Bilateral art: facilitating systemic integration and balance

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Art therapy has typically focused on issues associated with the human need for creative experience—art as therapy—and the power of art as a form of expression—art in therapy (Cane, 1951; Rubin, 2001). Marriage and family therapists argue that many of the difficulties that present in therapy are best treated systemically, i.e., from the perspective of or in the presence of the family as a whole. More recently, family therapists have extended their systemic perspective in the opposite direction with the introduction of the self in the system (Nichols, 1987) and internal family systems models (Breunlin, Schwartz, & Mac Kune-Karrer, 1997). The field of mental health is placing increased emphasis on the relationship between the biology of neuroscience and various treatment modalities. This paper represents an effort to integrate elements of these diverse viewpoints by describing a neurologically-based art therapy modality—bilateral art. It describes both neurological and family therapy systemic perspectives that argue for the use of bilateral art. A specific protocol for bilateral art therapy and a case study describing experiences with the use of this protocol are presented.

Background

Gazzaniga (1998a, 1998b) has written extensively on the structure and function of the brain, particularly the functions of the two hemispheres of the cerebral cortex—the left hemisphere associated with language and speech and the right hemisphere associated with visual-motor activities. Much of Gazzaniga’s work was based upon studies of patients whose corpus callosum had been severed to prevent communication between the left and right hemispheres—a technique used to inhibit seizures associated with epilepsy—hence the term “split brain.” Experiments revealed that the left hemisphere functions seemingly independently of its right counterpart. Gazzaniga described additional dominant functionality of the left hemisphere—cognitive problem solving. In contrast, the right hemisphere was very poor at problem solving. Additionally, Gazzaniga explored the interactions between the left and right hemispheres and discovered a left brain capable of confabulation, i.e., capable of unconsciously manufacturing explanations for the output of the right brain.

While Gazzaniga’s experiments were conducted on patients with split brains, Schiffer (1998) generalized these findings to normally functioning brains. Schiffer (1998) provided evidence for two autonomously functioning brains, each with its own personality, memories, and behaviors. He performed experiments using goggles that restricted visual stimulation of the left or right sides of the brain. These experiments revealed different “senses of well-being” or affect when different halves of the brain were visually stimulated. While not specifically mentioned by Schiffer, this phenomenon may provide evidence for one theory posited for the success of eye movement desensitization and reprocessing (EMDR) (Shapiro, 2001). This theory argues that the eye movements in EMDR stimulate both sides of the brain while focusing on a particular target, thus invoking memories from both hemispheres and facilitating reprocessing and integration.

Extending this lateralized view of the brain to include the more primitive limbic system, Schore (1997) has argued that the limbic system, the brain structure associated with primary emotion, is more closely associated with the right brain than with the left brain. Thus, the outputs of the right brain may...
more closely reflect the emotional content of the limbic system and the neural organization established early in life than the narrative outputs of the left brain. More recently, Cozolino (2002) stated,

We have to assume that integration between the right and left hemispheres is a vital element of healthy brain functioning. Anxiety and affective disorders, psychosis, alexithymia, and psychosomatic conditions have all been hypothesized to be causally related to deficits in the regulations and integration of neural networks connecting the hemispheres. (p.117)

Additionally, Cozolino (2002) and others have described the presence of experience-dependent implicit memories (Schore, 1997, 2000; Siegel, 2001). These implicit memories reflect early attachment experiences and are embedded in our neural network architecture providing unconscious filters of current experience. Cozolino (2002) argued that it is these continuously evolving embedded experiences that provide the basis for responses to external stimuli and it is the task of psychotherapy or psychopharmacology to alter a neural architecture’s maladaptive components. Schore’s work on attachment supports this view. He argued that the experiences of early development are primarily reflected in the right brain organization stating:

The developmental neurosciences are now identifying the “lower” autonomic and “higher” central brain systems that organize in infancy and become capable of generating and regulating psychobiological states. These homeostatic structures that maintain stability are primarily lateralized in the early developing right brain. (Schore, 1997, p. 596)

