

Editor’s Note: For the interested reader, an outline of the structure of the case study of “Fran” and of “Emily” is shown in the Appendix.

## **Paradoxical Intention (PI) Combined With Hypnosis in the Rapid Treatment of Anxiety Disorders: The Cases of “Fran” And “Emily”**

Sam R. Hamburg <sup>a,b,c</sup>

<sup>a</sup> Independent Practice, Chicago, IL

<sup>b</sup> Thanks are due to Daniel B. Fishman for sage advice on drafts and to Graphic Ultra for creating a finished copy of Figure 1.

<sup>c</sup> Correspondence regarding this article should be sent to: Sam R. Hamburg, 8 S. Michigan Ave, Suite 1507, Chicago, IL 60603

Email: [samrhamburg@gmail.com](mailto:samrhamburg@gmail.com)

---

### **ABSTRACT**

Paradoxical intention (PI) is a psychotherapeutic technique that is intended to help clients become more flexible, or at least more open to thinking about their problems, such as anxiety, from a new perspective. In line with this I have developed an approach that involves a “Panic Attack Time Line” (PATL). This PATL (a) helps the client visualize and understand what is happening during the panic attack, and (b) encourages them to understand why, when they start to have panicky feelings in their body, it will be paradoxically helpful to make these feelings worse, for example, if the attack makes their heart beat faster, they might be instructed to do jumping jacks. One of the important advantages of this PATL approach is that it can typically shorten therapy for treating anxiety disorders to just three sessions in comparison with traditional CBT protocols that typically require 6–20 sessions for achieving clinically meaningful change.

Two, 3-session adult individual cases, “Fran” and “Emily,” are presented to illustrate the different ways that the PATL-grounded, PI approach can be combined with hypnosis to produce successful therapeutic outcomes. In Fran’s case, the PATL was used explicitly by itself with her and was sufficient to address her agoraphobia/panic disorder. Hypnosis was then used to extend the gains produced by PI. In the case of Emily’s aviophobia, the PATL was not used explicitly with her. Rather, the paradoxical logic it embodies was used to create a paradoxical directive that was conveyed via hypnotic suggestion.

*Keywords:* paradoxical intention; hypnosis; hypnotherapy; panic disorder; agoraphobia; aviophobia; cognitive behavior therapy (CBT); case study; clinical case study

---

## 1. CASE CONTEXT AND METHOD

As a full-time practitioner for more than 40 years, my personal experiences in therapy and the responses of my clients have interacted with my theoretical training to create a pragmatic model of psychotherapy that combines client-centered, experiential components resonating with Greenberg’s (2002) model of emotion-focused therapy and cognitive-behavioral, action-oriented, short-term components, including paradoxical intention and hypnosis. To provide the reader a fuller understanding of my model and how it developed, including the interaction of my different perspectives in the practice of psychotherapy, Appendix 1 of a previous case study in this journal (Hamburg, 2017, pp. 321-328) presents a personal statement of my theoretical and professional history. As will be seen below, paradoxical intention involves working directly with conscious cognitions, and thus is compatible with my overall, cognitive-behavioral approach.

Over more than 40 years of using PI, I estimate I have applied it to between 4 and 6 cases a year. My best guess—and it is a guess—is that I have used the aviophobia approach described here with between 20 and 40 clients. Overall, I estimate I have had a success rate of at least 80%. (I expand on my success rate in section 9 below.) Two recent, representative successful cases of this type, “Fran” and “Emily,” are presented here.

## 2. THE CLIENTS

### *“Fran,” a Case of Panic Disorder and Agoraphobia*

At the time of treatment, “Fran” was a 32-year-old White woman in a committed, non-married relationship. She had been referred to me by the social worker with whom she was in long-term, insight-oriented therapy. Fran was an equestrian. She cared for horses, trained them, taught young girls to ride, and taught older girls steeplechase riding and dressage. Her presenting problem was sudden, unaccountable attacks of nausea causing panic, with a resultant agoraphobic fear of traveling too far from home.

### *“Emily,” A Case of Aviophobia*

Emily, was a 54-year-old, married, White woman with two adult children. She had been referred to me by her primary care physician. Her presenting problem was aviophobia, i.e. fear of flying.. The problem was recently exacerbated by the fact that she needed to fly more and more because she was a vice president in a dynamic, Fortune 300 corporation with national scope.

### 3A. FRAN'S GUIDING CONCEPTION<sup>1</sup>

#### *Background of Paradoxical Intention (PI)*

Paradoxical intention was introduced into psychotherapy by Victor Frankl in the middle of the last century (Frankl, 1960). Frankl's contention was that directing clients to purposely enact troublesome symptoms or behavioral patterns could lead to their removal. Paradoxical therapy approaches received steadily increasing attention for the next three decades, and by the 1980s were the focus of extensive clinical and research exploration (Weeks, 1991).

Paradoxical directives were used in the treatment of a wide variety of problems in both individual and family therapy: insomnia, conversion reactions, obsessive-compulsive disorder, social phobia, panic disorder, agoraphobia, and functional urinary retention, among others. Outcome evidence, mostly from uncontrolled studies, but some from studies using experimental and quasi-experimental designs, attested to the effectiveness of paradoxical intention (Kim, Poling, & Ascher, 1991). But interest in paradoxical intention dropped off by the end of the century. A search of articles under "paradoxical intention" and "paradoxical psychotherapy" published in this century yielded less than 20 items, the majority of which had to do with insomnia and which were reviews of older research. A recently published review of research on paradoxical techniques in psychotherapy confirms that, in this century, the field has been quiescent (Peluso & Freund, 2023). (However, a review of more recent research on insomnia concluded that paradoxical intention could be considered an empirically validated treatment for that disorder [Morin, et al., 2006]).

The changes in psychotherapeutic fashion notwithstanding, paradoxical directives remain a useful tool for producing psychological change, often quite rapidly. This article presents two cases illustrating paradoxical intention as a means to produce rapid change in anxiety disorders. The therapeutic maneuvers are described in sufficient detail for readers to try them in their own practice. The first case has to do with panic disorder, the second with fear of flying.

#### *Two Diametrically Opposed Theories of the Nature of Panic Disorder*

In non-psychiatric medicine, definitive diagnoses are made by identifying the pathogen. An experienced physician may be able to take a good guess on the cause of a patient's rash and fever, based just on the pattern of signs and symptoms. But she will not know for sure which of

---

<sup>1</sup> The next 12 sections are numbered 3A-8A and 3B-8B, respectively, to indicate their parallel sections 3-8 of a typical pragmatic case study (Fishman, 2013)—specifically: 3) Guiding conception; 4) Assessment of the Client's Problems, Goals, Strengths, and History; 5) Formulation and Treatment Plan; 6) Course of Therapy; 7) Therapy Monitoring; and 8) Concluding Evaluation of Therapy Outcome. Sections 3A-8A describe Fran's therapy; and sections 3B-8B, Emily's therapy.

the many illnesses presenting with rash and fever it is, in this particular case, until a lab test has identified the pathogen for measles, rubella, Rocky Mountain spotted fever, or whatever.

In psychiatry and clinical psychology, diagnoses are purely descriptive—based solely on signs and symptoms. This is simply because we have very little knowledge about pathogenesis in mental disorders. We don't know what causes a person to have a panic attack—not in the sense that we know the cause of Rocky Mountain spotted fever. A number of etiological vulnerability factors have been proposed: temperament, anxiety sensitivity, history of medical illness (especially respiratory disorders), early experiences of sexual and physical abuse, and a heightened awareness of bodily sensations signaling psychophysiological arousal. However, none of these factors accounts for why some people have panic attacks while most other people don't; and none explains why a particular person has an initial panic attack at a particular time and place.

This lack of knowledge of the pathogenic mechanism in panic disorder offers us the freedom to speculate on what it might be. Two hypotheses immediately present themselves. They are diametrically opposed:

- Hypothesis 1. Panic attacks originate as mental phenomena and produce physical sequelae.
- Hypothesis 2. Panic attacks originate as physical phenomena and produce mental sequelae.

Hypothesis 1 undergirds conventional cognitive behavioral therapy (z) of panic disorder.

Hypothesis 2 informs the paradoxical approach presented here.

#### Hypothesis 1 and CBT for Panic Disorder

Conventional CBT for panic disorder conceives of it as “an acquired fear of bodily sensations, particularly sensations associated with autonomic arousal” (Craske & Barlow, 2014, p.9). Within this model, a person's initial panic attack is presumed to be “a manifestation of anxiety/stress” (Craske & Barlow, 2014, p. 32). Once the person has experienced a few panic attacks, or even one, and senses increases in bodily responses they associate with panic attacks, their anxiety level rises until it is high enough to trigger a full-blown panic attack, including its somatic components such as tachycardia, difficulty breathing, and dizziness. These increases in anxiety level and the ensuing panic attacks are more likely to occur in situations where attacks have occurred before and as a result have become conditional stimuli for them. A vicious cycle of attacks, hypervigilance for bodily changes, and further attacks is created and maintains the disorder.

