

A Biopsychosocial Approach to Creative Dissociation: Remarks on a Case of Mediumistic Painting

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ABSTRACT

A category of religious experience that still preserves much of the original blurring and fusion between art and religion is mediumistic or spirit painting. Performed by spiritualist mediums in different locations around the world, this form of religious experience is characterized by the supposed ability of an individual to serve as an instrument for deceased artists to continue to perform their works. Little scientific research has been conducted concerning this topic. We present a brief analysis of painting activity performed by Jacques Andrade, a Brazilian medium. Born in 1945, Andrade, who has been active in the Brazilian Kardecist movement for many years, has dedicated most of his religious life to mediumistic painting at his center (The Leonardo da Vinci Salon of Mediumistic Art). Data about the medium were collected on several different occasions, from 1998 to 2013, and include psychophysiological measures (hand temperature, heart rate, bilateral skin conductance, muscle tension, and electrical brain activity), psychological measures (Dissociative Experiences Scale, Tellegen Absorption Scale, Revised Transliminality Scale, and Childhood Trauma Questionnaire), artistic material, observational data (photographs of paintings, observations of the medium in action), and some basic socio-demographic and biographical information. Basically we sought to evaluate: a) general aspects of the painting technique and style employed by the medium, b) the main features of his pictorial production, and c) the general behavior shown by the medium during the mediumistic activity. In an effort to combine and integrate our findings about this case, we propose a biopsychosocial approach to the study of what might be called creative dissociation.

Key Words: dissociation, creativity, religious experience, imaginative involvement, mediumship, mediumistic painting

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Introduction

Today artistic manifestations are rarely regarded as resulting from inspiration mediated

by divinities or discarnate entities. The tendency to connect artistic creativity, dissociative states, and various forms of religious experience, however, is quite old, already discernible in rock paintings. Researchers argue that these paintings reproduced more than simple everyday situations and such preoccupations as hunting and gathering. They also represented dream content and hallucinations as experienced during rituals (Chippindale, Smith, & Taçoi, 2000; Lewis-Williams, 1987). Shamans, humanity's first healers (Krippner, 2007),

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included music and dance elements in their magic-religious performances (Krippner, 2000; Winkelman, 2010). One must acknowledge that, especially in more remote times, there was not a clear distinction between art and religion. The various forms of such experiences were joined, and the separation that was subsequently observed between rational and aesthetic categories was not yet present. The element that most often unified such fields was myth (Campbell & Moyers, 1991). In many ancient rituals, there was a fusion of elements that today make up the universe of both religion and art. One can even say that the study of myths is valuable for understanding the nature of both art and religion, because myth represents a fusion of these two forms of human expression (Harner, 2013).

As stated by Berlyne (1980, p. 328): “What Westerners recognize as artistic productions of another culture, are often representations of magic-religious rituals or objects created for use in these rituals.” Oesterreich (1930, p. 3) observed that, “in ancient, as also sometimes in later times, it was customary to class as possession other states of enthusiasm or inspiration.” About the intricate crossings between art and religion, Arnheim (1987) defended the aesthetic experience as important to the objectification of religious experience, in that, for the faithful, it translated their faith into tangible, material terms. But this connection, noted by many researchers, between art and religious experience, is not only a relic of the past; rather, it seems to remain, in a sense, to the present day. One example is the use of recurring dance and music in various religious rituals such as the *giras* in Umbanda, a mediumistic Brazilian religion (Zangari, 2003). Hastings (1991) enumerated many cases in which there was a connection between *channeling*² and creativity, even outside religious contexts or without the presumption of mediumship – although such productions had a profoundly spiritual character. The neurologist Oliver Sacks (2007) reports the interesting case of a patient who, after being struck by lightning, developed a strange attraction to music; at the same time, he began to gravitate toward paranormal beliefs and

experiences such as reincarnation and visions of auras. In her fundamental work on automatic writing, Anita Muhl (1930) described many instances of spontaneous artistic productions made by psychiatric patients in the form of poems, proses and drawings, with which she was able to investigate their psychodynamics and unconscious motivations. Some of her patients’ materials were interpreted by themselves as mediumistic productions.

In order to encompass the underlying relationship between apparently unrelated experiences such as inspiration, mediumship, and surrealism, Michael Grosso (1997) developed the concept of “creative dissociation.” In his own words, “creative dissociation represents the mind’s evolved ability to escape, transform, and possibly transcend the limitations of ordinary reality” (p. 195). For Grosso, “a medium is anybody with a facility for communicating with unconscious sources during dissociation... I use the word *creative* because some mediums reportedly produce artistic works of quality” (p. 186). In fact, throughout the history of mediumship many mediums manifested talents that seemed to surpass their own expected abilities, like Hélène Smith (Flournoy, 1900), Pearl Curran (Prince, 1927), and Augustin Lesage (Victor, 1970). Even beyond direct mediumship research, other interesting studies have also described a significant and positive correlation between dissociation and artistic creativity (e.g., Domino, Short, Evans, & Romano, 2002; Pérez-Fabello & Campos, 2011), which seems to confirm Grosso’s idea of a relationship between these two constructs.

Braude (2002, p. 6) has defended that “dissociation can be a profoundly creative – indeed, continually creative activity”, and he outlined many situations in which dissociation is used as a creative coping strategy against suffering and trauma (e.g., DID), but also in other non-pathological activities, as seen in certain creative hypnotic responses or behaviors and in cases of spontaneous emergence of latent abilities (e.g. Pearl Curran). Thus, the concept of what we might call “creative dissociation” (i.e., dissociation specifically related to creative and artistic elaborations) could illuminate the etiology of normal and pathological dissociative processes (Alvarado, 2005). Pathological dissociation is frequently linked to childhood trauma, although there is some debate around the plausibility of the trauma model (Dalenberg

² According to Hastings (1991, p. 4), “Channeling refers to a process in which a person transmits information or artistic expression that he or she receives mentally or physically and which appears to come from a personality source outside the conscious mind. The message is directed toward an audience and is purposeful”.



et al., 2012; Merckelbach & Muris, 2001). But socio-cultural variables tend to play an important role in the differentiation between pathological and non-pathological dissociation. Psychological processes can have both adaptive and maladaptive aspects, the same as trauma producing both posttraumatic symptoms and growth. As Grosso said (1997, p. 182), dissociative phenomena are culture-bound: “what looks like fragmentation or disconnectedness may in fact be a prelude to greater wholeness or higher integration... Creative dissociation is paradoxical because it is destructive and reconstructive at the same time.” Indeed, “according to some philosophical and religious stances [e.g., Buddhism], to be human IS to live in a dissociated condition” (Cardeña, 1997, p. 61). In this sense, we have to consider a more complex relationship between dissociation and psychopathology, and be sensitive to the socio-cultural, artistic and religious variability of its expressions. As Krippner (1997, p. 6) adequately remarked:

Westerners are prone to take terms with which they are familiar and superimpose them on phenomena in other cultures with which they are unfamiliar. Like other hypothetical constructs in the social sciences, “dissociation” is an attempt by a social group to describe, explain or otherwise account for the world in which they live... So-called “dissociative” phenomena have been given varied labels and interpretations in different eras and locations, as well as in diverse historically and geographically situated interchanges among people. An understanding of this situation should prevent the reification of such expressions as “dissociation” and “dissociative disorders”, and the uncritical acceptance of the Western constructions of these phenomena.

For our purposes here, and considering the complexity involved in the conceptualization of dissociation, we can describe the term “dissociative” simply as:

...an English-language adjective that attempts to describe reported experiences and observed behaviors that seem to exist apart from, or appear to have been disconnected from, the mainstream, or flow, of one’s conscious awareness, behavioral repertoire, and/or self-identity. Dissociation is a noun used to describe a person’s involvement in these reported dissociative experiences or observed dissociative behaviors. (p.8)

A category of religious experience that still preserves much of the original blurring and

fusion between art and religion, and is also representative of creative dissociation, is mediumistic or spirit painting. Practiced by spiritualist mediums in different places around the world, including internationally renowned mediums such as the Brazilians Luiz Antonio Gasparetto (Gasparetto, 2009; 2013a; 2013b) and Florencio Anton (Anton, 2009a; 2009b; 2009c; 2013), this form of religious experience is characterized by the supposed ability of an individual to serve as an instrument for deceased artists to continue to produce their works of art. The justifications raised for such a return of illustrious or unknown painters are varied; they are often based on the belief that the artists are trying to demonstrate their survival after death, thus leaving a message of hope and consolation to those who still inhabit this world. Like automatic writing, mediumistic paintings try to reproduce the same style employed by the deceased painters, in order to allow their identity to be verified *post mortem*. In some cases, like that of H  l  ne Smith (Flournoy, 1900), these paintings seem to have the additional function of representing, in concrete terms, the alleged spiritual world of one’s visions and mediumistic experiences. There are also cases in which the supposed artistic relationship between the dead and the living are expressed in more abstract and nonfigurative forms (Th  voz, 1990).

Before expanding our discussion of Brazilian phenomena, it is important to observe that, in the United States, the 19th century interest in mediums was dubbed “spiritualism.” However, similar activities had been transpiring in Brazil since the days of slavery; Candombl  , Tambour de Mina, and other Afro-Brazilian religions cultivated contact with alleged spirits, and we are using the word “spiritistic” to refer to these groups as well as to the Spiritist religion that emerged later in the 19th century. It took the name “Spiritist” to distinguish itself from the American movement, especially the Spiritualism Church. However, we will use the term “spiritualist” to refer to people from around the world who engage in behaviors that attempt to interact with “spirits,” whether they are discarnate entities who once lived on Earth or divinities (benevolent, malevolent, or both) who exist on another plane.

Little research has been conducted on the topic of mediumistic paintings. The authors could not locate, despite a detailed search in scientific databases, more than a modicum of



academic literature concerning the subject. This is due, among other reasons, to the fact that mediumship – for example – is a practice of great interest to the Brazilian culture – given the wide proliferation of Spiritistic groups in that country – but is not always cultivated in other contexts, at least with the same frequency (Hess, 1991). For instance, the dissemination of Kardecist Spiritism in Brazil is more significant than in its own country of origin, France, the home of Allan Kardec (1804-1869), whose writings triggered the development of this movement (Lewgoy, 2008). Moreover, unlike the philosophical and scientific doctrine originally promoted by Kardec, the Brazilian version of Spiritism came to acquire a character far more religious as a result of both its initial assimilation by the lower social classes and the established syncretism between Popular Catholicism and spiritistic practices (Stoll, 2002). Therefore, most of the available literature on mediumistic painting in Brazil is religious in nature, produced by the Spiritists themselves, so as to disseminate experience from Spiritist centers or *centros* (Fernandes, 2002; Rufino, 1999), biographies of painters and other mediumistic artists (Brown, 1971; Victor, 1970), or reproductions of works that depict classic philosophical aspects of the relationship between art and Spiritistic practices (Bozzano, 1930/1976; Denis, 1922/1990; Zanola, 1996). Some academic studies were also dedicated to the topic of automatic writing or *psicografia* (Caroli, 2001; 2008) and spirit photography (Andrade, 2008). Only one recent Brazilian study on mediumistic painting with an anthropological approach was found (Oliveira, 2009). However, Lins (1999) has published a comprehensive review on the subject coupled with a preliminary analysis of the productions of the Brazilian medium Jacques Andrade, to whose work we will devote our analysis in this article. We also found French studies (Barrière, 1988; Delacampagne, 1979; Deonna, 1932; Thévoz, 1990) suggesting a relative interest by researchers from the homeland of Kardecist Spiritism. Thévoz (1990) defines mediumistic painting alongside the pictorial productions of psychiatric patients, as well as an example of Art Brut, understood as productions free of formal influence or imposition of styles.