Schore (2000) and Siegel (2001) both described the implicit memories established through early attachment experiences. They described the role of the right brain as the home for these implicit memories, noting that, developmentally, the left brain is not receptive until late into the second year of life. Cozolino’s (2002) extended this notion of neurally embedded architectures to specifically include the impact of family dysfunctions. He claimed that “the development of children, on all levels, is shaped and distorted by all of the adaptations necessary for their emotional survival within the family” (p. 58). Siegel (2001) supported this claim and used the term “interpersonal neurobiology” to refer to the relationship between “neurophysiological process and interpersonal experience” (p. 997).

Bowen (1978) described the task of differentiation as integrating and balancing the needs of self and others, to be able to concurrently maintain one’s sense of self and be available to others. Bowen (1978), Kerr and Bowen (1988), and Cozolino (2002) all have argued that anxiety and fear inhibit the process of differentiation. Additionally, Cozolino (2002) has posited that integration and balancing of cognition and affect facilitates the process of differentiation. The case study described in this paper clearly illuminates the differentiation process of a woman at midlife who is struggling with the needs of self versus others.

Art therapy has long been regarded as a modality that integrates left and right hemispheric activity (Nucho, 1987; Silver, 2001). It has been used as a modality for language impaired populations, and for children who are often more comfortable with right brain activities than language. Additionally, art therapists have argued for the visual voice of the right brain in highly verbal left brain dominated populations as well (Cappachione, 2001; Rubin, 2001). The right brain’s visual thinking facilitates self-expression and personal growth. This paper describes an art therapy protocol, proposed by Cartwright (1999), that explicitly seeks to engage responses from both the left and right hemispheres for the purposes of integration and balancing.

One hypothesis for the intervention described in this paper is that just as a family therapist joins with a family and perturbs the family’s patterns of behavior, the bilateral art serves to perturb maladaptive neural organization. This hypothesis is consistent with Cozolino’s (2002) view of the need to integrate and balance the experiences and memories embedded in the neural architectures of the various parts of the brain, including the specialized right and left hemispheres. However, this thinking, while engaging, is clearly speculative and arguments for or against are well beyond the scope of this paper.

The following sections present Cartwright’s bilateral art protocol, proposed extensions to this protocol, and a case study describing experiences using bilateral art with a client struggling with differentiation of self. It is this author’s belief that the case study presented in this paper is the first documented use of Cartwright’s bilateral art protocol as an intervention.

Bilateral art protocol

Clients engaged in bilateral art activities use both hands in an effort to stimulate the memories and experiences that reside in both sides of the brain. Cartwright (1999) posited that exploration (or tracing) of the art drawn by one hand with the opposite hand facilitates integration of these experiences.

Supplies typically included 14 inch × 17 inch white paper used in landscape mode and marking pens. Before beginning the process, I drew a vertical line down the center of the paper. Usually, the left hand side of the paper was used for the expressions of the left
hand and the right hand side of the paper for the expressions of the right.

Cartwright (1999) provided a detailed protocol for the use of bilateral art or “neurologically-based art work.” The following steps describe my use of his protocol.

1. Determine a focus for exploration. I often wait until the client provides a natural focus. It typically resembles a situation where the client is struggling with a choice between two options, how he/she feels versus how he/she would like to feel, where he/she is currently versus where he/she would like to be, two conflicting needs, two conflicting beliefs, or two conflicting emotions, e.g., I am good enough versus I am not good enough.

2. Have the client determine which hand is most connected to which of the two conflicting elements of experience. Then have the client decide which of the two elements “wants” to be “drawn” first.

3. Drawing supplies are placed next to the hand that “wants” to draw first. Have the client “connect” with the “feeling” associated with the element being drawn. And then with an imagined or real line down the middle of the paper, draw in response to the feeling on the side of the paper corresponding to the hand that is drawing. For example, if the left hand wants to draw first in response to “I am good enough,” the supplies are placed on the client’s left hand side and the client is asked to use his/her left hand to draw in response to feelings associated with “I am good enough.”