Accordingly, the aim of CBT is to desensitize the person's fear of the bodily changes that signal the onset of a panic attack. This is accomplished through a multi-component treatment package that includes education, self-monitoring, training in diaphragmatic breathing and, most

importantly, exposure. There are two types of exposure: *in vivo* exposure and interoceptive exposure. *In vivo* exposure in panic disorder is like that used in other anxiety and phobic disorders. The client is directed to enter repeatedly into a systematic series of real-life situations associated with panic attacks, and use the coping skills they have been taught, such as slow breathing, to remain in feared situations rather than flee them. The situations are generally ordered in an anxiety hierarchy, beginning with less challenging ones and then continuing to more challenging. However, a flooding approach, beginning with the most feared situations has also been found to be effective. It is stressed to clients that "[t]olerance of fear rather than immediate fear reduction is the goal for each exposure practice" (Craske & Barlow, 2017, p.41) with the expectation that eventually there will be fear reduction.

Interoceptive exposure is unique to the treatment of panic disorder. In this technique, clients are induced to intentionally produce the sensations they fear, so that the fear can extinguish. The tasks designed to produce these sensations include shaking the head from side to side or spinning in a chair to induce dizziness, running in place to elevate heart rate, and breathing through a straw to simulate shortness of breath. Clients are directed to practice these exercises at home, preferably when no one else is home to provide a safety signal.

CBT has been found to be a highly effective treatment for panic disorder. Controlled trials have yielded success rates of 70-80%. There is strong evidence for maintenance of these gains at follow-up. Not surprisingly, CBT has become the gold standard for psychological treatment of panic disorder.

There is no arguing with success. Yet the guiding conception of CBT is open to critical scrutiny. The claim that panic disorder is the acquired fear of bodily sensations is not accurate. It is more accurate to say that panic disorder is the acquired fear of bodily sensations that were part of the terrifying experience of an initial panic attack, and possibly a few subsequent attacks. People experience elevated heart rate, shortness of breath, dizziness, etc. in a variety of contexts—exercise, watching horror movies, amusement park rides—and do not become phobic for those bodily responses as a result. People even suffer from troubling medical conditions which feature some of these bodily responses, but they do not develop panic disorder. Orthostatic (postural) hypotension can include lightheadedness, dizziness, and even fainting but it does not lead to panic disorder. Likewise, benign paroxysmal positional vertigo (BPPV) can cause dizziness, a sense that one's surroundings are spinning, loss of balance, nausea and vomiting. An episode of BPPV is anxiety provoking for those experiencing it, but it does not put them at risk for panic disorder.

It is only the bodily changes that occur in the sudden, unpredictable, uncontrollable, and terrifying context of initial panic attacks that lead to panic disorder. They derive their phobic power because they signal an oncoming panic attack; if they didn't, they would lose their phobic

power. (And, who knows, if you could give a person with panic attacks an ironclad guarantee that they would never have another one, those bodily changes might instantly cease being phobic stimuli.) Logically, to say that panic disorder is the acquired fear of the physical sensations associated with panic attacks reduces to saying that panic disorder is the fear of panic attacks. In that case, treating panic disorder by desensitizing the anxiety associated with the sensations produced by panic attacks may amount to going the long way around. CBT for panic disorder generally takes between 6 and 20 treatment sessions, and homework practice in between, with the modal length of treatment being around 12 sessions. Might it not be quicker and easier to treat the individual's fear of the panic attack itself, rather than desensitize the anxiety attached to the physical experiences it produces? This is where paradoxical intention comes in.

### Hypothesis 2 and Paradoxical Intention

This hypothesis postulates that a neurological anomaly is at the root of panic attacks. When this anomaly is activated, it causes the person to experience a massive response of the sympathetic division of the autonomic nervous system, causing the physical responses of panic attack along with mortal fear. This reaction would be appropriate in a situation of threat—e.g., being confronted by an armed assailant in a dark alley—but the neurological anomaly causes it to occur randomly, in the absence of adequate stimulation. An elevated level of anxiety may potentiate this anomaly to generate a panic attack, but is not necessary for it. And in the absence of this anomaly even very high levels of anxiety will not trigger a panic attack. It is in this sense that Hypothesis 2 posits panic disorder as physical in its origin rather than psychological. The advent of panic attacks soon enough initiates the vicious cycle—identified by Hypothesis 1 (and the treatment focus for CBT)—of somatic hypervigilance and anxiety leading to further attacks.

Treatment by paradoxical intention is designed not to teach the person to be less anxious about panic attacks but to abort them. This is accomplished by teaching the person to counter the paradox that is at the center of any panic attack.

### Salzman's Insight

At the time that I was starting out in practice as a psychologist, I was in search of a way to treat panic attacks. In 1982, in a recently published book on agoraphobia, I found a chapter by the psychoanalyst, Leon Salzman. It contained the following:

[I]n recent years the phenomenological analysts, like Frankl (1960) and Gerz (1962), have successfully used a technique called "paradoxical intention" in the resolution of phobic states. This method takes into account the compulsive, unfree nature of the phobic avoidance. Patients, against their will and free choice, avoid certain situations, places, or persons, even while knowing it is absurd and irrational to do so. However, they have no choice but to pursue the phobic demands, since the threat of anxiety is very great. The paradoxical intention technique forces the patient to accept the phobia willingly and

S.R. Hamburg

*Pragmatic Case Studies in Psychotherapy*, <http://pcsp.nationalregister.org/>

Volume 22, Module 1, Article 1, pp. 1-34, 02-19-26 [copyright by author]

deliberately and put it under voluntary control. This not only focuses on the absurdity of the symptom, *but also gives the individual the possibility of controlling its manifestations, by putting it squarely under his or her own control and responsibility*. While the paradoxical nature of the therapist's encouraging a patient to continue symptoms is most evident, the real issue is in terms of putting the action within the domain of the patient's choice and under her or his control. *Because many of the phobic symptoms are expressed through the autonomic nervous system, these feelings and functions are not under this voluntary control*. Therefore, when patients try to produce a symptom, as they are instructed to do, they usually fail.

When patients find they are unable to produce the symptom, it frequently disappears... This treatment draws on the element of control and the issue of free will and choice (Salzman, 1982, p.40 [italics added]).

Salzman's insight hit me like a ton of bricks. It was one of those ideas that is so obvious, once you've thought of it, that you wonder why it had not occurred to you earlier: The occurrence of a panic attack hinges on a paradox. In the first moments, any rational person feeling the onset of panic will try to make the symptoms go away—try to relax, breathe slowly, whistle a happy tune, etc. But the symptoms they are trying to control are not under voluntary control; they are under the control of the autonomic nervous system. *By trying to control what is impossible to control, they are setting themselves up to feel out of control, and to experience a full-blown panic attack*.

So the key to dealing with panic attacks would be not to try to make the initial symptoms better but to make them worse. That way the person would not be fighting their body, trying to alter the direction their body was going in, but would be going along with their body. And so they would be averting the sense of being out of control.

I started experimenting with telling panic disorder clients to try to make the untoward changes in their body worse as soon as they sensed them. It worked. Instead of progressing into a full-blown attack the symptoms would subside—and, paradoxically, the person would regain the feeling of control over their body. Soon enough I evolved a standard operating procedure for treating panic disorder. I have been using it for more than 40 years, with excellent results overall—and it is what I used with Fran.

#### **4A. ASSESSMENT OF FRAN'S PANIC DISORDER AND AGORAPHOBIA**

As mentioned above, at the time of the therapy, Fran was a 32-year-old White woman in a non-married committed relationship. She had been referred to me by the social worker with whom she was in long-term, insight-oriented therapy. Fran was an equestrian. She cared for horses, trained them, taught young girls to ride, and taught older girls steeplechase riding and dressage.

Fran's presenting problem was sudden, unaccountable attacks of nausea. She did not vomit in these episodes; she simply felt nauseous. Despite the non-occurrence of vomiting, these

attacks were alarming because she had read that in women, as opposed to men, nausea could be the sign of an impending heart attack.

Fran's panic attacks had led to the start of agoraphobia. She did her best to avoid places where she was seated with other people and felt it hard to escape—beauty parlors, restaurants—and she had trouble in large stores, e.g. Home Depot, Whole Foods. Fran had become afraid to travel too far from home. She had an "axis of safety," beyond which she was frightened to travel, a distance of about 20 miles by car, in one particular direction.

It was clear from her history that Fran had always been high in trait anxiety. She said her problems with nausea had started when she was "really little." When she was 7, after having seen a movie about Noah's ark, she developed an intense fear of dying which would most commonly affect her at bedtime. That fear seems to have abated relatively quickly but it had been disturbing enough for her to report it to me many years later.

In addition to the panic disorder, she was afraid of flying. Fran very much wanted to be able to fly without fear—especially since she had the opportunity to fly to Spain with her boyfriend in a few months' time.

And in our third and last session she revealed that she suffered from social anxiety, worried about what others might think of her. Fran reported that all of her anxiety problems had gotten worse since a recent "nightmare" cross-country road trip she had taken to transport a horse. I should have asked Fran what made the trip nightmarish; I didn't. I count that as a mistake.

Fran didn't know if her parents had ever had panic attacks, but reported that they were both alcoholics—her mother now sober. (Because of her parents' alcoholism, Fran did not drink alcohol or use recreational drugs.) Fran did know that her father had a "huge" fear of flying. She did not know if her two brothers had ever suffered from anxiety disorders.