The scientific study of mediumistic painting, or *psicopictografia*, may be important in several respects. Regarding the arts, for

example (either the arts in general or, more particularly, specific fields of study such as the psychology of art), an understanding of these experiences might help to elucidate the boundaries between art and other cultural practices, including religious or so-called “paranormal” activities. It is worth recalling, in this regard, that the available evidence for which categories of phenomena should be termed “paranormal” is still cause for heated debate; a broader and more detailed discussion about this can be found in Maraldi (2011). For now, we limit ourselves to designating them simply as allegations of peculiar experiences that seem to contradict some established scientific principles (whether physical, biological, or psychological), and that may perhaps demand, in order to be accepted, a review of the principles and theories that they challenge or propose to expand. In general, claims of alleged paranormal experiences involve assigning magical or transcendental properties to objects or living things (Zusne & Jones, 1989). Psychologists who are dedicated to the study of these beliefs and experiences often include in this description terms such as 'telepathy,' 'precognition,' and 'mediumship,' among others.

During our discussion, some important questions will be raised, such as the following: How might the phenomenon of mediumistic painting help us understand the process of artistic inspiration and, consequently, the psychological condition of artists during their activity? In fact, we know of cases in which automatic productions similar to those of Spiritist mediums were elaborated by artists, although without the presumption of mediumship – such as Joan Miró (1893-1983) and other surrealists as Andre Masson (1896-1987), who even equated his productions with that of mediums. There are also cases in which academic artists have also mentioned mediumistic experiences in relation to their artworks, such as Ernest Josephson (1851-1906). How might public perception, including that of spiritualists and society in general, determine the recognition of an aesthetic work as an art object or as a “demonstration” of the paranormal? These are just some of the many issues that a study like this could raise, although it is not our intention to cover them all in this paper. The issues listed above are perhaps of a greater relevance to the arts than to a proper investigation of the existence of

paranormal phenomena or processes behind mediumistic painting – even though a paranormal explanation should not be completely ruled out prior to the emergence of new data. That is why formal aspects of the composition of the paintings will be considered in our analysis, but only as they contribute to the biopsychosocial reading we intend to carry out.

While it has previously been mentioned that the verification of possible paranormal processes are not the main objective of this work, it is important to explain some of the reasons why we consider an analysis exclusively focused on this aspect not to be helpful in the elucidation of the phenomenon of mediumistic painting. If the proposal is to advocate a biopsychosocial perspective on these experiences, rather than an exclusively 'parapsychological' or 'spiritual' one, then it might be important to clarify the steps that led to this choice. That is, the phenomenological and psychosocial perspectives could be complemented by an ontological perspective (Zangari, 2003). It is not our intention; however, to go into metaphysical speculations or to take a philosophical or religious position regarding the reality of spirits, but simply to verify, according to scientific arguments, whether mediumistic painting manifestations could involve the occurrence of events or processes that might be considered anomalous. At the same time, we do not expect to perform an exhaustive analysis even in this respect, but only to make a comprehensive evaluation of the topic, as it presents itself. This is merely an overview, seeking to highlight reflections and suggestions, including precautions to be taken in future research. We will take as an example the work of a Brazilian painter medium from the city of Pernambuco, José Jacques Andrade.

Materials and Methods

Born in 1945, Andrade has been active in the Brazilian Kardecist movement for many years; indeed, he has dedicated most of his religious life to painting in his center (The Leonardo da Vinci Salon of Mediumistic Art). The material discussed here was collected on several different occasions:

- 1) During visits to his center in the 1990s, Krippner observed a ceremony that culminated with Andrade “incorporating” many famous artists (*e.g.*, Monet, Da Vinci, Cézanne). In preparation for this

occurrence, Andrade and his group sang several hymns and prayed. Once the ostensible spirits had been “called,” Andrade dipped both his hands into jars of paint and, with two canvasses in front of him, swiftly began painting landscapes, still lifes, and portraits, two at a time. Krippner’s visits were sponsored by the Institute of Noetic Sciences as educational tours for its members and included stops at various other Brazilian centers of spiritual activity.

- 2) During a parapsychological conference in Recife (Brazil) in 1999, Krippner and his associates obtained psychophysiological data from Andrade and other participants, gathering polygraph data in a Recife hotel room (this location was considered adequate for physiological measurement in terms of privacy, temperature control, standard room lightning, and comfortable seating). Participants also responded to psychological scales on dissociation and absorption. Obtained consent had been secured through the Saybrook Institutional Review Board. For brevity’s sake, it is important to mention that these findings have been partially published elsewhere (Hageman *et al.*, 2010; Hageman, Wickramasekera & Krippner, 2011), so will not be discussed in detail here. Another paper including a full description of the psychophysiological data is also under review.
- 3) While attending to the 5th Psi Meeting (an international parapsychological event conducted in Brazil in 2009, in the city of Pernambuco), Maraldi obtained photos of the mediumistic performances as well as of the paintings made during Andrade’s presentation. He also collected basic demographical and biographical information about the medium in a brief interview and, later, through e-mail.
- 4) In the beginning of 2013, Maraldi invited Andrade to participate in an internet survey that was part of a study investigating dissociative experiences and related variables among Brazilian respondents. On this occasion, it was possible to collect additional data regarding childhood traumatic experiences and transliminality. The same instrument used to measure dissociation



was again applied to verify if there was any significant difference from the score achieved in 1999. Informed consent was obtained from Andrade as part of the online questionnaire. The study was approved by the Institute of Psychology of the University of São Paulo Research Ethics Committee.

In this paper, we intend to focus on the findings of the third and fourth occasions, although the other findings were equally important in the construction of our biopsychosocial model.

Measures

A Brazilian version of the Dissociative Experiences Scale (DES) was used in this study. The translation and adaptation was done by Fiszman, Cabizuca, Lanfredi and Figueira (2004). The instrument, which consists of 28 items, serves as a screening tool for clinical and nonclinical populations to assess the intensity and frequency of dissociation, but is not recommended for diagnostic purposes (Carlson & Putnam, 1993). In the original instrument, the answers are given on a percentage scale ranging from 0 to 100. In the Brazilian version, however, the authors opted to replace the percentage system because of the difficulty respondents had with that response model. Thus, it used the same response model as in the adolescent version of the DES (Smith & Carlson, 1996), which is more subjective and the responses on which vary only from 0 to 10. No significant changes were observed, however, in the overall scores, and the operational equivalence of the instrument was preserved (Fiszman, Cabizuca, Lanfredi, & Figueira, 2004). A total score of 30 or above is suggestive of a dissociative disorder or a strong tendency to dissociate (Carlson & Putnam, 1993). There is evidence suggesting the cut-off score of 30 as useful to identify cases of dissociative pathology, post-traumatic stress disorder, and psychogenic non-epileptic seizure disorder in Brazilian samples (Faria, 2008; Fiszman, Cabizuca, Lanfredi, & Figueira, 2004; Negro, Palladino-Negro & Louzã, 2002; Proença, 2004). The Brazilian DES also showed convergent validity with measures of childhood trauma and psychological distress, especially those items tapping the more pathological dissociative experiences (Domingues Goi, 2012; Negro, Palladino-Negro & Louzã, 2002). In turn, DES scores diminished in response to

cognitive behavioral therapy and pharmacological treatments of post-traumatic stress disorder (Lages *et al.*, 2011; Lima *et al.*, 2007). However, in this study, we did not use the threshold score for diagnostic purposes, but only as an auxiliary procedure to differentiate high or low dissociative tendencies – in accordance with the recommendation by Carlson and Putnam (1993). Still, we thought that it would be useful to evaluate the presence of pathological dissociative symptoms, even without prescribing any diagnose. A subset of 8 items (3, 5, 7, 8, 12, 13, 22, and 27) forms the Dissociative Experiences Taxon (DES-T), which is considered to be sensitive to pathological dissociation (Waller, Carlson, & Putnam, 1996). A procedure to derive Bayesian taxon membership probabilities from the DES-T items was proposed by Waller, Carlson, and Putnam (1996) – see also Waller & Ross (1997). DES-T scores were associated with more antecedents of psychological distress, poorer control of mediumship behavior, and poorer social support in a sample of Brazilian Spiritist mediums (Negro, Palladino-Negro & Louzã, 2002).

The Tellegen Absorption Scale (TAS) is intended to measure an individual's capacity for experiences that involve both the narrowing and broadening of attentional focus (Tellegen & Atkinson, 1974). These attentional states are characterized by a significant restructuring of one's phenomenal self and worldview. Roche and McConkey (1990) term *absorption* as the capacity to experience alterations of cognition and emotion over a broad range of situational experiences. Fantasy-prone individuals seem to report many absorption experiences (Wilson & Barber, 1983), and absorption correlates highly with fantasy proneness (Rhue & Lynn, 1989). Fantasy proneness is also known to be an important correlate of dissociation (Lynn, Pintar, & Rhue, 1997). The TAS consists of 34 true or false response items; administration time is approximately 10 minutes. A Portuguese translation of the TAS was employed in this study.

The Childhood Trauma Questionnaire (CTQ) consists of 28 questions related to various traumatic experiences, comprising five subscales: physical abuse, emotional abuse, sexual abuse, physical neglect, and emotional neglect. Besides these five components, the questionnaire includes a minimization/denial subscale. The CTQ is an instrument easily



applicable both to adolescents (from 12 years of age) and adults. Each item is ranked according to a five-point Likert scale, and the test is self-administered. The CTQ is also sensitive to the frequency, severity, and duration of abuse (Bernstein & Fink, 1998; Bernstein *et al.*, 2003). The results may indicate a history of traumatic experiences ranked 1) none or minimal, 2) low to moderate, 3) moderate to severe, and 4) severe to extreme. Each one of these criteria involves different cut-off scores (Bernstein & Fink, 1998). Studies have been conducted to translate and validate the instrument for the Brazilian population (Brodski, Zanon, & Rutz, 2010; Seganfredo *et al.*, 2009).

The Revised Transliminality Scale (RTS) measures *transliminality*, “a hypothesized tendency for psychological material to cross thresholds into or out of consciousness” (Lange, Thalbourne, Houran, & Storm, 2000, p. 594). The concept of transliminality involves such experiences as hyperesthesia, fantasy proneness, tendency to interpret dreams, absorption with nature, mystical experiences, magical thinking, paranormal beliefs and experiences, and manic ideation. The scale has demonstrated clinical relevance, presenting positive and significant correlations with such variables as dissociation (Thalbourne, 1998), schizotypy (Dagnall *et al.*, 2010), propensity to have hallucinations (Thalbourne, 1998), creative personality (Thalbourne, 2000), and reports of childhood traumatic experiences (Thalbourne, Houran, & Crawley, 2003). The original transliminality scale comprises 29 items, but Lange, Thalbourne, Houran and Storm (2000) demonstrated that 12 of these items are biased (or reflect, “cause bias”) for gender and/or age, that the remaining 17 are unidimensional, and that a Rasch model would fit those items. Although only the 17 items of the revised version are scored, all 29 items are nevertheless presented to respondents, for the sake of context. The translation into Portuguese followed a “forward-backward” process undertaken by the members of the Inter Psi Laboratory of Anomalistic Psychology and Psychosocial Processes, São Paulo, Brazil (Zangari *et al.*, in press) and is now undergoing validation. All the process of translation and back-translation was conducted and assisted by psychologists and professional translators. The back-translated version of the instrument was reviewed and approved by one of the authors

who validated the revised transliminality scale (Rense Lange).