4. Once the first element is drawn, the drawing supplies are placed on the opposite side of the client, and the client is instructed to focus on feeling(s) associated with the second or oppositional element of experience. Once the client is fully connected to that element, he/she is instructed to respond to the feeling on the other side of the paper with the other hand. For the example above, the client would use his/her right hand to draw on the right side of the paper in response to “I am not good enough.”

5. Once both elements of the experience have been expressed, have the client determine which element “wants” to be explored first with the hand that did not draw it, e.g., the left hand is used to explore the drawing made with the right hand and vice versa. Direct the client to just let his/her hand rest on the drawing made by the opposite hand, and then to explore the drawing using any amount of pressure that feels appropriate. In the case of the example above, if “I am good enough” wants to be explored first, the client uses his/her right hand to reach over to the left side of the paper to explore the drawing of the left hand. Repeat this process with the opposite element and hand.

6. Have the client use both hands together to explore both drawings in any order with any movements that seem appropriate.

7. Then ask the client to reflect upon his/her experience.

Cartwright (1999) provided numerous variations to this protocol including tactile creations for use with visually impaired clients. He also recommended the use of pencils, crayons, and marking pens rather than pastels or paints, which tend to blend when the images are traced over or explored.

My experiences with this protocol have led to several adaptations. The most significant is the use of scaling. Shapiro (2001) described a process of rating the validity of a cognition for EMDR and I have extended the bilateral art procedure to include a similar scaling of the strength of a client’s belief in the truth of a cognition or experience. Both before and after the bilateral art procedure, I ask clients to indicate how true the cognitions are for them on a scale of one to seven, where one represents completely false and seven represents completely true. Another adaptation relates to the clients’ exploration of drawings with the opposite hand. I typically will ask the client to “trace over” the drawing in any manner that they wish. The distinction between explore and trace is subtle and lends itself to experimentation.

Case example

This case example describes experiences using bilateral art with “Elinore,” a client in her late thirties who presented with symptoms of depression related to difficulty differentiating from her family of origin. Our work spanned 30 sessions over a 12-month period meeting at times weekly and at times biweekly. The bilateral art interventions described in this paper span 20 sessions over the latter nine months of this period.

Initially, Elinore was feeling unable to work, was fatigued, and showed little attention to her personal appearance. The Mind over Mood Depression Inventory (Greenberger & Padesky, 1995), administered in session six, yielded a score of 51 out of a maximum of 57 for Elinore. She exhibited most of the inventory’s 19 symptoms of depression “most of the time.” Ten sessions into the process of therapy, that included self-expression through talk in all sessions and through art in six of the sessions, Elinore was no longer working. I sensed that the process had reached a plateau and decided to introduce her to bilateral art. She had actively engaged in other uses of art in therapy and I felt she might be a good candidate for bilateral art as she often presented with polarized
struggles. She clearly articulated what she was experiencing and what she would like to experience. I was hopeful that bilateral art might help Elinore integrate some of her polarized conflicts. The next 20 sessions with Elinore included 12 sessions directly related to the bilateral art process. An additional four sessions included art as a form of expression but not bilateral art. The remaining sessions included two with her spouse and relied upon talk as a form of expression.

Her first bilateral drawing, shown in Fig. 1, focused on opposing cognitions “I look good” on the left and “I am fat and want to hide” on the right. Elinore had little to say about the exercise and I was not sure what, if any, impact it might have had, but I decided to persist with the technique at least for the short term.

Elinore’s second bilateral art drawing, done three sessions later and shown in Fig. 2, illustrates the in-
ternal tension between her need for self-care on the left and the needs of others on the right. This time Elinore was quite engaged in the process and seemed quite pleased with her images. She still complained of fatigue but was more kempt than in previous weeks.