Fran had been to more than one physician, all of whom had told her there was no physical basis for her nausea. She was currently taking mirtazapine, but felt it was not helping her anxiety or nausea. She had previously tried Sertraline but it had not helped. Fran had gotten temporary relief from benzodiazepines but was not taking any currently. Fran's affect was upbeat. She had no history of depression.

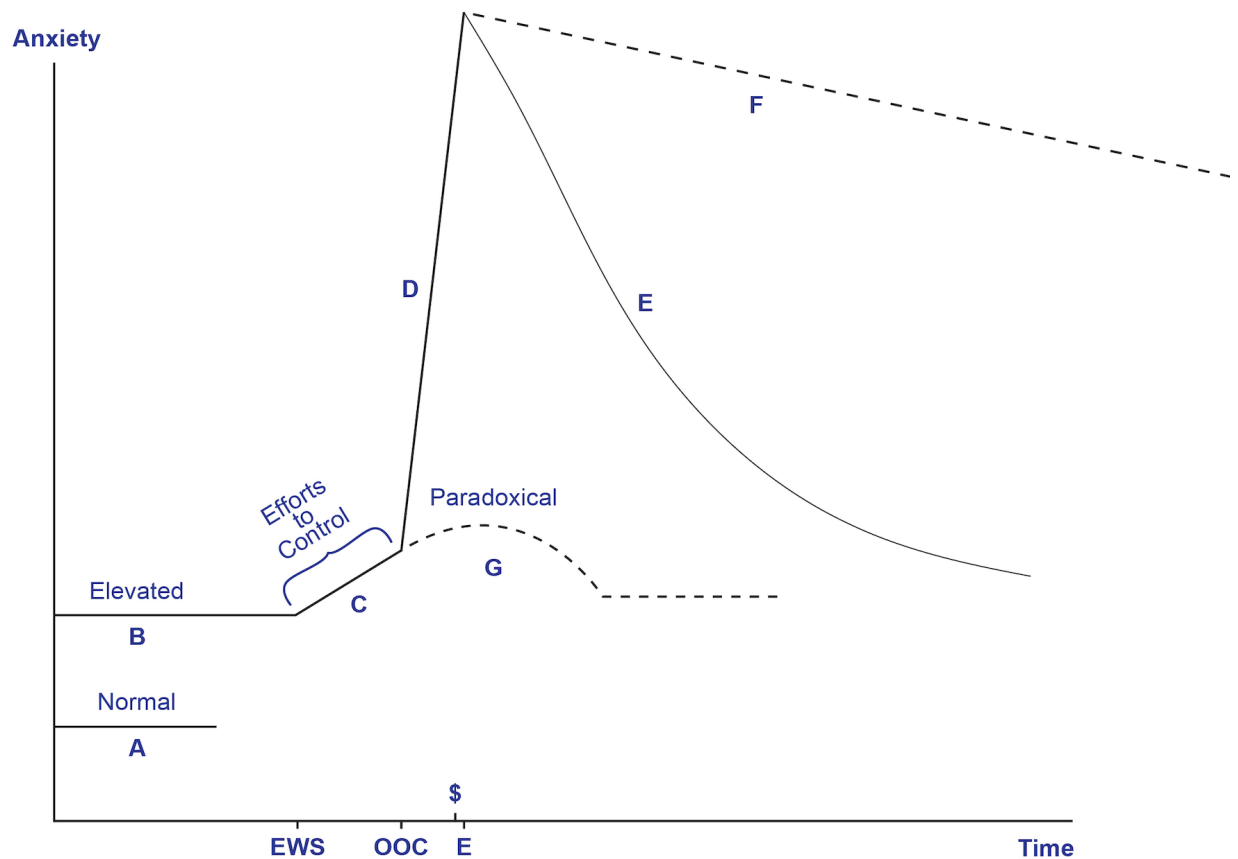
In sum, Fran presented a picture not uncommon for patients with panic disorder—recollection of anxiety dating back to childhood, other concurrent anxiety problems, incipient agoraphobia, and unsuccessful treatment with antidepressants tried for it, including an SSRI. Some people with panic disorders experience them only after a night of heavy drinking, or secondary to a major depressive episode. Both were ruled out in Fran's case. She appeared to be a good candidate for psychological treatment.

## 5A-6A. FRAN'S CASE FORMULATION, TREATMENT PLAN, AND COURSE OF THERAPY

### *Session 1. Introduction to the Paradoxical Procedure and Arranging a First Experience With It*

The treatment used to help Fran has two components—psychoeducation and paradoxical exposure. The educational component is delivered in the first session, and varies little from client to client. The presentation is anchored to a graph (Figure 1 below) depicting the natural history of a panic attack.

**Figure 1. Panic Attack Time Line**



If I am meeting with the client in person, I sit next to them and draw the graph as I speak. If we are meeting virtually, as was the case in the initial session with Fran, I text or email the client a photo of the graph. The presentation for in-person treatment, which I do most often, goes like this:

We're all alike in that we experience stress and anxiety. We're all different in how we react. Some of us can't sleep. Some of us lose our appetite. Some of us start eating more. And some of us, you and many others, have panic attacks.

Now I am going to draw you a graph of what happens during a panic attack, and from this graph we'll derive a way for you to deal with panic attacks.

The vertical axis of the graph is anxiety and the horizontal axis is time. OK. We all live at some level of anxiety [Segment A]. But panic attacks are like mountain peaks: You get to Denver and you are already at 5,000 feet—and then the mountains begin.

So panic attacks happen when your overall level of anxiety is a bit elevated [Segment B]. That could be for any number of reasons: you're dealing with something difficult in your life; you've had a couple of panic attacks and you're nervously waiting for the next one; or maybe you're just hardwired to live at a higher anxiety level than other people—some people are. So you're going along with your life at a somewhat higher than usual level of anxiety and then suddenly you start to feel a sensation in your body that you don't like. I call that an Early Warning Sign—labeled "EWS" on the graph—because if you've had a panic attack before, which of course you have, you know this bodily change signals that a panic attack is coming.

And so your anxiety goes up [Segment C], causing you to make Efforts to Control until you sense you're Out Of Control—labelled "OOC" on the graph—and you have a panic spike [Segment D], a full-blown panic attack.

The time interval between EWS and OOC can vary a lot, from a few seconds to a few minutes, but sooner or later you do get to OOC and have the panic spike. At that point you, and every other rational person, execute some kind of escape response [Segment E]. And by the way, panic attacks happen only to rational people like us. They don't happen to people with major mental disorders like schizophrenia.<sup>2</sup> You execute an escape response; and in the short run, escape is a pretty effective remedy for panic attacks. You calm down and eventually your anxiety gets more or less back to where it started.

Now, do you see that dollar sign just before the E along the horizontal axis? What does that mean? What it means is this: Let's say I came up to you just before you escaped and told you that I would give you this week's Powerball jackpot if you didn't escape but just stayed where you were? Would you stay, or would you say sorry and escape anyway? [Most clients say they would stay, some don't. It doesn't matter which way the client

---

<sup>2</sup> The intent of this sentence, obviously, is to reassure the client that having a panic attack doesn't mean she is crazy or could go crazy. Now, if a person has had the bad luck to be saddled with a diathesis to panic disorder as well as schizophrenia, it is certainly possible for them to experience panic attacks along with hallucinations and delusions. But considering the low base rate of panic disorder and the very low base rate of schizophrenia, resulting in the exceedingly low joint probability of suffering from both, we can expect that such people are quite rare. And note that panic attacks are not listed in the criteria for schizophrenia, and panic disorder is not one of the diagnoses that must be ruled out before conferring the diagnosis of schizophrenia.

S.R. Hamburg

*Pragmatic Case Studies in Psychotherapy*, <http://pcsp.nationalregister.org/>

Volume 22, Module 1, Article 1, pp. 1-34, 02-19-26 [copyright by author]

responds during my presentation.] Most people do say yes—because they really want that \$100 million or whatever. So what would happen then? This is what would happen. [And I point to Segment F on the graph.] You would calm down, much slower than if you'd escaped; and I don't have enough paper to show it, but your anxiety would eventually get back to where it was at the start.

Why does that happen? Why do you calm down? I think that's for two reasons. First, panic attacks use up a lot of energy and you just get tired. Second, and I think more important, is that after a while you realize that none of the things you feared during the panic attack happened: you did not fall down, you did not lose consciousness, you did not have a heart attack, you did not die. Those things never happen in a panic attack. Fear of them happening is one of the symptoms of a panic attack—the part that makes it terrifying. So eventually you calm down.

Now there are two advantages to staying instead of escaping. This first, of course, is the money. The second is that you leave the scene with a sense of mastery instead of in a state of terror. And so that situation does not end up becoming a cue for future attacks.

At the start, I said that we could derive a way to deal with panic attacks from this graph. To my mind, the most important part of the graph is the part from Early Warning Signs (EWS) to Out of Control (OOC) in segment [C]. What is the person doing during that time interval? [The client generally says something about trying to relax or calm down. Interestingly the word, "control," is hardly ever used.] What you and other rational people having a panic attack are trying to do is control what's happening in your body. But wait—what are you trying to control? Not voluntary bodily movements [I touch my thumb to the other fingertips on my hand]. You're trying to control bodily responses that are under the control of the autonomic nervous system.