Since part of the psychological battery used in this study did not receive proper psychometric validation for the Brazilian population (TAS and RTS), the results must be considered as exploratory and/or suggestive of possible trends to be confirmed in future investigations.

Psychophysiological data from Andrade were obtained with a portable computerized polygraph from Thought Technology™. The psychophysiological equipment that was used measures hand temperature, heart rate, bilateral skin conductance, muscle tension (electromyography or EMG), and electrical brain activity (electroencephalography or EEG). It records responses from both the peripheral nervous system (PNS) and the central nervous system (CNS). The electromyography (EMG) measured electrical activity within the frontalis and trapezius muscles. Optimal muscle tension was designated as 3.1 microvolts. Bilateral hand temperature measured relaxation or tension. Optimal temperature was designated within a range of 92°–96°Fahrenheit (F)³. Heart rate measured cardiac activity. Optimal rate was designated within a range of 59–91 BPM. Electrodermal activity (EDA) measured changes in the bilateral skin's electrical conductivity. Optimal conductance was designated as 44 micro-siemens. The EEG was used for spectral analysis.

Andrade's psychophysiology was measured under two baseline resting conditions (eyes open; eyes closed). His psychophysiology was then measured while he was performing intense imaginative work (*e.g.*, “incorporating” a celebrated artist from the “spirit world”)⁴, and again during the return to the baseline conditions (eyes open; eyes closed). Each condition lasted for four minutes. Although there is no consensus or established rules for time duration of research sessions for physiological measurement and some researchers may elect to test for longer than 4 minutes, physiological reactivity may be

³ Although hand temperature was originally measured in degree Fahrenheit (F), we have converted Fahrenheit to Celsius in the presentation of the results, because F is not a SI unit.

⁴ Because data can be distorted by bodily movement, Andrade was instructed to imagine incorporating a spirit rather than to engage in direct incorporation. This method was guided by previous research that has suggested that imagery rehearsal activates virtually the same brain centers involved in actual performance (Feltz & Landers, 1983).



measured accurately in 4-minute sessions because the sympathetic or parasympathetic nervous system response can occur rapidly (*e.g.*, one second).

The recommended procedures for the placement of the electrodermal measurements and for EEG measurement were administered (Fowles *et al.*, 1981; Pivik *et al.*, 1993). The recording system by Thought Technology was used for data collecting, and related software was employed for data editing and analysis. The EMG, EEG, hand temperatures, pulse rate, and skin conductance signals were processed using the corresponding modules. The raw EEG records were inspected and any epochs containing eye movement or other artifacts were removed. Each of the physiological measures was computed for the averaged score for 4-minute sessions.

Our inquiry consists in a single-case study embedded design. Thus, the data were not based upon an experimental design requiring a control group, randomness, large sample size, or many repeated measures over a series of multiple sessions. The embedded single-case study design is an empirical form of methodology that allows for:

(a) a small sample size and/or sample selection based upon specific criteria (*e.g.*, a medium using a specific technique);

(b) few testing sessions that collect data under multiple conditions (*e.g.*, eyes open and eyes closed conditions for serial testing of psychophysiological measures, in addition to psychological measures, behavioral observations and analysis of artistic material);

(c) lack of randomness (*e.g.*, medium's personality traits or mediumistic skills were not known to the researchers prior to testing); and,

(d) multiple sources of data that may be used in triangulation to describe features, context, and the process of a phenomenon (*e.g.*, medium's psychological data and artistic productions; other data sets; other related research). All together, these facets contribute to the validity of the research analyses.

Results

Psychological measures

In the first data collection (1999), Andrade obtained a score of 72 on the Dissociative Experiences Scale. On the second occasion (2013), however, Andrade's score was 62.14 (see

Table 3). Many factors could be involved in the decrease in his DES score. In many studies, dissociation has shown a negative correlation with age (*e.g.*, Putnam, Helmers, & Trickett, 1993). Andrade was 53 years old in 1999, and was 67 years old at the time of the second test administration – see Table 4. However, the correlation with age found in the mentioned investigations is based on studies across decades, not within a few years. Explanations in terms of response bias or measure error are possible (*e.g.*, regression to the mean). There are no reasons to suppose that there was any significant problem with the filling out of the scales in both occasions. Although Andrade did not complete his studies, he is literate and knows how to adequately use the internet, having responded many of our e-mails. The researchers were also constantly available to clarify any doubts he could have, and his understanding of the DES questions was confirmed through interview. Andrade informed Maraldi in the beginning of 2013 that he continues to participate as a medium at the Kardec temple, and there is no reason to suppose that his interest and dedication have decreased in some way (he visits the Spiritist center three times a week, and continues to do mediumistic paintings). At the 5th Psi Meeting in 2009, when we collected photos of his presentation, his productions were no better or worse than those produced years before, and his performance maintained quite the same characteristics. In any case, both his former and current DES scores put him in the “highly dissociative” category.

Following the factor analysis conducted by Carlson *et al.* (1991), we investigated if there was any difference in the mean scores regarding different types of dissociative experiences. As expected, we found that depersonalization/derealization experiences obtained the highest mean (see Table 1). Amnesia and absorption, on the other hand, earned similar means. Depersonalization and derealization involve experiences of detachment from oneself and others (*e.g.*, out-of-body experiences), including alterations in the perception of the surrounding environment. Examples of such items in the Brazilian DES include: “Some people have the experience of feeling that their body does not seem to belong to them. Circle a number to say how often it happens to you” (Andrade scored 10 on this item), and “Some people have the experience of

looking in a mirror and not recognizing themselves. Circle a number etc.” (Andrade scored 9 on this question). These results are consistent with reports of mediumistic experiences, to the extent that Andrade allegedly “incorporates” the spirits and feels inspired and guided by them (i.e., alterations in the sense of self and agency). Andrade is usually not able to fully control his movements or ideas while he is writing or painting (as also

evidenced by an item on the transliminality scale that Andrade scored ‘true’: “My thoughts have sometimes come so quickly that I couldn’t write them all down fast enough”). Another interesting item of the DES that received a score of 10 by Andrade is indicative of his mediumistic painting activity: “Some people sometimes find writings, drawings, or notes among their belongings that they must have done but cannot remember doing.”

TABLE 1. Andrade’s DES Scores (Second Occasion, 2013).

DES-Total	Absorption	Depersonalization	Amnesia	DES-T	DES-T %
62.14	5.33	7.00	5.87	5.75	0.99

DES = Dissociative Experiences Scale, DES-T = Dissociative Experiences Scale Taxon, DES-T % = Dissociative Experiences Scale Taxon Membership Probability

Andrade’s membership probability for the DES-taxon was 0.99, well above the usual threshold scores (cut-offs) of 0.50 or 0.90 (Waller & Ross, 1997; Giesbrecht, Merckelbach, & Geraerts, 2007).

In the same vein, we found that Andrade had elevated scores on all CTQ subscales, which means that he was probably exposed, in his childhood, to many different experiences of trauma (see Table 2), some of them in a severe or extreme form. If his responses were accurate and not just the product of fantasy or confabulation, we could say that this is a case of “pan-trauma” (Bernstein & Fink, 1998). The only subscale that did not reach a moderate to severe classification was physical neglect. More important, the score on the minimization/denial scale did not indicate underreporting of traumatic experiences; which is consistent with the idea that he did not try to minimize or distort his responses in a socially desirable way. Despite the fact that Andrade have filled out the questionnaire with easiness, he seemed not to be very much willing to *talk* about his childhood experiences, and considering that we were not conducting any psychotherapeutic treatment with him, we decided not to move on with further questioning. It is important to mention, however, that violent and authoritarian practices of education in Brazil have a long and insidious history; only recently have they been properly countered. Still today, it is not uncommon to find cases of physical abuse that are relatively sanctioned by local values, based on paternal and male authority over women and children (including the use of force and physical violence), especially in poor rural communities,

but also in other areas (Azevedo & Guerra, 2001). It is possible that Andrade was exposed to some of these circumstances, like many others who live in poverty in Brazil, and this could explain his responses to the CTQ, without a need to resort to explanations in terms of bias or false memories. While it is difficult to say whether his childhood experiences had an impact on his pronounced dissociative tendencies, we can hypothesize, based on Grosso’s speculations (1997), that the religious and artistic activities at the Spiritist center (employing the use of creative dissociation) could have helped Andrade deal with his suffering and, in that way, to “escape, transform, and possibly transcend the limitations of ordinary reality” (p. 195).

TABLE 2. Andrade’s CTQ Scores.

Subscales	Subtotals	Cut Scores	Classification
Emotional Abuse	13	13-15	Moderate to Severe
Physical Abuse	15	≥ 13	Severe to Extreme
Sexual Abuse	8	8-12	Moderate to Severe
Emotional Neglect	18	≥18	Severe to Extreme
Physical Neglect	9	8-9	Low to Moderate
Minimization/Denial	0	≥ 1	Valid Profile

CTQ = Childhood Trauma Questionnaire.

TABLE 3. Scores in Different Measures on First and Second Occasions.

	DES	TAS	RTS
First Occasion (1999)	72	21	-
Second Occasion (2013)	62.14	-	32.5

DES = Dissociative Experiences Scale, TAS = Tellegen Absorption Scale, RTS = Revised Transliminality Scale



In the first data collection (1999), Andrade obtained a score of 21 on the Tellegen Absorption Scale (TAS), which placed him in the “medium absorption category.” He claimed, among other things, that he was moved by songs that he enjoyed, was caught up in the action while watching a movie, and liked to watch clouds take various shapes in the sky. While Andrade’s score on the absorption scale was not as high as Pai Ely’s (another research participant – see Hageman *et al.*, 2010), he does not have to deal as extensively or intimately with clients, and his duties at the Kardec temple are not as demanding as those of Pai Ely, who directs activities at an Afro-Brazilian temple in Recife. Still, when Andrade “incorporates” his artistic predecessors from the “spirit world,” he often becomes so absorbed in the task that he claims not to recall the details when the supposed discarnate entities leave the scene (although he said to Maraldi that he remains in a conscious/waking state during the mediumistic activity).

Andrade obtained a score of 32.5 in the Revised Transliminality Scale. According to Thalbourne, Houran, & Crawley (2003), the Rasch mean is set to 25, with a standard deviation of 5 and a range of 13.7 to 37.3. Samples of undergraduate students from England and Australia showed the following RTS means: 20.96 (SD = 4.88), 22.36 (SD = 4.74), and 24.2 (SD = 4.1) (Thalbourne & Maltby, 2008; Thalbourne, Houran, & Crawley, 2003; Thalbourne, Crawley, & Houran, 2003, respectively). Andrade's score is significantly above the expected mean and standard deviations for the Rasch measure, a finding that may indicate a high transliminal mind, i.e., a mind that frequently experiences psychical, mystical, and creative eruptions into consciousness of preconscious and unconscious material (Thalbourne, 2000). This is consistent with the view that “a medium is anybody with a facility for communicating with unconscious sources during dissociation” (Grosso, 1997, p. 186). Although we computed only the 17 items on the revised version (following instructions from Lange, Thalbourne, Houran, and Storm, 2000), we also conducted an individual analysis of each of the 29 items. Some interesting items scored as “true” by Andrade included: sense of presence (“I have sometimes sensed an evil presence around me, although I could not see it,” “At times I somehow feel the presence of someone who is not physically there”), fantasy

proneness (“If I could not pretend or make-believe anymore, I wouldn’t be me – I wouldn’t be the same person”), absorption in nature and in art (“It is sometimes possible for me to be completely immersed in nature or in art and to feel as if my whole state of consciousness has somehow been temporarily altered,” “When listening to organ music or other powerful music I sometimes feel as if I am being lifted up into the air”), and manic and eccentric tendencies (“I have felt that I had received special wisdom, to be communicated to the rest of humanity,” “Sometimes people think I am a bit weird because my ideas are so novel”). Interestingly, Andrade did not respond to the item “I am convinced that I am psychic.” In the Portuguese translation, we used the word “paranormal” instead of “psychic,” because the latter is unusual in Brazil. Yet Andrade was perhaps confused by this question and did not recognize the meaning of the word *paranormal*. Another possibility is that he simply chose not to state that he is paranormal, considering that this sentence could be interpreted in ways that would not involve mediumship but only psi phenomena, for instance.

