale's graduate art program. Tobey seemingly had a strong influence on Close's decision to later become associated with the New Haven program (One Country, 1998). Morris Graves was the younger of the two faculty members and he too was strongly influenced by the East. He had been to Japan as a young man, and in the Zen tradition he is said to have tried to capture the sound of surf and birdsong in his painting (Ament, 2003).

Larry Bakke's teacher, Alden Mason also served on the faculty at the University of Washington. Mason was originally from Everett, and Close respected and relied on him during his two years at the university. Mason describes Close as at first being a nervous student who
painted "big gesture abstract expressionist paintings." It appeared that Close was trying to paint like Mason, but would come to Mason for affirmation of his work. Mason saw a different side of Close who usually appeared to be very self confident in front of his peers in classes and social situations (Harrington, 1984; Finch 2010a). Mason and Close remained lifelong friends.

Close was not afraid to move away from the painting styles of his teachers. In the spring of 1961, Close took a step away from abstract expressionism with his work, a large 10 x 7 foot American flag that he painted and altered, called "Betsy Ross Revisited." In the following fall he submitted it to the juried Northwestern Art Regional Show at the Seattle Art Museum. The influence of Jasper Johns and the recently emerging pop art trend likely influenced Close's use of the flag to create the political statement that caused a stir in Seattle. He was beginning to make a name for himself.

During the summer between his junior and senior year at UW, Close received a fellowship to attend Yale's Summer Program of Art and Music in Norfolk, Connecticut. His admission to this prestigious program marked the first time that he was seriously recognized for his work. It exposed him to teachers with international reputations. Visiting critics included painters Phillip Guston, Elmer Bischoff, and the photographer Walker Evans, best known for his depression era photographs (Friedman, 2005; Storr et al., 1998). Close also had the opportunity to engage with the art and varied opinions of his fellow students: Vija Celmins, Bill Hochnausen, Brice Marden, and David Novoros (Finch, 2010a; Bui, 2008). Being in Connecticut brought him within striking distance of New York City where he could visit the museums and galleries he had been hearing about for the past three years. Close returned to Seattle and in 1962 finished his art studies at the university, graduating with the highest honors.

Yale MFA Program

After attending Yale's summer School of Music and Art and graduating with honors from the University of Washington, Chuck Close was accepted into Yale's MFA program in Art and Architecture. There, he was "immersed in the ethos of 1960's modernism" (Freidman, 2005, p. 28). He developed his technique as an artist while building a theoretical and practical understanding of painting, printmaking, photography, and art history. A shift in the school's teaching philosophy as it moved from the influence of Josef Albers disciplined Bauhaus teaching methodology to the freer approach that developed under recently appointed director and abstract expressionist, Jack Tworkov, undoubtedly benefitted Close. Tworkov's approach involved exposing students to a wide variety of possibilities that could be in conflict with one another, and allow students to be influenced as they engaged in their processes. "Rather than teach students to be artists – an impossibility- or indoctrinate them in a particular aesthetic, Yale's approach was to expose students to as wide a range of ideas and potential choices that could be bought under one roof" (Storr et al, 1998, p. 29).

This creative crucible was also influenced by Ad Reinhardt who was with Albers at Yale ten years before Close arrived. Reinhardt was the philosophical spokesperson for "The Irascibles," who were the most well known group of New York twentieth century artists. Reinhardt was a painter who wrote and commented on the philosophy that underpinned the abstract expressionism the group recognized. He was perhaps best known for his painting "Black
on Black” the ultimate abstract work. Close was influenced by the ideas of Reinhardt, and like many students he was determined to do something that had not been done before. Reinhardt's words supported that approach and Close talked about that influence:

“… The artist who actually influenced the way I think most was Ad Reinhardt. In his writings he would say, ‘You can't do this, you can't do that, no more this, no more that.’ The whole notion of constructing limitations that guarantee you can't do what you did before will force you to do something else. And that's how you change, move forward; not necessarily progress, but how you can program change into your work” (Bui, 2008).

A more direct influence came from studying with Al Held, who joined the faculty in 1962, and taught at Yale until 1980. Held also painted abstract expressionist canvasses on a large scale. Close had a difficult time with Held's approach to teaching that tended to push works in progress toward a specific resolution. Still the student painter related to Held's working class background, and respected the older artist's advice on dedication to art and the importance of hard work (Finch, 2001).

In addition to the opportunity to study with painters like Held and get critical feedback from artists like Phillip Guston, Close was also able to work alongside and interact with fellow students who went on to successful careers. Examples include: steel sculptor Richard Serra and his then assistant, composer Phillip Glass, film maker and painter Nancy Graves, and still life painter Janet Fish, all of whom later became subjects of Close's paintings. A look at Rackstraw Down's paintings which depict photorealistic cityscapes on a large scale shows the influence of peers on the evolution of Close's work. Being in such a hot house environment of creativity had to accelerate the incubation of ideas and catalyze the young artist's process.