A week later, Elinore produced the bilateral art shown in Fig. 3. The left hand image was in response to “trying to measure up to the standards of others” and the opposing right hand image reflects “setting my own standards.” This week Elinore reported having joined the gym and working out. She appeared pleased with her progress and new found energy and was considering returning to work part time.

Several weeks later, Elinore was back at work and her struggle with self-care resurfaced as shown in Fig. 4. The left hand image reflects “it is ok to take care of [my] self” versus the right hand reflection of “I must take care of others and put their needs first.”
Fig. 5. Elinore’s fifth bilateral drawing with left hand image focus on “I am normal” and right hand image focus on “I am defective.”

was a continuing theme in Elinore’s work and she often commented on guilt associated with self-care.

Elinore’s fifth bilateral art drawing, shown in Fig. 5, returned to self-image, the topic of her first drawing, with opposing cognitions “I am normal” on the right and “I am defective” on the left. By this time, I had decided to introduce scaling into the process. On a scale of one to seven, where one means “the statement is not at all true of me,” and seven means “the statement is very true of me,” Elinore assessed herself as a five-six for both cognitions before the bilateral art exercise. Following the exercise, her assessment of the positive cognition, “I am normal” remained the same, however, her assessment of the negative cognition, “I am defective” dropped to a one, “not true at all for me.” Additionally, she reported that “defects are normal human characteristics.”

In this particular session, Elinore deviated from the normal protocol and upon finishing her two drawings, she went back and added the shopping cart to the right hand “I am normal” image. She described herself as “pushing a cart full ... making [her] way to being normal.” She articulated her journey toward accepting herself as normal.

Elinore’s sixth bilateral art drawing, shown in Fig. 6, reflects opposing cognitions “I need to be perfect” on the left and “I am beautiful the way I am.” Elinore seemed pleased with her progress. She described wild things as beautiful, delicate, startling, brightly colored, not manicured. She was talking about herself. She was now back at work part-time, she continued her self-care regimen including exercise, and yoga, and she presented kempt, smiling, and with a sense of humor in therapy.

Our next bilateral art session was several months later. At this time, Elinore reported getting her “flow” back. She commented that she “was shut down for so long and was opening up again and felt like a different person,” “it was like being in a desert.” She was working seriously at her business once again. New to our sessions was her acknowledgement of anger toward her family of origin. Elinore’s seventh bilateral art drawing, shown in Fig. 7, and our subsequent discussion yielded an outcome that I had not intended and served to remind me of the importance of the determination of the initial cognitions. I include it to demonstrate a failure of the technique, although it may not have been a therapeutic failure. The opposing cognitions were “I had a happy childhood” on the left and “I didn’t get what I needed” on the right. As we discussed the image on the left (drawn first) it became clear that the fantasy world that Elinore depicted in this drawing was a manifestation of her taking care of herself as a child and thus supportive of the opposing cognition “I didn’t get what I needed” rather than “I had a happy childhood.” The mistake here was in not ensuring a true polarity in the cognitions. Elinore and I discussed the results and we both agreed with the above explanation.

Elinore’s eighth bilateral art drawing, shown in Fig. 8, reflects images of Elinore as a young child on
Fig. 6. Elinore’s sixth bilateral art with left hand focus on “I need to be perfect” and right hand image focus on “I am beautiful the way I am.”

the left and Elinore as a mature woman on the right. She described her little girl self as “grubby, dragging myself home from school” with all the other little girls with their “perfect pigtails, and even hair cuts, I saw them getting love and recognition that I didn’t get.” On the right hand side, Elinore saw herself as youthful, and desirable and commented that “others look old, they look nice but I look younger.” Elinore