Andrade’s social profile (Table 4) reveals a 67-year-old man, single, of low social income, retired, who attended only elementary school. Andrade lives alone (his mother died shortly before the latest round of work with him commenced). As we will see in the discussion of the results, these characteristics were of great importance to our analysis. Besides his poor social conditions, Andrade was a victim of significant social discrimination due to his auditory impairment. It seems that these experiences have contributed to feelings of low self-esteem that apparently played an important role in the development of his mediumistic manifestations and interest in art (see Figure 8).

TABLE 4. Andrade’s Social Profile

Age	Marital Status	Socioeconomic Status	Educational Level	Current Profession or Occupation
67	Single	Low Social Class	Elementary School	Retired

Psychophysiological measures

In general, the psychophysiological data obtained from Andrade on the first occasion (see also Hageman *et al.*, 2010, and Hageman, Wickramasekera & Krippner, 2011) revealed several incongruent findings: 1) there was a



general reduction in skin conductance level across conditions. Since skin conduction is a measure of sympathetic activation or withdrawal, it is unusual to find it associated with constriction of the blood vessels and increased muscle tension during the imagination task, typically considered a relaxing condition – instead, both sets of data suggest increased sympathetic activation in these response systems. 2) The increase in muscle tension during the eyes-closed imagination condition and the associated increase in the percentage of alpha brain wave activity during imagination are also paradoxical – these two measures (muscle tension and alpha brain waves) are typically negatively associated, not positively associated. The former indicates tension, and the latter indicates relaxation.

Andrade had approximately a 5 degree Fahrenheit (-15.000° C) discrepancy between his left hand and right hand temperature during the baseline eyes open condition. When Andrade was asked to close his eyes and relax, there was at least a 1 degree drop in temperature in both hands, but the discrepancy between each hand was less (about 4 degrees or -15.556°C). During the imagined fantasy of incorporating an artist session, his left hand dropped an additional degree, but his right hand temperature barely changed. When he relaxed after imagining an incorporation, his bilateral hand temperatures continued to drop an additional degree in both the recovery conditions. 4-degree discrepancy (-15.556°C) existed between both hand temperatures in comparison to the imagining session. Thus, Andrade tested with right hand temperature higher than left hand in all conditions, indicating an IR specificity for the right hand⁵.

Andrade's EMG baseline readings were about 5 microvolts higher than the optimal (3.1 microvolts). When instructed to close his eyes and relax, his EMG increased almost a microvolt, which was contrary to expectations. When instructed to imagine incorporating an artist, his EMG increased an additional 4 microvolts. During the eyes open recovery session, his EMG dropped over 6 microvolts,

but his EMG increased over 2 microvolts during the eyes closed recovery. Again, this result was paradoxical. Andrade's heart rate increased modestly in the baseline eyes closed condition, and in particular during the imagining of incorporation. His heart rate dropped during both recovery sessions with little difference between the eyes open and eyes closed conditions. In general, his heart rate (59–63 bpm) in all conditions was low for a person of his age though he increased his heart rate modestly in the closed conditions. Although the means for skin conductance are not included in detail, paradoxically, Andrade's mean SCL dropped across the entire session independent of other conditions and instructions. Generally, there was a greater sympathetic activation in his left hand than in his right hand.

Andrade's EEG showed an increase in the percentage of theta brain waves from the eyes open to the eyes closed baseline conditions, but a drop in alpha percentage. Paradoxically, the increase in the percentage of alpha was also associated with a sustained increase in beta percentage, even during recovery conditions. As one would expect, during the imagination exercise, there was an increase in the percentage of alpha comparable to the eyes open condition, but, paradoxically, the increase in the percentage of alpha was also associated with a sustained increase in beta percentage, even during recovery conditions.

In short, Andrade demonstrated increased muscle tension and increased hand temperature in the recovery eyes closed session. Andrade increased his heart rate from the baseline eyes open condition to the baseline closed condition, and also from the imagination condition to the recovery eyes open condition. In addition, Andrade increased his heart rate from the recovery eyes open condition to the recovery closed eye condition. In general, his heart rate (59–63 BPM) under all conditions was low for a person of his age although he increased his heart rate modestly in the eyes closed conditions (for a graphical representation of some of the results, see Figures 1-5 in the paper by Hageman, Wickramasekera & Krippner, 2011).

We concluded that there were specific incongruences or “disconnects” in the peripheral (or outer) and central (or inner) physiological response systems. These include deviations during Andrade's imagination condition that were discrepant from what is

⁵ At the time of the study, Andrade alleged no vascular disease that could possibly explain some of the obtained results. In a test of cutaneous thermography with another Brazilian painter medium, Tinoco & Guimarães (2006) verified blood vessel constriction in the medium's right arm, but it was rapidly reversible after the mediumistic activity.



typically seen during an eyes-closed imagination condition. This supports the idea that physiological incongruences and differences are frequent outcomes of testing sessions with people claiming “mediumistic” abilities. Not only are there incongruences between the mediums’ verbal reports and behavioral observations, but also between their psychophysiological response systems as well. People with incongruences between CNS and ANS responses can be described as periodically inhabiting two worlds, one in which they are critical, rational, and practical, and another in which their fantasy and emotional reactivity expand and deepen. As such, they often are “at risk” for somatization, i.e., psychosomatic illnesses (Wickramasekera, 1993). In fact, when Andrade responded to the online questionnaire on the second occasion, he reported some apparent conversion symptoms (such as a DES item tapping analgesia, and also items on a scale on pseudo-neurological symptoms). Nevertheless, since no neurological or medical analysis was actually performed with Andrade, we cannot be sure if the reported symptoms are indicative of a somatoform or psychosomatic condition. Also, it would be useful to administer somatization and depression measures to samples of Brazilian mediums to test these hypotheses and replicate our findings. There remain many aspects of the mind/body relationships that we did not study that we hope will be explored in future investigations.

Incongruences between CNS and ANS response systems are not unusual among spiritual practitioners, according to the “high risk model” (Krippner, Wickramasekera, Tartz, 2000; Wickramasekera, 1993; Wickramasekera I, Krippner, Wickramasekera II, 1997). It is taken for granted that some practitioners, especially self-styled “mediums” and “channelers,” will demonstrate incongruences between their behavioral observations and their verbal reports. For example, they might appear calm and composed, but speak of calamitous events from their clients’ “past lives” or terrifying episodes from the lives of their clients’ deceased relatives. These incongruences between verbal reports / behavioral observations and physiological responses are essential to the discussion concerning dissociative processes, and deserve further investigation.

Limitations of psychological and physiological analysis

Methodological limitations of the psychological and physiological analysis include:

- 1) Problems with the use of DES in non-English speaking populations have been addressed in the literature (Icaran, Colom & Orengo-Garcia, 1996). On the other hand, DES was adequately translated and adapted for Brazilian culture, and the available research suggests that this instrument showed some predictive and convergent validity. Although the DES presented an inverse correlation with intelligence (Fruech *et al.*, 1996) and with cognitive deficits and aging (Walker *et al.*, 1996), there are no reasons to suppose that there was any significant problem with the filling out of the scale in both occasions. Although Andrade did not complete his educational studies, he is literate and knows how to adequately use the internet, having responded many of our e-mails. The researchers were also constantly available to clarify any doubts he could have, and his understanding of the DES questions was confirmed through interview.
- 2) The self-report nature of CTQ makes it more vulnerable to bias, and we cannot ascertain for sure if Andrade’s scores are accurate or just the product of response bias or confabulation. However, the score on the minimization/denial scale did not indicate underreporting of traumatic experiences; which is consistent with the idea that he did not try to minimize or distort his responses in a socially desirable way. There are also culturally-based evidences sustaining the reasonableness of the obtained scores (Azevedo & Guerra, 2001). CTQ is a brief and relatively noninvasive instrument and therefore suitable for administration (Bernstein & Fink, 1998), and was adapted and validated for Brazilian respondents.
- 3) We have to be cautious about psychological research across cultures, since culture-bound beliefs and practices (*e.g.*, idioms of expression) may influence how *individuals from differing cultures* score on dissociation and absorption measures (Cardeña and Krippner, 2010).



For example, a tendency toward hyperbole may be more common among Latin Americans than among Europeans, Canadians, and individuals from the United States, which is congruent with Krippner and Weinhold's (2001) finding that Brazilian dream reports contain high levels of emotional content and Krippner and Faith's (2001) finding that twice as many "exotic" dream reports appear in Brazilian dream reports as compared with dreams from participants in the United States. Dissociation must also be understood through a cultural lens because certain life experiences may be adaptive to life event that are culturally related (Calof, 2002; Krippner, 1997). This highlights some caution in using a strict interpretation of high absorption and high dissociation as risk factors for somatization (e.g., psychosomatic illnesses) for multicultural research.

Now that we have outlined the main features of Andrade's psychological profile, let us pass to a qualitative analysis of his mediumistic paintings.

Analysis of painting technique and style

In the previous discussion, we could see that Andrade frequently reports dissociative, paranormal, and creative experiences that may have an important function in his mediumistic painting activity. Suggestive neurophysiological evidence of dissociated processes was also obtained in his case. However, it is to demonstrate how creative Andrade is, and whether his paintings could indicate a paranormal explanation, as he himself believes. Throughout our discussion, we will try to establish some associations between Andrade's work and the performances of other renowned painter mediums, in the hope that the analysis of his manifestations may also illuminate the reading of similar cases. We have tried to analyze, among other things: a) the general aspects of the painting technique employed by Andrade, b) the main features and style of his pictorial productions, and c) the behaviors displayed by the medium during the activity. The analysis of painting technique and style served here as a qualitative measure of creativity, and also as a qualitative and impressionistic form of analysis concerning possible paranormal processes underlying Andrade's mediumship. Following this script,

we came to a few conclusions about the mediumistic painting activity performed by Andrade:

1) The technique used to elaborate the paintings is, except in a few cases, the same for all 'spiritual' painters

Andrade uses his hands to make the artistic productions. In general, he starts by spreading small amounts of paint on canvas or paper, at specific points, and then moves his hands, with greater or lesser intensity and speed, mixing paints and outlining the contours that result in the final image. The medium denotes an impressive ability with this technique, putting it into action at with extraordinary speed and dexterity. He employs the back of the hand, his fingers, and his wrist to execute the details. During the sessions we observed, Andrade did not employ any other techniques. Lima (1998) mentioned Andrade's preference for using his right hand, although he frequently used both hands⁶.

While these performances are apparently improvised, during sessions open to the public, without the possibility of correction or improvement (which, however, does not completely invalidate a previous workout), they provide little evidence on the painters to whom they are attributed. We know that Dali, Miró, and Picasso drew on many different techniques, including sculptures, ceramics, mural painting, photography, etc. They had preferences, of course, but their art techniques were versatile. However, Andrade uses only his hands, regardless of the supposed disembodied artist's identity. Moreover, Andrade claims not to have taken any sort of painting course prior to the manifestation of his mediumistic experiences⁷.