It's called autonomic because it works autonomously of your will. You don't have to will yourself to breathe at night when you're asleep, or will your heart to keep on beating. Your autonomic nervous system takes care of all that without your having to will it. You don't control it. So when you start to feel changes in your breathing or your heartbeat that tell you that a panic attack is about to happen, you can't control that either. Yet that's what every rational person is trying to do when they feel a panic attack coming on. And by trying to control what they can't control, they are setting themselves up to feel out of control and so are setting themselves up to have a full-blown panic attack.

So what *should* you do when you start to sense these scary changes in your body? You try to make them worse. If your heart is beating faster, you do jumping jacks. If you are having trouble breathing, you don't try to catch your breath or breathe slowly and deeply; you hold your breath. If you are feeling nauseous, think "Vomit, it's OK, vomit!!"

Now you can't really make what's started happening in your body worse either—because, again, it's all controlled by the autonomic nervous system. But by trying to make these things worse, you will be going in the same direction as your body. You won't be

fighting your body, and so you will not be setting yourself up to feel out of control—and you'll prevent the full blown panic attack from happening. Instead of the panic spike, what will happen is what's shown by the dotted line [G] under "paradoxical." The sensations will get a little worse because that's the direction your body was going in anyway, and then they will subside. That's all you have to do to defeat panic attacks.

At the end of the presentation, I asked Fran how well the graph matched up to her experience. She said, as most clients do, that it matched up quite well. So then it was time to help her engineer a program of paradoxical exposure.

We agreed that a good place to start paradoxical exposure was large stores. Her task was to progress deeper and deeper into the store until she felt the onset of nausea. At that point she was to stop moving, pay close attention to her body, and try to make the nausea worse. When the nausea subsided she was to proceed deeper into the store until the nausea came on again and then repeat the paradoxical response. She was to continue an exposure session as long as she liked, but she could not leave the store if she was in a high state of anxiety or nauseous. She could leave only when she was calm and not nauseous. I told Fran, as I tell all my panic disorder clients, that she was free to call my cell phone at any time, especially during exposure, and that I would take the call. There the first session ended.

### ***Session 2. Processing Experiences with the Paradoxical Procedure and Planning More***

Fran came to my office for our second session, two weeks later. This was our first in-person meeting and, as always, I was impressed by how different the whole person was from what I imagined her to be, based on the image of her face on the screen: She was much taller. Fran was feeling improved and hopeful. She had done the paradoxical exposure in a few different stores and it had worked. Fran suggested that a good next exposure step for her would be to go to a large indoor venue such as the Chicago Museum of Science and Industry where she could "get lost"; that is, where she could get to a location that was deep enough inside so that she did not immediately know where the exit was.

Fran reported that a serious driving challenge was coming up for her. She had to drive to an equine event far outside her "axis of safety" and she didn't think she could do it. So we agreed that, in advance of the event, she would drive as far as the end of her "axis of safety" and then beyond it. She would take small roads and city streets so that she could easily pull over to do paradoxical exposure and go as far away from home as she comfortably could.

### ***Session 3. Adding as a Booster an Hypnotic Induction and a Hypnotic Suggestion***

When we met for the third and last time, in person three weeks later, Fran was further improved. Her drive beyond the "axis of safety" had been "perfect." And she had been able to drive to the equine event comfortably. She said that she was starting to make a distinction

between the anticipation of panic and actual panic. (I wasn't exactly sure what she meant by that but didn't inquire since she seemed to think that being able to make that distinction was a good thing.) At the equine event, she felt unusually "tranquil," as if she had taken a benzodiazepine. Her father had been in the hospital for heart surgery the week before and Fran had been anxious, but the thought of escaping was not as compelling as it had been before; and she said she thought that it was because "the physical part [of the anxiety]" was not there.

Fran's boyfriend, Jake, was preparing to take a long car trip to western Massachusetts to visit his family in about a month's time. Fran thought she could do it but was obviously anxious about it due to her earlier "nightmare" cross-country trip.

I felt that as a booster I should do some hypnosis. I explained hypnosis to her and she was willing to try it. So I instructed her to read my paper on hypnosis for anxiety (Hamburg, 2006a). And I immediately texted her a recording of my standard hypnotic induction and told her to listen to it once a day for a week or so until I sent her a recording of the actual hypnotic suggestion. I used the "permissive" induction cited in my earlier paper (Hamburg, 2006a). Here is an excerpt that illustrates the difference between that sort of induction and the traditional, imperative induction (i.e. "Your eyes are getting heavy and tired and you are becoming sleepy...Your body is heavier and heavier now"):

As you become as relaxed as you'd like to become, and as you let the entire weight of your physical self be supported by what you're reclining on, and as you just let all your muscles go, you may be feeling a pleasant feeling of heaviness in your body, like you might feel after taking a swim. And I don't know where you're feeling that heaviness most, and it doesn't matter that I know. All that matters is that you enjoy this experience.

Once the client has listened to the induction several times, I can truncate it for the recording in which I deliver the hypnotic suggestion. I also asked Fran to text me a picture of a map showing the route they would take.

My first thought was to record a travelogue—that is, a simple description of a trip, sometimes describing a particular route, sometimes not. I had first used travelogues to good effect with a schizoid, middle-aged woman suffering from irritable bowel syndrome. She was resistant to hypnosis, but liked to travel. So I asked her to close her eyes, as I described some the places that we had both visited. I used a travelogue again with a young woman who was moving to New York and was anxious about it. For her I recorded a walk up Broadway from the Battery to the Cloisters (Hamburg, 2017).

As I'd expected, I had travelled all the roads that Fran was about to take, some of them numerous times. So, at home following our third session, I made a recording of all the nice and interesting things she would see along the way. A few hours after making that first recording, I found myself disquieted: I felt that I had not included enough direct suggestions for relaxation in

the travelogue. So I recorded a second hypnotic suggestion focusing on relaxation. I recommended that Fran listen to both recordings (each about a half-hour long) every day.

Fran had an opportunity to go to Spain with Jake a few months hence, but needed to do something about her fear of flying. We discussed using hypnosis to help her with that and scheduled another session for that about a month later. (That fourth session did not take place, because she could not make the trip to Spain. See section 8a, below.)

## **7A. THERAPY MONITORING OF FRAN'S CASE**

As with all my cases, I take notes during the session, convert them into a prose narrative after the session, and review them before the next session. I also keep track of my success rate across similar types of cases as feedback for possibly changing my approach to such cases in the future. See my discussion of this in section 9 below.

## **8A. FRAN'S THERAPY OUTCOME**

A few weeks after I sent Fran the hypnosis recordings, I received this email from her:

Hi Sam!

Wanted to give you an update on the road trip!

I listened to the recordings at least once a day before we left for our trip (including the morning of). The day before and morning of, the only jitters I was really feeling was making sure we packed everything we needed. I had intrusive thoughts pass through leading up to the trip here and there, but they were not panic/anxiety inducing.

The drive itself was so beautiful and I was able to remain calm, even during rain and fog in Western PA. I had a lot more confidence in myself, my car, and my boyfriend than I would have had if not been for our sessions together.

I did experience stomach issues from New Jersey to Massachusetts, and still I did not feel a panic attack coming.

I will not be going to [Spain] as the date [Jake's] company selected for the trip occurs during my cousin's wedding, so [Jake] will be going solo. However, we will be planning a trip to [Seattle] in January or February to visit friends. That being said, I'd like to reschedule our session on Monday for another time this fall to touch base so I can reflect a little more on the road trip highs and lows.

Thank you again for your tremendous support guiding me through an experience that could have been unbearable. So appreciate you and your work!

Attached to the email was a photo that had been taken by Jake while Fran was driving. It was of a wooded hillside in fog in western Pennsylvania. In the hypnosis recording, I had mentioned that western Pennsylvania was particularly beautiful.

### 3B. EMILY'S GUIDING CONCEPTION

What distinguishes fear of flying (aviophobia) from other phobias is dread. Most phobic stimuli—small animals, insects, heights, blood—can be avoided if the phobic person wishes and pays attention. In aviophobia, exposure to the phobic stimulus is usually scheduled in advance; and from that time to boarding time, it is present in consciousness, generating increasing distress as the day of the flight approaches. If fear of flying were confined only to the time the person was on the plane it could be controlled easily. With an adequate dose of a benzodiazepine the aviophobic would space out, or even sleep their way, through the flight—sedation being a small price to pay for anxiety relief.

But in flight phobia, the person is confronted by the phobic stimulus not just at the time they board the plane but, in their imagination, for days or weeks in advance. Dread was identified as a core component of fear of flying in the first report of the disorder—insomnia was listed as one of its manifestations (Anderson, 1919, as cited in Oakes & Bor, 2010a). In the present day, internet advertisements for commercial operations offering treatment for aviophobia invariably cite examples of people who somehow managed to fly to their vacation destination, only to have their vacation ruined by dread of the return flight.

There are two other phobias where exposure to the phobic stimulus is scheduled in advance—public speaking phobia and needle phobia—however, these differ from aviophobia in some important ways: a) the fear is not mortal fear but fear of social embarrassment or physical discomfort; b) the feared event lasts for minutes (sometimes seconds, in the case of needle sticks), not hours, and; c) both can be remediated by easily accessible, therapist-guided exposure or even, in the case of public speaking phobia, self-help resources such as Toastmasters. (A quick and easy paradoxical method for combating public speaking phobia can be found in Table 1, which is presented at the end of the article.)