Fig. 7. Elinore’s seventh bilateral art with left hand image focus on happy childhood and right hand image focus on not getting what she needed. This drawing failed to produce any apparent integration.
Elinore’s eighth bilateral art drawing with left hand image focus on little Elinore and right hand focus on adult Elinore. Elinore wanted to focus on guilt in her last bilateral art drawing, shown in Fig. 9. The left image reflects the cognition “I feel guilty for taking care of myself” and the right image reflects the cognition “It is good to take of myself.” Before we began these drawings, Elinore expressed her opinion on the process for the first time. She commented “these exercises demand that I take hold of a little bit of reason and today is like . . . I am so unreasonable and prickly . . . it’s like you kind of have to deal with the part that hurts the most . . . and I don’t want to be reasonable.” We scaled her belief in the cognitions and it became clear what was causing her distress—guilt over not visiting her parents over the recent holiday. On a scale of one...

Fig. 8. Elinore’s eighth bilateral art drawing with left hand image focus on little Elinore and right hand focus on adult Elinore.

Fig. 9. Elinore’s ninth bilateral art drawing with left hand focus on guilt associated with self-care and right hand focus on guilt-free self-care.
to seven her feeling of guilt for taking care of herself was an eight and she was not willing to place it within the scale. Her belief that it was good to take care of herself was a five. Upon completion of the bilateral art exercise, the eight dropped to a six and the second scale remain unchanged at five. It appeared that the issue of guilt had not been fully addressed or resolved at that point although her symptoms of depression had all but disappeared.

Elinore was nearing the end of her treatment and the Mind over Mood Depression Inventory (Greenberger & Padesky, 1995) yielded a score of 15 markedly reduced from the score of 51 at the beginning of treatment.

Discussion

This paper presents a case study demonstrating the use of bilateral art with a client who presented with significant depression. Upon beginning treatment, the client’s score on a Mind over Mood Depression Inventory (Greenberger & Padesky, 1995) was 51 out of a maximum score of 75.

Several themes manifested themselves through the client’s art including problems with self-image and self-acceptance, the tension between her needs and the needs of others, and the guilt associated with taking care of herself versus taking care of others. Additionally, she showed an increasing awareness of problems associated with her family of origin.

Over the nine months that I worked with this client, she progressed in her ability to articulate her internal struggle and initiated self-care activities in the form of exercise and yoga as well as therapy. She no longer felt guilty about these activities. A Mind over Mood Depression Inventory (Greenberger & Padesky, 1995) administered following her nine months of treatment that included the use of bilateral art yielded a markedly reduced score of 15.

This case study represents a first step toward an effort to explore the effectiveness of bilateral art as a therapeutic tool. While bilateral art did not represent the totality of Elinore’s treatment, it was, aside from the therapeutic relationship, the primary therapeutic tool. I believe that the use of bilateral art facilitated therapeutic change for this client. It is not possible to infer from the case study if the bilateral art protocol actually engages specialized right brain and left brain neuronal structures, nor is it possible to know if integration and rebalancing across hemispheres is occurring. Neither will any future effectiveness studies be sufficient to make these claims. Nevertheless, the bilateral art protocol succeeded in evoking new insights and the client experienced positive benefits. For now, assessing effectiveness must stand on its own merit. Hopefully, the rapid pace of research in neuroscience will provide new tools for examining relationships among biological processes, family systems, and art therapy. Similarly, it is not possible to infer from the case study that bilateral art resulted in Elinore’s increasing differentiation from her family of origin. It is only possible to observe that it occurred.

This case study provides what this author believes to be the first documented use of Cartwright’s (1999) bilateral art protocol. Future efforts to study the effectiveness of bilateral art will require a larger clinical population than the single case study provided in this paper. Several additional areas also beg exploration. One is an exploration of the integration of bilateral art into protocols for cognitive behavior therapy. It is possible that bilateral art could provide an effective experiential adjunct to cognitive behavior therapy’s cognitive restructuring process. Additionally, it would be interesting to explore the use of the bilateral art process on single targets or cognitions, rather than on the dual polarized cognitions as described by Cartwright (1999) and this paper.

References