Such characteristics of mediumistic painting technique tend to render difficult a verification of the authenticity of the alleged spiritual authors, since the procedures used do not provide any indication of specificity or

⁶ Postscript (01/08/2013): recently, we have been informed that Andrade are currently employing the paint-brush instead of his hands, apparently because of skin irritation.

⁷ Postscript (01/08/2013): A Brazilian spiritistic blog has recently published an interview with Andrade in which it was mentioned that in his childhood he took a few classes in a School of Fine Arts. Those classes were said to be a preparation for his future work as a medium. On the other hand, it has to be said that his aspiration for drawing dates back to early childhood (and was first noticed by his mother), many times before he initiated those classes.

particularity that would help in an identification process⁸.

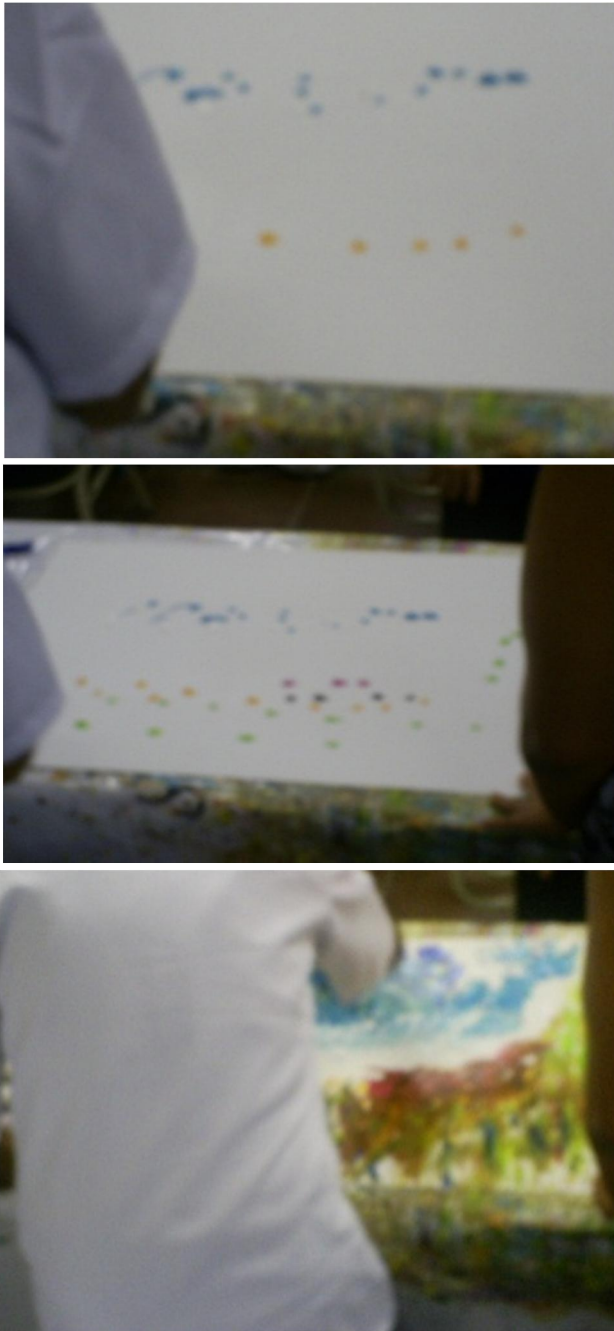


Figure 1, 2 and 3. In this sequence of images, we see how Andrade forms a landscape from small ink dots spread across the paper.

2) Painting themes are always similar (religious, floral, portraits, landscapes, still

life, etc.), and are not always consistent with the themes usually explored by the artists to whom they are attributed. These paintings also manifest an evident lack of depth and symbolic richness that was a hallmark of the works of many artists who allegedly signed such mediumistic productions.

Dalí, as we know, was a surrealist. But we see him painting through Jacques Andrade a simple picture without any significant indication of surrealism. Also well-known in the art world are the surreal paintings of Miró. In Andrade's hands, however, we see him producing a religious painting, with Jesus at the center, devoid of all surreal forms that characterized his previous works. The paintings made by Andrade lack the depth and symbolic richness that were hallmarks of the famous painters to whom they are attributed. In fact, the reproductions are not even close to the actual painters' style. The content of the productions, in most cases, has a merely decorative value, and does not transmit any message, convey significant knowledge or social criticism, or have any function other than to entertain the viewer. These productions are actually as empty in content as suggested by the short time in which they are produced. Regarding the artists who supposedly signed them, these images reveal their most superficial side. In this sense, the apparently impressive finding that nearly 300 different artists were represented in a collection of mediumistic paintings by Andrade (Lima, 1998) is actually not so striking, if we consider that virtually all these productions do not display good evidence of authorship.

One could argue that, since many modern artists have initially come from an academic background, they probably knew how to draw in styles other than their own; moreover, many of them were men of versatile genius. This argument, although reasonable, only reinforces the enormous difficulty in obtaining significant evidence of paranormal processes from mediumistic paintings, since excessive stylistic plurality tends to preclude the development of parameters by which it is possible to make an accurate identification. Others might argue that these authors' originality could not be embedded so unilaterally in an artistic movement. However, even if this is a legitimate argument, it has not been widely observed throughout the history of art (Eco, 1995; Hauser, 2003). In one way or another, critics tend to develop some form of categorization

⁸ Some mediums resort to using their feet, employing only one foot or both alternately – See Anton (2013) and Gasparetto (2013b). However, painting with one's feet does not necessarily offer evidence on the authorship of spiritual paintings. Although it seems to constitute something beyond the normal, giving the impression that a paranormal agent would be behind the performance of the medium, it is a procedure that only emphasizes one's motor skill, not a relationship with any deceased artist. Although difficult and noteworthy, painting with feet can be taught and does not constitute in itself an anomalous or paranormal phenomenon.

that facilitates the location of these artists at a given time and space or conceptual scheme. When used sparingly, this procedure may be useful to delineate more objective parameters without entirely reducing the uniqueness of the artwork.

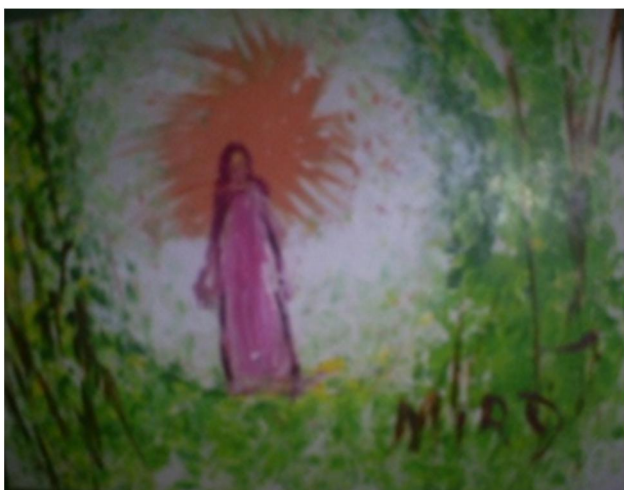
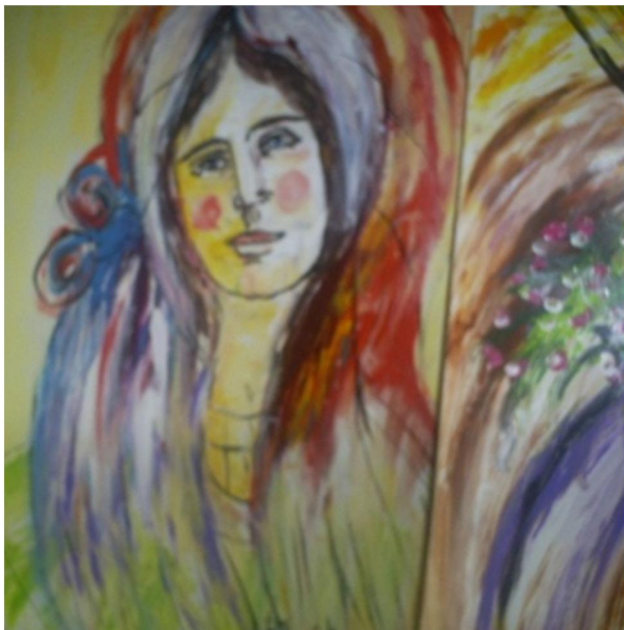


Figure 4 and 5. The picture on the upper is a portrait attributed to Salvador Dalí. The image on the below is assigned to Miró.

The works of Piet Mondrian have an abstractionist conceptual framework, developed by the author in his philosophical and artistic quest for a geometrical synthesis of reality. But in a painting by Andrade, what we find is an overlay of colored geometric shapes (resembling buildings) and a large yellow circle at the top of the figure, like a sun (Figure 6). There was no synthesis, but an excess of colors and geometric shapes. The image does not capture the same sense of geometry as a true Mondrian. Andrade tries to form a landscape,



when Mondrian would have actually simplified, abstracting to the fullest. The result is, perhaps, a Cubist pastiche.

It is known that the work of modern artists such as Klimt, Picasso, Dalí, and Breton contained a strong critique of conventionalism, the society of their time, with an appeal to the erotic, to dreamlike visions, to an innovative perspective of reality. The artistic movements in which these artists participated were widely studied and discussed in a series of publications in manifestos, journals, books, and newspapers, fighting certain perceptions of reality and mainstream culture. These artists did not paint just for the sake of painting; their art mirrored their philosophies and their worldviews, and had a broader cultural role than just to entertain or “beautify” (in fact, some of their works were often criticized for their lack of academic rigor).

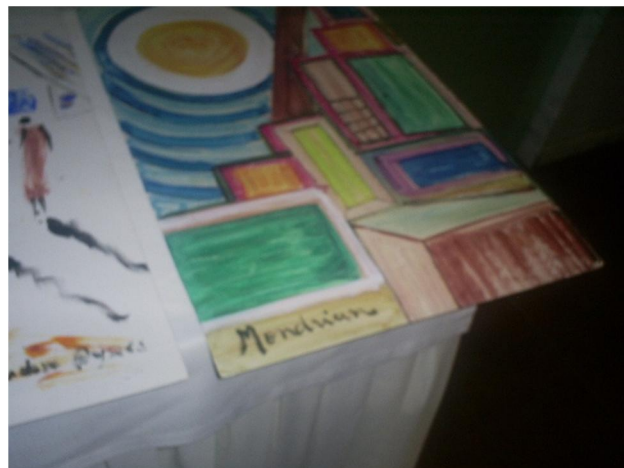


Figure 6. Detail of a mediumistic painting attributed to Piet Mondrian.

In some of the pictures of these authors an art critic could find the most varied artistic influences (Eastern, Western, other), as well as the most varied social and symbolic meanings (as in Picasso’s “Guernica”). Their art urged their audience to think as they did. However, the Gustav Klimt of Jacques Andrade does not incorporate his elaborate and provocative eroticism or his initially proposed historical and realistic art. After death, Klimt seems to have resolved to devote himself to producing simple portraits and landscapes similar to those of all other spiritual painters – see Figure 7, below.



Figure 7. Mediumistic painting attributed to Gustav Klimt.

3) Regardless of greater or lesser authenticity of signatures, one cannot be sure whether their reproduction was previously practiced by the medium, or if there were intervening factors of an unconscious nature.