CBT approaches to aviophobia have focused not on the dread of an upcoming flight but on desensitizing the fear of the experience of flying itself; the reasonable assumption being that if clients had an easier time in the airplane, their dread would diminish accordingly. Most published studies of CBT for aviophobia have included *in vivo* exposure, to stationary aircraft and/or to actual flying, in addition to cognitive restructuring, psychoeducation regarding the safety of flying, and relaxation training.

When *in vivo* exposure has not been used, audio visual displays have been used in imaginal exposure treatment to simulate the experience of flying. The most recent innovation in simulation is virtual reality. In "small scale" virtual reality exposure (VRE) the VR headset is used to simulate the sites and sounds of flying; in "large scale" VRE, in addition to the headset, the client is seated in an installation that can simulate the movements of a plane (e.g., Gottlieb et al., 2021). In a recent study of small scale VRE, the VR headset was connected to a smart phone

app that clients could access at their convenience (Donker et al., 2023). Both this study and the study by Gottlieb’s group (Gottlieb, et al., 2021) of large scale VRE found significant therapeutic effects for VRE treatment. Overall, CBT has produced decreases in post-treatment anxiety and increased post-treatment flight frequency and flying time—although these studies have been criticized for a variety of methodological deficiencies (Oakes & Bor, 2010b).

Back in the late 1980s, before most of the research on CBT for aviophobia had been done, a young woman with a fear of flying was referred to me by her family doctor. I did not have access to *in vivo* exposure for this client. And in its absence, I had no confidence that imaginal desensitization, even if combined with psychoeducation and relaxation training, would be effective. So instead of focusing on the experience of flying, I focused on the dread. I hypothesized that if, instead of unalloyed dread of the flight, the client could experience an admixture of dread and, paradoxically, positive anticipation, during the time before the flight, the flight itself would become easier to manage. The technique I developed for this client, which was successful, evolved into the approach I used to help Emily.

#### **4B. ASSESSMENT OF EMILY’S AVIOPHOBIA**

As mentioned above, at the time of treatment, “Emily” was a 54-year-old, White, married woman with two adult children. She had been referred to me by her primary care physician. In her initial email to me requesting treatment, she wrote,

Currently, I take Xanax, prescribed by Dr. E [who had referred her] before flying but still have anxiety. And I’m flying more and more these days and would love to have it be less anxiety inducing.

Emily was flying more and more because she was a vice president in a dynamic, Fortune 300 corporation with national scope. She denied any other psychological or emotional problems; and she indeed gave the impression of being a happy, well-adjusted person.

Emily reported that for the past 20 years she had needed to take Xanax (alprazolam) to fly. She would take .25 mg before the flight; and then, if she felt it wearing off during the flight, she would take another .25 mg. There was no traumatic incident that had provoked her fear of flying. Rather, about 20 years before we met, she had begun traveling almost weekly for work. She believed that an accumulation of non-traumatic but anxiety provoking experiences, e.g. landing in a snowstorm, had resulted in a fear of flying that gradually increased with more and more flights over the years. She was careful to check the weather forecast at both her arrival and departure cities before each flight.

For Emily, as for most people who fear flying, the most challenging moments of the flight were take-off and episodes of turbulence. Flying was easier, although still anxiety provoking, if she was sitting in the front of the plane and if she was traveling with a companion. She would

begin to get very anxious only on the day before the flight, but the anxiety would persist until her plane landed.

Emily's only prescribed medication, aside from the Xanax, was Synthroid. She denied abuse of alcohol or use of any non-prescribed drugs.

### **5B-6B. EMILY'S CASE FORMULATION, TREATMENT PLAN, AND COURSE OF THERAPY**

Emily's treatment consisted of three sessions, all virtual, plus about an hour of my time preparing a hypnotic recording that was emailed to her. Shortly after her first, post-treatment airplane trip we had a brief follow-up phone call. (She lived in a distant Chicago suburb, worked remotely most of the time, and greatly preferred to avoid coming downtown.)

#### ***Session 1: Developing a Treatment Plan***

The first evaluation task in the initial interview was to establish whether Emily's fear of flying was primarily that, or a fear secondary to an underlying panic disorder. So I asked her this standard question, "When you are on a plane are you afraid of the plane falling down, or are you afraid that something might happen to you—you might become sick in some way—and being trapped in the plane you would not be able to get help?" She replied that she was afraid of the plane falling down—primary aviophobia.

Since I was contemplating hypnosis with her, the second evaluation task was to assess her hypnotizability. I do this via a set of yes/no questions:

1. Are you absent minded?
2. If you have the radio on to NPR or WBBM [the local news radio station] would you be able to read the newspaper at the same time—or would you have to turn off the radio to concentrate on the paper?
3. Have you ever taken a drive of, say, an hour from point A to point B—you get to point B and you realize you have no memory of having gone past point C in the middle?
4. Have you ever been working with your hands, fixing something or cooking or playing an instrument or playing some sport and only afterwards realized that while doing that you had injured yourself in some way?
5. If you are working on something at home, whether for home or work, and your husband calls out your name, do you immediately hear it; or does he have to call it out louder and louder—and maybe even have to tap you on the shoulder?

All of these questions concern the person's ability to narrowly focus attention and screen out external stimuli; to the degree a person has this ability, the induction of a trance state is easy. Emily answered yes to two of the questions which meant she wouldn't be a wonderful hypnotic

subject as, for example, Amy had been (Hamburg, 2017). But two yes answers meant that hypnosis with her would at least be feasible.

Only after asking the questions did I explain that they pertained to hypnosis and that I was thinking about using hypnosis to help her. I then said a few introductory words about hypnosis, explaining that it had nothing to do with will or suggestibility but only with the ability to narrowly focus attention. Emily said she was willing to try hypnosis, so I asked her to read my paper on hypnosis in anxiety disorders (Hamburg, 2006a). I told her that I was going to email her a recording of my hypnotic induction and asked her to listen to it once a day. I explained to her that if she listened to it a number of times, then when I recorded a hypnotic suggestion I could introduce it with a truncated hypnotic induction.

My treatment for aviophobia has two components: psychoeducation, focused on the safety of flying; and an attempt to alloy positive anticipation of the flight to the dread. Both these components are delivered, at least in part, via hypnosis.

For the psychoeducation, I recommended that Emily read two books, *Flying Without Fear* (Brown, 2009), and *Cockpit Confidential* (Smith, 2018). The first, written by a psychologist, contains the usual CBT recommendations for dealing with aviophobia but contains a great deal of information about airplanes and aviation, designed to allay fears of flying. The second, by a commercial pilot, is not designed for aviophobics *per se* but likewise contains reassuring "inside" information about aviation, especially about the elaborate measures taken to assure that flying is safe.

To generate positive anticipation about flying I first asked Emily what she most enjoyed reading. She said that her favorites were psychological thrillers with plenty of plot twists. I asked her to buy a new one and to read into it far enough so that she was really curious about what would happen next—and then stop reading it. I explained that she would resume reading the book on her next airplane trip, and that I would explain more at our next session.

### ***Session 2. Reviewing the Homework Reading and Preparing for a Hypnotic Suggestion***

By our second session, Emily was almost done reading *Cockpit Confidential* and had found much of it reassuring but some parts, e.g. about drones, a bit scary. She had not read *Flying Without Fear* yet. I asked her to do so, then write me a list six propositions which, if she believed them deep in her bones, would cause her to be less fearful of flying.

The novel Emily had chosen was *The Housemaid's Secret*, by Freida McFadden. She hadn't started that one. I reminded her that she needed to read enough into the book until she was really eager to find out what would happen next, and then stop reading it. I requested that she then write me an email about what she was curious about and what she most wanted to know about how the plot would unfold. After that she was to seal the book in a manilla envelope.

Then I explained the hypnotic strategy. She would take the book on the plane with her. She could take it out of the envelope and start reading it as soon as the plane taxied down the runway to take off. As soon as the plane leveled out after take-off and passengers were told they could use their electronic devices, she had to put the book back in the envelope. After that, she could take the book out of the envelope only if: a) the pilot announced they were about to enter an area of turbulence, or if; b) at any point after take-off the fasten seatbelt sign turned on again. I told her that the hypnotic suggestion would contain several messages—that she was really curious about what would happen next in the book; that over the days preceding the flight she would find herself becoming increasingly impatient and irritable about not being able to find out what happened next; that once she started to read the book she would be very aware of all the unexpected sounds and movements the plane was making and that she would be irritated by their distracting her from her reading.

I told Emily that once the plane had emerged from the area of turbulence she would have to stop reading, and that there would also be a hypnotic suggestion that she would find that to be frustrating and irritating. And I explained that her reassuring propositions about flying would be interwoven in that hypnotic narrative. She said that all of this was acceptable to her. I am not sure how much she believed hypnosis would actually work. I suppose she was not sure either, but she was certainly willing to try it. Based on previous experience, I was guardedly optimistic that it would work. (But I must confess that even after almost 40 years of doing hypnosis I am always, to begin with, skeptical that it will work, and then pleasantly surprised when it does—as it usually does.)