Summary and Conclusion

Looking at a time line of Chuck Close's life, one might conclude that attending Yale's prestigious graduate program to study visual arts would appear to be a natural next step. But given the struggles he faced in the earlier stages of his education, his completion of a graduate degree is a remarkable feat. In addition to and as a product of his determination, he developed and evolved study strategies that had to be continually sharpened in order for him to cope with the demands of a rigorous graduate school course load. He used his resourceful approaches of finding, "his own way to skin a cat," to complete his requirements in art history. For example, in Egbert Havencamp-Bergemann's class on the history of print making, Close replicated processes that were used more than 300 years earlier to gain a deeper understanding of processes used by 17th century Dutch printmaker Hercules Seghers. He used his experience to understand and explain methods used in that era. As a result of his studies with Havencamp-Begemann, Close began to understand both the chemical and collaborative nature of the print making process (Sultan, 2005).

In another art history class, his non verbal term paper prepared for Professor Jules Prown was so impressive that the instructor later contributed it to the archives of Yale's Sterling Library. The response to an assignment on the topic of early American architecture and furniture compared a Hepplewhite chest to a Federal period villa by, "combining images reproduced from
photographs with diagrams presented on acetate overlays" (Freidman, 2005 p. 320). This extension of his ability to break a problem down into its smaller parts that later could be reconstructed into a new view that revealed solutions, predicted his later direction in visual art.

Not surprisingly, there were less successful endeavors and setbacks that may have been influenced by the artist's learning differences. For example, Close worked as an assistant to printmaker Gabor Peterdi. While the older artist liked Close, the student was seen as being too disorganized for the master printmaker's work style.

Even though he faced obstacles Close gained an understanding of the history and process of print making. He did this in part by being able to see "and hold" the works of the masters like Rembrandt and Durer. "We were allowed to see and touch remarkable prints by Rembrandt and Durer, among others. I could study state proofs of Rembrandt's 'Descent from the Cross,' and clearly see the choices and decisions that Rembrandt made. I could hold them a few inches from my nose. I could see the process evolve through progressive states. I really understood print making for the first time" (Sultan, 2005). The art student is said to have left the experience seeing printmaking as something that would hinder rather than help him as a painter (Wye, 1998).

As is the case with many students who leave school with skills they feel are not the most useful at the time they acquire them, it is likely that the experience with printmaking under Peterdi and Havencamp-Begemann served him well some years later in his career when he became involved in print collaborations. Close's learning experience with prints and printmaking also illustrates the power of active involvement and “hands-on experience” for students with learning differences.

Chuck Close completed a double major in painting and printmaking in 1964. He then travelled to Europe on a Fulbright Grant, and taught briefly at the University of Massachusetts at Amherst. Close followed Al Held's advice and walked away from the security of a university teaching job to dedicate himself to his art. When he was a student in New Haven, Held told him to go to New York prepared to support himself as a painter through hard work. After his diverse college experience and the rigorous, dynamic work of graduate school, that is exactly what he did. From there, Close's national and international reputation grew to what it has become today.

Chuck Close's life is an example of dedication to developing processes to solve artistic problems. He believes ideas come out of this commitment to process and work. In part of a television appearance recorded by CBS's This Morning news show, Close offers advice to his “14-year-old self” (Close, 2012). This advice is perhaps among the best for anyone who has struggled academically. He states, "If you are overwhelmed by the size of a problem, break it down into mini bite-sized pieces." The micro-uniting and chunking processes he used while sitting in the bathtub, struggling with high school reading comprehension, served as the foundation for the process that would make him a recognized artist. Several years later he would take photographs enlarge them, then place a grid over the enlargement and paint them, one block at a time. The resulting hyper-realistic products literally changed the face of art history.
It would be a stretch to state that Close became a successful artist because of his experience with dyslexia and prosopagnosia, but they both are critical elements of his personality. Opportunities and the people around him also played important roles in his growth, but his learning differences shaped his cognitive style and his approach to problem solving. They influenced the art he became known for and they are undoubtedly part of his creative process.

Appendix

Three of the following four url links lead to examples of Chuck Close's painting that appear on his official web site. The first two links lead to early works, Big Self-Portrait 1968 (1.), and Phil 1969(2.). Both are the result of taking a black and white photograph of a neutrally expressive face, and placing a grid over it. Close then paints each individual square of the grid to achieve a hyper-realistic portrait of the individual. These two paintings are approximately 9 feet x 7 feet in size. The third link connects to Self-Portrait 1997(3.). This represents his later color work which extrapolates the earlier process. The final result is not concerned with realism and the artist fills squares with x's, o's, triangles, or other shapes to form the portrait. This painting is about 8 1/2 x 7 1/2 feet in size. A fourth url (4.) links to a photograph of the artist working in his studio.

1. Big Self-Portrait 1968
   http://chuckclose.com/work007.html
2. Phil 1969
   http://chuckclose.com/work017.html
   http://chuckclose.com/work171.html
4. Chuck close in his studio working on John 1992
   http://chuckclose.com/work155.html

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References