The analysis of the signatures from mediumistic paintings would certainly require an expert, which we are not. However, it is important to mention that, just like in any other investigation of alleged paranormal phenomena, an important first step is to check for the possibility of deception. Signature imitation is something that many individuals perform well enough to impress even expert analysts: this also happens with possibly fake works of art, which tend to call into question their real authorship. Even when the suitability and honesty of the individuals involved are verified, one should ensure the necessary controls to guarantee that there will be no deviations from the established order. We are not stating here that this is necessarily the case with Andrade, since we do not have the necessary analytical tools for such an evaluation; in fact, we have no evidence of deception concerning this particular medium. To the contrary, Andrade has been cooperative and accommodating in all of our various encounters. However, it is an important methodological procedure to be stressed, one which future investigations will have to consider initially, before the development of other hypotheses.

In any case, we have to deal with other issues no less worrisome. The psychological literature on dissociation and altered states of

consciousness attests that, under certain mental conditions, some people may manifest latent capabilities that go far beyond their usual abilities and accessible knowledge (Braude, 2000; 2002; 2003). At such times, they tend to produce artifacts that they are considered unable to do ordinarily, with the emergence of talents previously unknown (or else an increase in capabilities already developed). The emergence of such potential would be an expression of latent or unconscious aspects not previously accessed due to many unforeseen biographical, social, and familial determinations. Therefore, it is possible that a medium might imitate the style and signature of deceased authors with fluency and ability, without conscious premeditation. In fact, this spontaneous form of imitation combined with imaginative elaboration may be a central aspect of creative dissociation (Grosso, 1997). Although the precise mechanisms underlying such unconscious capabilities are not well comprehended, the many cases reported in the literature attest to its possibility (e.g., Pearl Curran, Hélène Smith, Leonora Piper).

There are certain ways of verifying the actual occurrence of a change in the mental state of the medium, either by interviews, questionnaires and ethnographic data or by measurement of neurophysiological variables. As we saw in the case of Andrade, the available evidence actually pointed to the occurrence of a dissociative state during mediumistic sessions. On the other hand, the dissociated state does not need to be completely unconscious, but may allow some contact with the environment, although somewhat reduced. Many mediums claim not to become unconscious or unaware of things around them, but they can feel, for example, that they do not fully control the movement of their hands, arms, or vocal cords, as is the case of Andrade.

4) The production time of each painting is extremely rapid, which tends to impress the observer by the medium's dexterity. However, this speed is usually contrasted with the longer periods that many artists took to complete some of their most important artworks.

Some of the great works of Western art depended on a long time of studies, refinement, and details until they were finished. Before finalizing his picture of the cathedral of Rouen, for example, Monet drew several previous studies at different times of the day, following

the inclination of the sun over the cathedral. In total, his studies involved a series of 50 images, made between 1893 and 1894. The many difficulties involving the termination of the works of Leonardo da Vinci, who left many unfinished productions, are also well known.

In the spiritual world, however, the artists seem to have more haste than when they were incarnate, since their performances do not last more than a few minutes. Lima (1998) reported that, before beginning to paint, Andrade hesitated for about 20 or 30 seconds. According to her calculations, the average time spent by Andrade on a painting was 6 minutes and 28 seconds. Although impressive to the public, these mediumistic performances seem to associate painting with a kind of "spiritual showmanship." What becomes important is not so much the quality of the productions individually, but how skillfully and quickly they are made. The content is left in the background, with priority given to the ability of the medium. Although aesthetically accessible, these paintings remain quite lean, which decreases their confirmatory evidence. Interestingly, in these sessions, the medium is put directly in contact with the public, in such a way that we can compare them with some types of performance paintings (Goldberg, 2006).

5) While doing the paintings, mediums do not provide other evidence of something effectively paranormal in their behavior. Their actions are always the same, invariably ritualistic.

If, during their performances, mediums behave in a way that expresses traits or behavioral characteristics of the deceased painters, this might serve as suggestive evidence of something paranormal (especially if these are behaviors that only family members or people very close to the artist could have had access to, rather than attitudes widely known or expected by the general public). Andrade – as well as other mediums, such as Anton and Gasparetto – typically adopts a ritualistic posture while painting. His movements, his gestures, always suggest much more a creative urge than unique aspects of the personality of the deceased painters. Andrade sometimes smiles during the session, as if possessed by a bewildering joy. At other times, he seems nervous, conveying the impression that he cannot fully control all his actions; sometimes, he may remain absorbed with his eyes closed. All these behaviors are

recurrent in the performances, but tell us nothing about the alleged spiritual authors.

In the performance that took place during the 5th Psi meeting, the medium at a given moment said that "there is Joan Miró, and Miró likes a lot of joy", whereupon Andrade started singing and dancing, and invited everyone to sing. Such an isolated behavior provides little evidence about Miró. This, in turn, was virtually the only specific behavior that differed from all the others displayed during the session.

6) There is a prevalence of authors of modern art.

Would this be symptomatic of a trend? The style of modern artworks tends to be seen sometimes as 'easier' to imitate than the neoclassical and Renaissance artworks, which bore an excessive rigor and complexity. Although they were great designers and painters, many modern artists preferred, for stylistic reasons and as a critique of academicism, a simplification that nevertheless followed a conceptual proposition. In general, significantly fewer mediumistic works are attributed to non-modern artists than to modern artists. There are, for example, some productions attributed to the pre-Renaissance painter Giotto, as well as to Bernardino Luini and Nicolas Poussin in the gallery website of Florencio Anton (Anton, 2009c), but the majority are certainly attributed to modern artists such as Renoir, Manet and Van Gogh. Is this a strategy of persuasion on the part of the mediums? Since it is apparently simpler to imitate these artists, there should be a greater likelihood of convincing the public of the authenticity of the productions.

Notwithstanding, the above argument is not entirely generalizable, if we think that Cézanne or Dalí, to name just two, are any less complex or difficult to imitate than previous masters. Thus, another possible explanation is that people imitate modern artists because they are better known nowadays. If we think that the more art becomes contemporary, the more the personality and life of the artist become important as well (Hauser, 2003), then the act of signing the paintings is not only an attempt to legitimize the phenomenon, but also has to do with a broader social process of idealization of the artist and his work. In all of Andrade's mediumistic paintings analyzed during the 5th Psi Meeting, the supposed authors had some notoriety, even when they were not well known

to the general public. This gives weight to the manifestations, but is also interesting for the exaltation that it makes of these painters. In the two Spiritist centers of São Paulo visited by Maraldi during research for his master's thesis (Maraldi, 2011), the local mediums did not sign their works, because their paintings and drawings clearly are inferior to those of already recognized mediums. The impression one gets from this finding is that the quality of mediumistic performance is more or less proportional to the deceased painter's grandeur – a sort of “spiritual aristocracy.” These findings seem only to strengthen a psychosocial interpretation of the cases.

7) The spiritualist explanations given to such contradictions tend to resort to metaphysical speculations that are not always scientifically verifiable.

Surely, spiritualists have many different explanations for some of the contradictions involving a paranormal or spiritualist hypothesis. The first one would be, perhaps, that there are certain limitations to be considered in the manifestation of spirits through mediums. Bozzano (1938/1982), for example, referred to the phenomenon of “animism,” i.e. an overlay, so to speak, between the medium's unconscious motivations and the communicating spirit, through which elements of both personalities become mixed in the resulting manifestation. This would explain, for instance, the fact that mediumistic paintings, even while resembling the style of great artists, cannot fully reproduce their original quality. According to the spiritualists, this is because the disembodied artists have to adapt themselves to the “instrument” (the medium), and, therefore, there is no pure mediumistic manifestation, but one that always involves mirroring, fusion, and adaptation to local conditions. The better the medium (*e.g.*, dedicated, disciplined, devoted to moral and spiritual causes), the better the mediumistic capacities; but they are still limited at a certain level.

The fact that some mediumistic paintings present elements that are not congruent with the artists' original style could be explained by saying that these artists have changed their way of being or seeing things during their time spent in the spiritual world. This would explain, for example, the episode in which Andrade assigned a religious painting to Miró, although it did not evoke the same surrealist forms that

Miró created when he was alive. But it could also reflect the artist's inability, from the spiritual world, to recapture the craftsmanship exhibited while alive.

All these counter-arguments, as well as others possibly considered by spiritualists themselves, are based on the idea that scientists are not well informed about the rules that govern life in the spiritual world and the supposed communicability between the living and the dead. Such justifications end up resorting to metaphysical speculations not verifiable by scientific means. They are *ad hoc* explanations, without the same validity as testable scientific hypotheses. They may seem logical to the spiritualists, but to the extent that they relate to an invisible world – thus subject to different interpretations – and that they can be explained more parsimoniously according to theories and psychological phenomena already known, there seems no need for the scientist to resort to these speculations. Moreover, there may be some tendency to extend indefinitely the possibility of formulating that type of justification – always somewhat malleable and adaptable to the facts – and thus we would never arrive at a satisfactory and objective conclusion about the case presented.

We believe that, with the seven arguments cited and scrutinized above, we ended up minimally supporting reasons for choosing and developing another approach to explaining these phenomena besides the one based on the occurrence of paranormal processes. There are many other interesting cases of mediumistic paintings that deserve a careful analysis, using the methodology that we proposed earlier: the cases of Augustin Lesage (Victor, 1998), Hélène Smith (Flournoy, 1900; Maraldi, Alvarado, Zangari & Machado, 2013), and Thompson-Gifford (Braude, 2003; Hyslop, 1909), among others. This exploration, however, is not possible in this work. Nevertheless, the analysis of these other cases could contribute much to the discussion here established; even perhaps considerably extending our results (see Maraldi, 2012, for an analysis of some of these cases). It is important to say, however, that it was not our intention, with the previous arguments, to reject entirely the possibility that paranormal processes are effectively underlying some of these experiences. For now, we believe that there is still no sufficient evidence in this regard, particularly in the case of Jacques Andrade, to reach this conclusion.



A possible counter-argument to this perspective would be that, given the enormous variability of aesthetic opinions, we cannot actually achieve any reliable judgment on artistic productions. But that would be admitting a total relativism, which is inconsistent with the fact that the qualitative interpretation and analysis of an artwork may sometimes find consensual agreement on the part of other critics, as long as they follow the same assumptions of reasoning, regardless of their subjective position (Eco, 1995). Besides, some of the criteria on which we relied to construct our analysis of the case are quite objective – the stylistic movement to which the deceased artist belonged, the technical and formal characteristics of his paintings, his signature, the themes or subjects of his productions, the conceptual proposal of the author regarding his works, etc. We are convinced that it is not possible to reach a *definitive* conclusion – as in many other areas of science – but, considering the greater or lesser weight of the data, the mediumistic paintings could, perhaps, be admitted as suggestive evidence of paranormal processes.

To the extent that Andrade attended only elementary school and lived most of his life under poor socioeconomic conditions, victimized by trauma and discrimination, his painting abilities and his precocious interest in art are indeed of a *creative* nature, in the sense of a creative coping strategy in opposition to suffering and low self-esteem. The dissociative and semi-automatic character of his work indicates that these talents and potential were not entirely integrated into his ordinary stream of consciousness and self-concept, thus requiring a specific set of circumstances to evolve and develop, including a culturally validated form of expression (i.e., mediumship).

Discussion and Outlook

We would like to discuss some of the implications of the results previously presented in order to outline the contours of a biopsychosocial approach to the study of creative dissociation. As said before, our considerations are not intended to be exhaustive. We intend to develop some basic principles and working hypotheses to be improved and verified in future investigations. We hope the reader will bear with us as we propose a tentative (and, at this point, relatively unsupported) delineation of some of the

pathways to be followed in the study of creative dissociation. Our model can be summarized according to six general premises or arguments:

1) Dissociative experiences (including mediumship) tend to conform to the historical and social environments in which they are manifested.