A week or so later Emily sent me her reassuring propositions and the information about *The Housemaid's Tale*. In the meantime, I had read a little bit about the book online. Emily's reassuring propositions were:

- Air travel is 200 times safer than automobile travel with two million flights taking off and landing each year.
- Pilots are experienced with 3000+ hours of flight time. They have twice-yearly physicals by FAA appointed doctors and have to retest for their jobs annually.
- Maintenance workers are held to rigorous testing and standards.
- Airplanes have many back-up systems and manufacturers exceed regulations when building planes. Additionally, older planes are regularly overhauled.
- Flight plans are set to avoid turbulence as much as possible for comfort and not safety.
- While drops due to turbulence may feel like you have fallen a lot, the reality is it's typically 10 to 20 feet.

I was ready to record the hypnosis. (An annotated transcript can be found in Table 2, which is listed at the end of this article.)

### ***Session 3. Review of Listening to the Hypnosis Recording***

Our third session took place after Emily had been listening to the hypnosis recording for about two weeks. My note for that session is very short:

Couldn't get into a deep hypnotic state. Seems to be self-conscious.

Rx: Just lie there and have it on. Don't try to listen or not listen.

My guess was that Emily was trying to hard to feel hypnotized. My hope was that if she simply let the sound of the recording wash over her, she would get into a deeper hypnotic state.

### ***Follow-Up Phone Call***

Our third session was the last time I saw Emily. Our next contact, four weeks later, was a phone call I made to her shortly after she returned from her trip. She was elated. The outbound trip was much better than she had expected, and she was relieved when she could finally open her book. The return trip was even better; she just read her book the whole way back—as many clients do.

## **7B. THERAPY MONITORING OF EMILY'S CASE**

As mentioned above, as with all my cases, I take notes during the session, transform them into a prose narrative after the session, and review them before the next session. I also keep track of my success rate across similar types of cases as feedback for possibly changing my approach to such cases in the future. See my discussion of this in section 9 below.

## **8B. EMILY'S THERAPY OUTCOME**

As mentioned above, for the purposes of this article, I wrote Emily a follow-up email a little more than seven months after our last session. Here is what I wrote to her:

It's about a year since we first met and I am curious about how you are doing with flying these days. Is it easier than before we worked together? And is there anything in particular that you are doing these days to cope with flying?

I look forward to hearing from you. But if you don't feel like responding, I absolutely understand.

Three hours later she responded:

Dr. Hamburg -

Thanks so much for reaching out! I was literally telling someone last week about how you helped me. I still take a Xanax right before I get on the plane but all of the anxiety is much better. I don't check the weather ahead of time or worry about where I am seated on the

plane, etc. Turbulence doesn't cause me to white knuckle. If it is a rough flight, I am able to breathe through it and also replay the things I learned about how it is safe.

Hope all is well with you - and thanks again for your help making flying better for me!

Take care –

## **9. DISCUSSION OF THE CHANGE MECHANISMS IN THE TWO CASES AND THE FUTURE OF PARADOXICAL INTENTION**

Neither Fran's case nor Emily's case exhibits unusual features. On the contrary, each stands as an exemplar for many cases of the same type I have treated in the same way, with only minor variations from case to case, over many years. I never come as close, as a psychotherapist, to having a standard operating procedure—comparable to that for replacing a cataract-occluded lens or, for that matter, brake pads—as I do when treating panic disorder and aviophobia.

Both cases were treatment successes—in the clients' eyes, and in mine. There was no significant follow-up interval for Fran but the pre-post treatment changes in her were stark; and once people learn to avert panic attacks using paradoxical intention, in my experience they don't unlearn it.

The follow-up interval for Emily was longer than the six months used in some of the studies of CBT for aviophobia. At follow-up Emily still suffered residual anxiety about flying. But the criterion for success in studies of CBT for aviophobia is not anxiety abolition but reduction—and Emily certainly achieved that.

The two cases, although successful, raise a variety of questions. The answers are, for the most part, conjectural.

### ***What is the Overall Success Rate for PI in Panic Disorder and Aviophobia?***

I can only provide estimates for my own work. In the panic disorder cases, numbering by my estimation between 160 and 240, the success rate is very high, 80% at least and maybe substantially higher. If my success rate for such a well-defined, narrowly delimited disorder were lower, I would have long ago been searching for an alternative approach (as compared to say couple therapy, in which a 70% positive outcome rate—which I am not sure I have attained, despite a good deal of experience and expertise [Hamburg, 2023]—is considered outstanding [Bradbury & Bodenmann, 2020]). I believe my success rate is similar for the paradoxical treatment of aviophobia. Again, if it hadn't been I would have abandoned it and sought a different approach. Over the years, as I have tried to improve as a couple therapist, my approach has steadily evolved. My approach to panic disorder and aviophobia has not evolved. There was no need for it to. I hope that someday some enterprising researcher will do a randomized, controlled trial comparing the procedures described here with those of conventional CBT.

### ***Why Was Fran Willing To Try Paradoxical Exposure After Just One Initial Therapy Session?***

Consider: Somebody sees a face on a screen for the first time for about an hour. At the end of the hour she agrees to enter into a situation that is frightening to her, and that she would otherwise avoid. What would induce her to follow what the face on the screen is suggesting? Persuasion is a component of all psychotherapy (Frank, 1973) perhaps a larger component than usual in Fran's case. And in my opinion, it is harder to be persuasive over a screen than in person. I think what persuaded Fran nevertheless was the detailed, moment-to-moment description of a panic attack, quoted above and illustrated in Figure 1. The description accorded well with her experience, and so the logic of not trying to control what was uncontrollable was compelling to her, and gave her the confidence to try it.

### ***What Role Did Desensitization By Exposure Play In These Cases?***

In Emily's case, none at all. The transcript of Emily's hypnosis certainly reveals direct suggestions for relaxation during airplane flights in general, including the reasons gleaned from her reading about the safety of air travel. But she was not asked to systematically imagine her particular flight in detail and imagine herself to be relaxed. In fact she was asked to imagine herself as impatient and irritable at certain points in the flight. And, of course, there was no *in vivo* desensitization or even VR desensitization.

Fran's case was a bit more complicated. There was what at first glance would seem to be systematic desensitization by exposure. But though the topography of the exposure was like that of the usual systematic desensitization, the underlying psychological process was distinctively different.

By contrast, consider a case of classic *in vivo* desensitization: A man with a lifelong fear of heights is instructed to sit in a chair about 15 feet away from a closed, 13<sup>th</sup> floor, double-hung window. The therapist asks him if the window can be opened just an inch. The client says yes. The window is opened and the client reports that his anxiety has suddenly increased. The client is instructed to stay right where he is until he is comfortable moving his chair a bit closer to the window. When he does, the window is opened another inch, his anxiety rises again and falls again, and then he moves a little closer. This routine is repeated again and again, the surefire psychophysiological process of habituation does its job—and within 1.5 hours he is leaning out the window (Hamburg, 2006b).

That process of repeated habituation to the anxiety-provoking stimulus is not what was taking place in Fran's exposure—because the anxiety-provoking stimulus never presented itself. Recall that panic disorder is defined as the fear of the physical symptoms of a panic attack or, by my preference, the fear of panic attacks. Fran exposed herself to situations she thought would stimulate a panic attack, but the panic attacks never happened because they were averted by the

paradoxical intention—and so there was nothing for Fran to habituate to. Her exposure sessions are better understood as repeated experiences of safety signals—that the panic was not going to occur—in more and more challenging situations in which she heretofore had expected panic attacks. Fran’s treatment removed not her anxiety in response to the anxiety-provoking stimulus but the stimulus itself.

### ***What Accounts for Emily’s Improvement?***

The short answer is I don’t know. It could have been the psychoeducational component. Or it could have been the psychoeducational component, based on the propositions Emily chose, as delivered in the hypnosis. It may have been the paradoxical task. Or it may have been the paradoxical task only because she visualized it repeatedly listening to the hypnosis recording. It could have been the combination of the two components. (However, it should be borne in mind that, based on my search of the literature in PubMed, hypnosis as a mono-treatment has never been demonstrated to be effective in aviophobia.) It may have been some of the CBT tips Emily picked up from *Flying Without Fear*. Recall that in her follow-up response she wrote about being able to “breathe through” a “rough flight.”

I do not think Emily’s improvement was due to non-specifics of the therapy relationship because we met only three times, and only virtually. My best guess, is that the improvement was due to the paradoxical directive combined with the reassuring propositions, both of which Emily received repeatedly via the hypnosis.

### ***How Does Paradoxical Exposure to Anxiety-Provoking Stimuli Work?***

My belief is that paradoxical exposure works not by desensitizing anxiety but by circumventing it. Another way of putting it is that paradoxical exposure works by reframing the anxiety-provoking stimulus as something more neutral—as some kind of roadblock that must be gotten around. Once the client successfully evades the anxiety, they realize that it was unwarranted and can let it go. This is the best I can do by way of explanation.

### ***Why Did Paradoxical Intention Disappear From the Research Literature on Treatment of Panic Disorder?***

My search of the literature identified five studies of paradoxical intention in agoraphobia/panic disorder, which I had been unaware of before preparing this article—three group studies (Asher, 1981; Mavassikalian et al., 1983; Michelson et al., 1988) and two case studies (Dattilio, 1987, 1994). All five demonstrated the therapeutic potential of paradoxical intention in panic disorder. I found nothing published after 1994. I think that is for two reasons. The first is that paradoxical intention did not fit into any already established “research programme” (Lakatos, 1970)—a succession of theories and associated empirical work, emanating from an initial theoretical idea. Obviously, by the 1980s, CBT was a well-established

research program, by Lakatos's definition, and it was easy for research on CBT of panic disorder to fit right in. The second reason is that paradoxical intention did not provide fertile ground for research. There is not much to research about a therapy that consists, essentially, of an instruction. CBT for panic disorder, on the other hand, offered many opportunities for research, as the over 200 references cited by Craske & Barlow (2014) attest.

### ***Is Anyone Out There Using Paradoxical Intention To Treat Panic Disorder Anymore?***

I find it hard to believe that I am the only person in the English-speaking world using paradoxical intention to treat panic disorder, although strictly speaking that is possible. The private nature of psychotherapy practice (as opposed to the public nature of psychotherapy research) militates against our knowing for sure. Since Frank Dattilio had published two case studies many years ago, I thought that, in connection with this article, I would write to him and ask if a) he was still using paradoxical intention, and; b) if he knew of anyone else who was. In his rapid and gracious response to my email, he reported that he had "not treated anyone with anxiety using paradox in years" and that he didn't know of anyone else who was.

Practicing psychotherapists not only do their work behind closed doors; they don't talk much to the public or even to their colleagues about what they do. (The other day I mentioned this article to a friend of mine, another clinical psychologist with whom I have been in regular contact for more than 40 years. He was surprised to hear that I treat panic disorder with paradoxical intention.) And practicing psychologists have little incentive to write up and publish what they do. Their career success doesn't depend on it; quite opposite to the situation of researchers. Although I have made regular use of paradoxical intention for over 40 years—the two cases reported here date from the past year—I would have never bothered writing this article if I had not been requested, as a member of the editorial board of this Journal, to submit another contribution; and I had these two recent, related cases at hand. My answer to the question, is anyone else out there treating panic disorder the way I do, is the same as my answer to the question, are there intelligent beings elsewhere in the universe: I suppose they're out there somewhere, but I'll never know for sure.

## **REFERENCES**

- Anderson, H. G. (1919). *The psychology of aviation: The medical and surgical aspects of aviation*. Oxford University Press .
- Asher, L. M. Employing paradoxical intention in the treatment of agoraphobia. *Behaviour Research and Therapy*, 19, 533-542.
- Bradbury, T. N. & Bodenmann, G. (2020). Interventions for couples. *Annual Review of Clinical Psychology*, 16, 99-123.
- Brown, D. (2009). *Flying without fear*. New Harbinger Press.

- Craske, M. G. & Barlow, D. H. (2014). Panic disorder and agoraphobia. In M. G. Craske & D. H. Barlow (Eds.) *Clinical handbook of psychological disorders: A step-by-step treatment manual* (pp. 1-61). The Guilford Press.
- Dattilio, F. M. (1987). The use of paradoxical intention in the treatment of panic disorder. *Journal of Counseling and Development*, 66 (2), 66-67.
- Dattilio, F. M. (1994). Paradoxical intention as an alternative in the treatment of panic disorder. *Journal of Cognitive Psychotherapy*, 8 (1), 33-40.
- Donker, T., Fehribach, J. R., van Klaveren, C., Cornelisz, I., Toffolo, M. B. J., van Straten, A. & van Gelder, J. L. 2023. Automated mobile virtual reality cognitive behavior therapy for aviophobia in a natural setting: A randomized controlled trial. *Psychological Medicine*, 53 (13), 6232-6241.
- Frank, J. D. (1973). *Persuasion and healing*, 2<sup>nd</sup> ed. Johns Hopkins University Press.
- Frankl, V. (1960). Paradoxical intention: A logotherapeutic technique. *American Journal of Psychotherapy*, 14, 520-535
- Gottlieb, A., Doniger, G. M., Hussein, Y., Noy, S. & Plotnik, M. (2021). The efficacy of a virtual reality exposure therapy treatment for fear of flying: A retrospective study. *Frontiers in Psychology*, 12, 2021.641393
- Greenberg, L. S. (2002). *Emotion-focused therapy: Coaching clients to work through their feelings*. Washington, DC: American Psychological Association.
- Hamburg, S. R. (2006a). Hypnosis in the desensitization of fears of dying. *Pragmatic Case Studies in Psychotherapy*, 2(2), Article 1, 1–30. Available: <https://pcsp.nationalregister.org/>  
<https://doi.org/10.14713/pcsp.v2i2.873>
- Hamburg, S. R. (2006b). Rapid change and clinical empiricism. *Pragmatic Case Studies in Psychotherapy*, 2(2), Article 4, 1-3. Available: <https://pcsp.nationalregister.org/>  
<https://doi.org/10.14713/pcsp.v2i2.876>
- Hamburg, S. R. (2017). Metaphoric tasks in psychotherapy: Case studies of “Margie’s” self-image and “Amy’s” pain. *Pragmatic Case Studies in Psychotherapy*, 13(4), Article 1, 284-328. Available: <https://pcsp.nationalregister.org/>  
<https://doi.org/10.14713/pcsp.v13i4.2020>
- Hamburg, S. R. (2023). *Couple therapy technique: A homework-based method to guide the perplexed clinician*. (Open access, available at samrhamburgphd.com)
- Kennedy, P. (2018). *Cockpit confidential: Everything you need to know about air travel*. Sourcebooks.
- Kim, R. S., Poling, J., & Ascher, L. M. (1991). An introduction to research on the clinical efficacy of paradoxical intention. In G. R. Weeks (Ed.) *Promoting change through paradoxical therapy* (pp. 216-251). Brunner/Mazel.

- Lakatos, I. (1970). Falsification and the methodology of scientific research programmes. In I. Lakatos & A. Musgrave, *Criticism and the growth of knowledge* (pp. 91-196). Cambridge University Press.
- Mavassikalian, M., Michelson, L., Greenwald, D., Kornblith, S., & Greenwald, M. (1983). Cognitive-behavioral treatment of agoraphobia: Paradoxical intention vs. self-statement training. *Behaviour Research and Therapy*, 21(1), 75-86.
- Michelson, L., Mavassikalian, M., & Marchione, K. (1988). Cognitive behavioral and psychophysiological treatments for agoraphobia: A comparative outcome investigation. *Behavior Therapy*, 17, 91-108.
- Morin, C.M., Bootzin, R.R., Buysse, D.J., Edinger, D.J., Espie, C.A., & Lichstein, K.L. (2006). Psychological and behavioral treatment of insomnia: Update of recent evidence (1998-2004). *Sleep*, 29 (11), 1398-1414.
- Oakes, M. & Bor, R. (2010a). The psychology of fear of flying (part I): A critical evaluation of current perspectives on the nature, prevalence and etiology of fear of flying. *Travel Medicine and Infectious Diseases*, 8, 327-338
- Oakes, M. & Bor, R. (2010b). The psychology of fear of flying (part II): A critical evaluation of current perspectives on approaches to treatment. *Travel Medicine and Infectious Diseases*, 8, 339-363.
- Peluso, P. R., & Freund, R. (2023). Paradoxical interventions. In C. E. Hill & J. Norcross (Eds.), *Psychotherapy skills and methods that work* (pp. 199-223). Oxford University Press.
- Salzman, L. (1982). Obsessions and agoraphobia. In D. L. Chambless & A. J. Goldstein (Eds.) *Agoraphobia: Multiple perspectives on theory and treatment*. Wiley.
- Weeks, G. R. (1991). *Promoting change through paradoxical therapy*. Brunner/Mazel.

### **Table 1. Paradoxical Intension for Public Speaking Anxiety**

People with a fear of public speaking are generally afraid of this sequence of events: a) they will be manifestly anxious; b) the audience will notice; and c) the audience will draw negative inferences about them as a result. Accordingly, the paradoxical instruction is as follows: Take a couple of pieces of paper up to the lectern with you. Purposely shake them, as if you were trembling. Then point to your trembling hand and say, smiling,

Don't mind me folks. I'm always like this at the start of a talk. I'll settle down soon enough.

Behaving in this way: a) averts the person's anxiety about being manifestly anxious and being noticed; and b) averts the person's anxiety about what the audience will be thinking because they are told the speaker doesn't think the anxiety is a big deal and they shouldn't either.

### Table 2. Emily's Hypnosis

*The transcription below begins with the hypnotic suggestion. It does not include the induction that preceded it. Letters in brackets [ ] refer to the commentary that follows the transcription.*

".....Now, so much has happened since you and I last met...that in some ways you're, you're not the same Emily that you were...when we first met.

[A] The knowledge that you've received—things you didn't know before—this knowledge has changed you. It's made you...at least somewhat more relaxed about the thought of flying in an airplane...These things you had no idea were the case...for example that air travel is 200 times safer than travelling by car...so you're really safer whenever you walk into an airplane than when you get into your car...to get to the store...or to go to the train station...Imagine being just as relaxed going into the plane as you are when you get in your car and close the door and hear that 'chunk' of the door....And you do some of the same things, don't you. You get yourself comfortable in the seat, *you fasten your seatbelt*—it's quite similar...except it's so much more safe...to fly in a plane...