Evidence collected over time about paranormal experiences, dissociation, and altered states of consciousness demonstrate that such occurrences are decisively influenced by contextual factors (Cardeña, Lynn, & Krippner, 2000; Locke & Kelly, 1985; Moreira-Almeida & Lotufo Neto, 2003). A hallucinatory experience, for example, would be interpreted differently in the Middle Ages, as compared with the interpretation that it currently elicits in our culture (Bentall, 2000). In Brazil, mediumship is predominantly understood from Spiritist and Umbanda perspectives, two similar mediumistic religions, but in countries like the United States, many mediums – including alleged psychics and channelers – do not follow a systematic group practice or philosophical-religious doctrine (Hughes, 1991). In each of these contexts, mediumship is understood and practiced according to certain culturally established values and norms. Even the way the “spirit world” will be seen will change from one context to another, from one religion to another. This is no different in the case of mediumistic painting.

Mediumistic practices have their history in Brazil. In its early days, this history was marked by marginalization and exclusion as a result of persecution conducted by medical authorities, police, and Catholic clergy in the late nineteenth and early twentieth centuries. Especially during the autocratic government of President Getúlio Vargas, many Spiritist centers had their doors closed (Giumbelli, 1997; 2003). Perhaps it is strange to think that mediumship was once a marginal and “outlawed” practice in Brazil, but this is its history, and if today a painter medium can reach international success and see his work recognized as a proof of immortality or as a subject of scientific inquiry, such a reality is the result of a historical and social achievement by the spiritists, an achievement only made possible by social negotiations among mediums, medical authorities, and other religious authorities.

2) Mediumship and creative dissociation are disciplined by a given culture or social group, which provides the basic elements and the outline of its manifestations.

In Spiritist centers, mediums learn to control their experiences and to interpret them according to a defined framework of beliefs and values. There, they can discuss their experiences with other mediums, and take courses that help them understand more about their experiences and how to make the best use of their “potential.” The practice of mediumship, therefore, does not arise from nowhere, alone. It makes sense only within a social group or a given culture. Without the group intervention, the experience becomes idiosyncratic and does not achieve wider significance. The group interprets the spiritual experience in a particular sense, offers names (*psicopictografia*), stipulates the types of behavior expected of a good medium, teaches different means of stimulating, conditioning, and controlling the experience, etc. But most important, the Spiritist group legitimizes the experience for the individual. For the group, mediumship is not mere enactment or mental illness, but a real communication between the living and the dead. The group interacts with the individual to turn these beliefs into irrevocable assumptions of the mediumistic experience. So, if mediums are “incorporating the spirits,” one should not talk to them presuming that they are in their ordinary state, because for now they are other individuals, spirits who are now using their bodies as a communication and expressive tool. The mediums, in turn, having learned to stimulate and control their dissociative state, will start to meet the expectations of the group as they define the role they play in that context. In fact, shortly before his presentation, Andrade approaches the artistic material and places it in a certain order, preparing himself mentally through prayer, or giving instructions to two young women who help him. These characteristics highlight not the posture of an outsider, but the attitude of someone already accustomed to the constant reproduction of that religious practice.

When Jacques Andrade says “there is Joan Miró”, and asks everybody to sing and dance with him, the onlookers accede to his request, while Andrade continue to paint. The medium here fulfills the role of an intermediary between this world and the transcendent world.

As much as he can, he seeks to encapsulate in himself the elements for such a demonstration, which legitimizes his beliefs and his identity as a medium, while legitimizing the beliefs of the attending Spiritist group, in a dialectical process. The objective of the mediumistic activity is not to elicit just an intellectual or perceptual reaction from the public, but more of an emotional one. It is probably for this reason that such presentations are conducted in the manner of performances or spectacles. The goal, therefore, is to cause an emotional impact, impress the public by one’s dexterity and speed, thus giving the sense of something transcendent or spiritual.

3) There is a dialectical relationship between personal meanings and certain collective issues and dilemmas. Therefore, creative dissociation should be understood both as individual and social coping.

In cases of mediumship studied recently in Brazil (Maraldi, Machado, & Zangari, 2010; Maraldi, 2011; Zangari, 2003), it was found that alleged paranormal experiences have profound influences on the life history of mediums, fulfilling important therapeutic and social functions. Just as when an individual chooses a profession (Bohoslavsky, 1977), people do not randomly choose to follow the path of mediumship. This path has its roots in biography, not only explicit but also implicit – conscious and unconscious. Brazilian mediums tend to say that they chose their path before being “reincarnated”. Andrade argues, for example, that “I was invited to reincarnate to fulfill the mission on Earth, like all other humble spirits of God.” Whereas his mediumship “developed” only in 1980 in a Kardecist temple, Andrade believes that he passed through out-of-body experiences as a child. But behind his doctrinal discourse and narrative, what we really have access to are his behaviors, his personality, and the way he interprets his own history based on the Spiritistic beliefs.

In a previous study of Andrade’s case, Lins (1999) noted that, when the topic of the painting is a landscape, as in most of the images, there is the presence of fences, which could symbolically represent Andrade’s hearing impairment, his restrictions and limitations to communicate and interact with others. By making reference to this psychoanalytic interpretation, we are not saying, categorically,

that Andrade chose to be a medium only as an attempt to overcome certain feelings of inferiority derived from a hearing disability. This reasoning would enormously reduce the understanding of the complex and interrelated causes underlying paranormal beliefs and experiences. However, such emotionally charged events and circumstances of life may illuminate some of the motivations of these individuals to report dissociative and paranormal experiences. What we are saying is that such experiences may acquire a specific meaning to the individual, which plays an important role in his self-concept and identity. The repercussions of this are perhaps even larger, covering also the socio-cultural context.

Ramos (2004) suggested that, in Brazil, one of the most evident cultural complexes has been the feeling of inferiority, visible especially in the relationship with other countries (an allegation that we believe has diminished since Ramos first described it). Among the features of this complex, Ramos identified the overvaluation of all that is foreign to the detriment of national talents, such as self-deprecating jokes and the lack of appreciation of what is native. In this sense, would mediumistic painting and writing, in a certain aspect, be expressions of a culture of inferiority? It is reasonable to think that, if Brazilians (especially those of Andrade's era) do not feel good enough to accomplish great things or attain success, including artistic and literary realizations, then many mediums would logically think: When I do such amazing things (paintings, writings, etc.), it should not be me, but a spirit that manifests through me (and preferably not Brazilian!). The talent or ability of which individuals are relatively unconscious may end up being considered as a kind of antigen, a foreign body that they are unable to reconcile with their own self-concept, thus personified as an inhabitant of the spiritual world.

In a previous study with 11 Brazilian spiritist mediums, using a multi-methods qualitative approach (interviews, observational data, and psychodynamic analysis of mediumistic writings and drawings), one of us (Maraldi, 2011; 2012) developed a preliminary model relating dissociation, paranormal belief systems and self-esteem that seemed to be also relevant in explaining the case of Andrade. According to this model, the attribution of authorship of these productions to external

sources will depend primarily on the automatic and involuntary aspect of the phenomenon, as well as the content of such productions, that would differ from one's conscious ideas or behavioural repertoire (the criterion would therefore be incompatibility with self-concept). As these psychological contents frequently emerge in a dissociated manner (lack of control of the hand or little awareness of the content produced), the self tends to perceive them as incompatible with certain voluntary aims or with self-concept. The intelligent (or at least intentional) aspect of such productions seems to serve as another element that could help sustain a spiritualist interpretation. Experiences of low self-esteem in childhood could enhance feelings of passive influence and avoidance of personal responsibility for success, thereby reinforcing paranormal or spiritual allegations involving external (or invisible) agencies. Schematically, we would have the following: Low self-esteem or impaired self-concept due to various biographical and social circumstances → Repression or absence of sufficient stimulation and encouragement to develop individual capacities → Eruption of latent potential in the form of automatisms and dissociative phenomena (maybe enhanced by innate dissociative tendencies) → Accommodation of anomalous (dissociative) phenomena under paranormal belief systems (Figure 8).

In fact, there are other interesting cases in the history of parapsychology and psychical research that also seems to adhere to these hypotheses. When the French medium Augustin Lesage (1876-1954) had his first mediumistic experience, it took the form of a voice he heard while working in a mine. The voice presaged that, one day, he would become a great painter (Victor, 1970). At that time, Lesage was a humble and dedicated miner, and did not harbor the expectation to follow such a distinctive career. Indeed, the voice proved to be a very fearful and strange experience to him, attaining significance only after his conversion to Spiritism. Maybe the voice was an initial sign of his tendency to dissociate. When he participated in a spiritualist séance for the first time, he immediately became the principal medium, causing a series of raps and other ideomotor phenomena. On a later occasion, he made his first automatic drawing and thus started to receive regular messages from the spirits (Victor, 1970). One can hypothesize that

the artistic talent of Lesage was so unconscious to him that the only way such potential could reach partial awareness would be through an auditory hallucination (and, further, through motor automatisms). This was mainly due to his socio-economic condition that made him unable to envision new possibilities in life or to assert himself beyond the hard work of a miner. As in other cases, his talent was somehow unable to emerge due to an inconsistent or restricted self-concept. The quasi “teleological” character of the ‘voice’ he heard at the mine does not pose a theoretical problem for our model, considering that many mediumistic manifestations have the same characteristic (Flournoy, 1911; Maraldi, 2011), one which is also found in mental patients like schizophrenics and those who suffer from dissociative identity disorder (Ross, 1989). Psychological contents have an almost natural tendency to be personified, as occurs in dreams, mythology, automatisms, or other imaginative productions, and it is not likely to be very different in the cases of Lesage and Andrade (even if we discard evidence of psychopathology). These personifications could be further influenced and molded by belief systems containing paranormal elements, acquiring thereby a more stable and acceptable presentation in a given religious group. The teleological character of some mediumistic messages or manifestations has something in common with Jung’s concept of *individuation* (Jung, 1948/1977). Accordingly, if Lesage had not listened to that voice, or if he had not accepted Spiritism, maybe he would not have developed his potential the way he did or would have had more trouble accepting his new condition and self-image as a painter. Thus, the voice could be understood as a trigger that would accelerate or facilitate individuation.

These assertions also become more understandable in the case of Andrade, when one considers the precarious situation of the educational system in various regions of Brazil – Andrade did not complete his studies – the lack of social stimulation in relation to areas such as scientific research, and even the popular tendency of Christianity to recognize the behaviors of self-worth and esteem as a sign of arrogance and unnecessary pride – a remarkable characteristic, for example, in the case of Chico Xavier (Maraldi, 2013). Interesting examples of low self-esteem can be seen in the following statements from Andrade:

in answering the first e-mail sent by Maraldi, the medium responded, “I remember the Congress of Parapsychology. Yes, it was nice to know *important people*” [emphasis added]. When asked if he had suffered any kind of discrimination due to his status as a medium or his hearing impairment, he replied: “There were many, many people who did this to me, spiritualists or not. Many times they hurt me.” In answering a question on the online questionnaire, “Were you a victim of discrimination or offensive jokes?” Andrade chose the option “6 or +,” in a range of never to 6 or +. Although short, these responses are at least significant to the assumptions made previously regarding low self-esteem. The most important thing to understand is that, once having entered the Spiritist center, Andrade’s biography became intertwined with the history and practices of the group. A religious group has its ideology, built for the individual and objectified by it. When the painter medium helps with the task of spirits to “demonstrate” the survival of the soul through his own mediumistic capacities, he is legitimizing that belief system for the group. He embodies the doctrine, and, while defending it and disclosing it, he is also defending and maintaining his own identity as a medium, the same identity that permits him to take control of his dissociative tendencies. It would be harmful to the group’s belief system not to interpret his experiences as mediumship. The spiritual source of the experience is never flatly denied, but only its quality or provenance (*e.g.*, a higher or inferior spirit), thus preserving group identity and the structure of its doctrinal beliefs. Once again, we have a dialectical process of individual-group.

4) Dissociative phenomena cannot be adequately explained in terms of a separation between cognitive and somatoform manifestations. Cognitive dissociation also has its roots in measurable psychophysiological processes.

Since dissociation is not a unidimensional construct, it is important to consider not just its cognitive (or ‘psychoform’) facet, but also its somatoform manifestations and functions (Nijenhuis, 2000). In a previous study, Maraldi (2011) observed that reports of somatic symptoms are quite common during spiritist *séances*. Evidence indicated significant and positive correlations between psychological dissociation and conversion/somatoform symptoms (Brown *et al.*, 2007; Nijenhuis,

2000). It has been common for researchers to verify positive associations between somatization and dissociation (Kruesi *et al.*, 2004; Ross *et al.*, 1990; Saxe *et al.*, 1994; Walker *et al.*, 1992), as well as between somatization and conversion (Binzer, Andersen, & Kullgren, 1997; Stonnington, Barry, & Fisher, 2006). It is known that somatization is strongly linked to anxiety and depressive symptoms, and that stress is a common factor underlying dissociation, conversion, and somatization (Coelho & Ávila, 2007). The psychosocial causes

or triggers of somatization are varied, ranging from traumatic childhood experiences – also common in dissociative and conversion disorders (Binzer, Andersen, & Kullgren, 1997; Roelofs *et al.*, 2002; Stonnington, Barry, & Fisher, 2006) – to stressors related to specific socioeconomic conditions such as poverty or exposure to violence (Tófoli, Andrade, & Fortes, 2011). Some researchers speak of a “somatization trait” typical of Latin American cultures (Tófoli, Andrade, & Fortes, 2011).

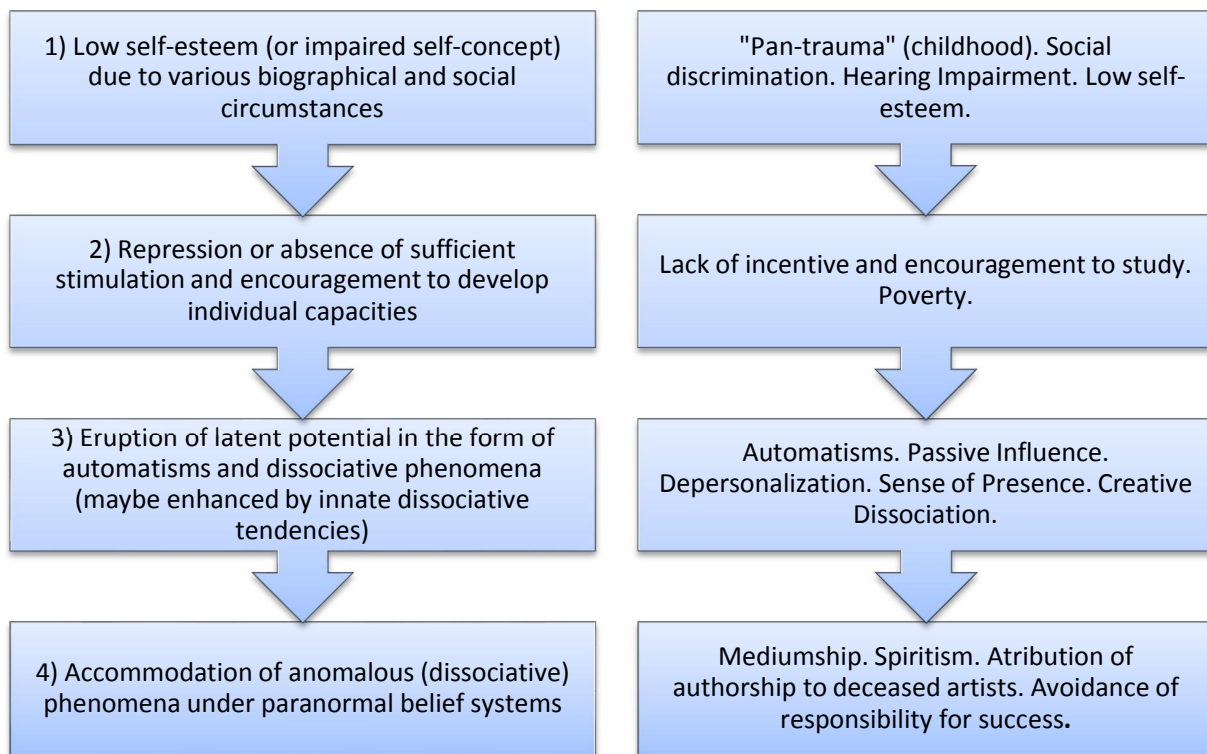


Figure 8. A comparison between the model (Maraldi, 2011) and the case of Andrade.

The literature reviewed above usually considers the two forms of dissociation (cognitive and somatoform) as sometimes occurring separately, but despite studies highlighting their strong positive correlation, the researchers have not yet been able to explain how these two variables are interrelated (but see Krippner, Wickramasekera, Tartz, 2000; Wickramasekera, 1993; Wickramasekera I, Krippner, Wickramasekera II, 1997). However, what our study with Andrade suggests is that cognitive dissociation also has its roots in measurable psychophysiological processes. While Andrade performed intensive imaginative work, his psychophysiology responded to this cognitive exercise with alterations in skin conductance level and

muscle tension. Thus, it seems inappropriate to separate one form of dissociation from another, since defined physiological reactions are present during a cognitive task. In this sense, we need to consider the individual as a whole when studying dissociation, i.e., biological, psychological, and societal dimensions. The Dissociative Experiences Scale is considered to be an instrument that assesses predominantly cognitive dissociation (Nijenhuis, 2000), but, since the results showed that there was something more than cognitive processes taking place during dissociative and absorptive experiences, perhaps we should redefine our way of conceptualizing dissociation and its manifestations. Replications of our study design

are urgently needed to establish our findings and their theoretical implications.

5) The differences between pathological and non-pathological dissociation may be more complex and subtle than we would expect them to be, and socio-cultural variables tend to play an important role in that differentiation.

As Grosso (1997, p. 195) stated: “creative dissociation represents the mind’s evolved ability to escape, transform, and possibly transcend the limitations of ordinary reality, which are, generally speaking, dangerous, depressing, and frequently traumatic.” However, Grosso was aware of the influence of socio-cultural factors in the definition of what is traumatic: “What we in our rationalistic society may characterize as pathologically ‘dissociative’ may appear under a different guise in another culture... before we can ‘reassociate’ on a higher level we first have to ‘dissociate’ from some aspects of lower selfhood or ordinary reality” (p. 182).

In the case of Andrade, it has been shown that his life history was marked by social discrimination and other traumatic experiences. But despite these difficulties, his spiritual and creative activities at the *centro* seem to be functioning as an effective coping strategy against trauma and its consequences. At the *centro*, he is a valuable medium. Although some of the spiritualists seem to have discriminated against him, he is a frequent and dedicated volunteer at the *centro*, he has many good friends there (as he indeed stated), and he is also being studied by scientists and lay researchers. All these practices and opportunities have possibly helped him deal with his spontaneous dissociative experiences and his low self-esteem tendencies. On the basis of the DES-Taxon criteria, it is possible to suggest the presence of pathological dissociative symptoms in his case (But see Giesbrecht, Merckelbach, & Geraerts, 2007, for a critique of the DES-taxon). Notwithstanding, it would be inadequate to diagnose a dissociative disorder based on a screening instrument like DES, and without further corroborative evidence. It is also premature to say that the spiritist practices are really fulfilling a therapeutic function based exclusively on our present findings (see also Maraldi, Machado, & Zangari, 2010; Maraldi & Zangari, 2012). Longitudinal studies are important to elucidate this question (obtaining measurements of psychopathology before and

after religious conversion, for instance, or investigating differences between non-medium attenders, beginners, and advanced mediums who dedicate themselves regularly to those practices).

In research conducted by Peres et al. (2012) with beginners and advanced mediums, both dedicated to the practice of automatic writing, the most experienced evidenced a low activation of brain areas responsible for attention and planning while doing automatic writing, a result that not only justified their claims of dissociative state, but also seemed contradictory to the best textual productivity of these individuals during the task under dissociation compared to the same task when they were out of a dissociative state (the control condition). In other words, these individuals produced better writings in trance than in the control condition (according to an analysis of the quality of the writings by a specialist who was blind to the medium’s degree of development and to which texts were produced in the experimental condition). In less experienced mediums an inverse phenomenon was observed: the areas related to planning were more activated during the experimental condition, suggesting that they (consciously) were struggling to produce better writings when compared to the experienced mediums. These results seem to demonstrate that 1) there is a measurable difference between beginners and experienced mediums, which suggests that creative dissociation may be trained or developed in some way, and 2) automatic productions cannot be entirely explained in terms of simulation or fraud. Although participants reported several dissociative and psychotic-like experiences, and also presented a pattern of cerebral activation that was similar to that of schizophrenic patients, they did not suffer from schizophrenia or other mental illness and were well-adjusted. Although mediums and psychic claimants are often placed in a “high risk” category for somatic ailments (Krippner, Wickramasekera & Tartz, 2000), these vulnerabilities are not inevitable because the various methods of prevention, self-regulation, and health maintenance involved in religious and spiritual practices.

6) Possible paranormal processes underlying these experiences need not be neglected, but acquire secondary importance.



From the viewpoint of the biopsychosocial model adopted, it is possible to explain mediumistic painting without resorting to paranormal processes. A similar conclusion was reached by Krippner (2002) on a previous study concerning stigmatic phenomena. However, such processes cannot be denied. We should be open to any changes in the model, as the data deviate from the initially formulated hypotheses, requiring considerations other than those of a physiological or psychosocial nature. Indeed, there are a few cases of mediumistic painting that do suggest psi, such as the Thompson Gifford's (Hyslop, 1909). Cardena, Iribas & Reijman (2013) have also focused on various connections between art and psi, while John Palmer developed interesting experimental investigations suggesting that motor automatisms and dissociation would be vehicles of ESP expression (Palmer, 2011; 2013). However, these studies require further discussions, well beyond the limits of this paper, and we will restrain ourselves here just to point out their importance when discussing these matters.

Conclusion

A final issue related to mediumistic painting is whether or not these productions deserve the label of artistic manifestations. After all is said and done, can mediumistic painting and other forms of creative dissociation be considered art?

The answer to this question rests on an even more complex one: What exactly is art? The simplicity of the argument of Marcel Duchamp (1887-1968), objectified in his ready-mades (like the urinal that he tried to present at the Society of Independent Artists in New York), hides deeper reflections, which sought to

undermine the theoretical assumptions of art and reduce all aesthetic judgment to a matter of social convention, of changeable and flexible definitions, continually redefined in the course of art history. What is or is not art depends, ultimately, on the interpretive context within which artistic objects are produced. After Duchamp, art was never the same, at least in the Western World.

But even if someone questioned the status of mediumistic painting as artistic expression, it is undoubtedly an aesthetic (and, at the same time, spiritual) experience of great import to an understanding of the interactions between these two fields of knowledge: art and religion. Even more than a spiritual/religious or aesthetic experience, mediumistic painting is a cultural phenomenon, and it is maybe for that reason that it is reminiscent of an era when the divisions existing today between different forms of knowledge were not rigidly established. Mediumistic paintings seem to preserve the nostalgia for a time when art served largely as a demonstration of the transcendent and was somehow identified with it.

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