[B] There's this wonderful feeling—that I feel anyway—when I'm going to take a trip...You know, it's been... very hectic to prepare for the trip, to pack, to make sure I remembered everything, y'know, to get there on time, to make sure that I have somebody to get me there on time, and then hoping the traffic on the Kennedy won't be so terrible that I'm late...Then of course there's the hassle of going through TSA Precheck—even if you have TSA Precheck, it's a hassle...And so then...once I board the plane...and then I have to find my seat and get my carry-on stowed away where it should be...And finally after having done so much in preparation for the trip...

[C] so many things that you have been responsible for, hassle through and worry about...after all of that, you're now sitting in your seat in the plane, with your hand luggage stowed away, with whatever you're going to read in your lap...And your seatbelt is fastened...And for the next few hours there's nothing for you to worry about, there's nothing for you to hassle over, it's all somebody else's responsibility...And there's such a feeling of *relief*...that all that hassle and worry is over...because now you're not in charge, somebody else is...who, as a matter of fact, really knows what they're doing...

[D] From your reading you know that pilots have at least 3,000 hours of flight time...and they're in great physical condition because they've been examined...twice a year...And you know that the maintenance people are held to the same high standards...And you know that airplanes are over-engineered...to be safe...So much redundancy has been built into airplanes in terms of backup systems and safety mechanisms...these features of the planes exceed...the

### Table 2. Emily's Hypnosis, continued

regulations that the FAA has. They are over-engineered, and of course the older planes are regularly overhauled and maintained [sic]...

But I've been impressed in recent years at how often I've gotten onto a pretty new airplane, actually...And you know that they have great information about the weather en route...And so the air traffic control is able to create flight plans that will steer the planes...around the bad weather and so avoid...turbulence...And that's just for comfort because, as you know from your reading and from what I have told you, turbulence *feels* much worse than it actually is... Something that's very alarming to us—and that's built in...to us. We can't help feeling alarmed when we have any sense that we may be falling...This is a natural human response...

You may not know this but you can have a toddler crawling on a hard solid surface that's painted to look as if it's dropping off...It's called a visual cliff. And toddlers, as they're crawling—so they're not toddlers, they're actually infants...you know, less than a year old, not at the point where they've learned to walk—but these little creatures, less than a year old, they crawl up to the edge of the visual cliff, they look down, it looks to them as if it's a cliff even though it's solid and perfectly level...they won't go past the visual cliff. So it's built into us...It's hardwired for us to be alarmed when we feel any sensation that we're falling. So you can understand that, and you can kind of forgive yourself for having these feelings, because they're just baked into the cake...And so it's just a matter of getting through them, which you do very quickly because turbulence never lasts very long...

[E] And so I wouldn't be surprised if...as you prepare...for the trip...you find yourself getting just a little more anxious as the time of the trip comes...because you've got all these things to prepare and if it's a business trip you've got all the business stuff to prepare and all the things I talked about...

[F] But also you're getting...a little...*antsy* ...because you would really, really like to continue reading your book, 'The Housemaid's Secret'...But you and I have made a deal that you would read only so far in the book until I gave you instructions to read further...And I bet you're interested in those instructions...This is what they are: You get on the plane, you have the book in front of you, it's closed...You cannot open it until the plane starts its taxi, until it starts moving...and then you can read it for the first minute or two or three—it doesn't take very long at all, for the plane to get up to 10,000 feet, to get up to that altitude where you are told it's safe to use electronic devices....And then when you get to 10,000 feet you have to stop reading the book....even if you're in the middle of something very... intriguing...even if you're finding...just about to find out...what the story is with Wendy...that she's not coming out of the room...or when you're just about to find out...something *sinister*...about Xavier or about

### **Table 2. Emily's Hypnosis, continued**

Douglas...or maybe even you're about to get an important clue about Millie's past...Even if you're just about to find any of that information out and the announcement comes that you've hit 10,000 feet, you have to close the book...

And then you can do whatever you want but you cannot read the book...until either of two things happens...The first is that you get an announcement from the pilot that you're about to hit a zone of turbulence...Then you can open the book up again and continue to read...and you can continue to read until you're past the turbulence, until they turn the fasten-seatbelt sign off again. Now depending on how bad the turbulence is, the shaking may make it a bit hard to keep on reading...but you really want to keep on reading...so you may find the turbulence a bit...frustrating and...irritating. And then...when the turbulence ends...you have to stop...Then you have to stop...You have to stop reading...no matter what you're in the middle of. You just put your bookmark in the book and you put it back in your purse or wherever and you just—you're gonna do something else for the rest of the flight...

You may well find yourself a bit irritated by that...So when are you going to continue your reading? Well, I'm afraid that the deal between you and me is going to be that...you're not going to pick up the book again.

Oh, just a minute! So if the pilot makes that announcement that you're about to go into a situation of turbulence [G] or the other condition is if you begin to feel some turbulence and the seatbelt sign comes on. As soon as you feel significant turbulence, you can open up the book and read...but just as before, when you're past that turbulence...you have to close the book again. And if there is another announcement, later on in the flight, from the flight deck, that there is going to be some more turbulence, then you can open the book until they turn off the fasten-seatbelt sign. Or if later in the flight, if the fasten seatbelt sign suddenly comes on again...you can open the book up again, and read it until the turbulence has passed by...But you have to be on scout's honor that...as soon as...the turbulence has passed...you close the book again.

And I don't know...how much turbulence you're going to experience on the flight, and I don't know...how much of the book you're going to be able to get read on the flight...Maybe a significant amount, maybe just a few pages...but that's the deal and...then finally the plane is going to land and you're going to have to wait until your return flight...to resume reading the book...

This is the deal that you and I are making. And it's going to be the same thing on the return flight. As soon as the plane starts to roll, you can begin reading and you can continue reading until you get the signal that you're up to 10,000 feet and people can use their electronic

### Table 2. Emily's Hypnosis, continued

devices. At that point...you close the book and you don't open it again unless and until there's another...period of turbulence...

[H] And it may be...that you experience...just a little bit of...jitteriness and tension and impatience over some of the rest of the flight because you'd really like to open the book again and read, but you can't. That's not the deal; the deal is that you read the book only in that initial part of the flight and only if subsequently there are periods of turbulence...And so I hope you'll have some other things to read or work to do on the plane, or maybe a movie, if it's a flight with a movie that can distract you...

[I] And I wouldn't be surprised that even if you are reading something else or watching a movie...your mind kind of wanders back to the book and back to what has already happened and your mind wanders then to what you think might happen...what directions...the plot might go in. You might find yourself just...leaning back in your seat with your eyes closed imagining the different alternatives, the different scenarios...[J] And I wouldn't be surprised if before you know it you're at your destination and it seems like it was shorter...than the time that has elapsed on your watch...shorter than it actually took...And you feel a sense of...pride when the plane lands, that this flight has been *so much easier* than the last few flights have been. You feel that you've somehow...gained knowledge and tools that will help you next time you go on a flight—on your return flight you may... You'll be confident that the same knowledge about the safety of air travel, the experience of pilots, the standards that the maintenance workers are held to, the over-engering of the planes themselves, that flight plans...that all this knowledge...somehow it's tools that will enable you to...be more relaxed and actually look forward to the flight back because...that's when you can continue reading the book...at least in the first few minutes before the plane reaches 10,000 feet.

And now, Emily, I'd like you to just take a few minutes to enjoy whatever good feelings you're feeling...And in a moment I'm going to count from 1 to 5 and when I count to 5 you'll be alert, awake, feeling good, feeling better than you did before listening to this, ready to continue on with your day with renewed energy and vigor. Alert, awake, refreshed, feeling good. So now 1, 2, 3 eyes open, 4, 5. Alert, awake, refreshed, feeling good."

#### Commentary

[A] Direct suggestion for relaxation during flying, based on the reassuring facts from her reading.

[B] Indirect suggestion (referring to myself, rather than her) to re-interpret anticipatory anxiety not as fear of the flight but rather as due to all the hectic preparation for the flight.

**Table 2. Emily's Hypnosis, continued**

[C] Segue to direct suggestion that *she* will feel a sense of relief and calm when finally settled into her seat.

[D] Recitation and elaboration of her reassuring propositions about flying.

[E] More reattribution of pre-flight anxiety as due to the preparation for the flight.

[F] Direct suggestion to attribute anticipatory anxiety to eagerness and impatience to resume reading her book. Delivery of the paradoxical directive to read only during take-off and turbulence. Teasers to pique her curiosity about what comes next in the book.

[G] At [F] I mentioned that after take-off she could resume reading if "either of two things" happened—but I forgot to mention what the second condition was. That is corrected in this section.

[H] A suggestion to re-interpret tension and anxiety during the flight as frustration at not being able to continue reading the book.

[I] A suggestion to dissociate during the flight by thinking about the book.

[J] Closing suggestion of feelings of mastery, confidence, and positive anticipation of the return flight.

APPENDIX. OUTLINE OF THE CASE STUDIES OF "FRAN" AND "EMILY"

1. CASE CONTEXT AND METHOD

2. THE CLIENTS

***"Fran," a Case of Panic Disorder and Agoraphobia***

***"Emily," A Case of Axiophobia***

3A. FRAN'S GUIDING CONCEPTION

***Background of Paradoxical Intention (PI)***

***Theory of Paradoxical Intention***

Hypothesis 1 and CBT for Panic Disorder

Hypothesis 2 and Paradoxical Intention

Salzman's Insight

4A. ASSESSMENT OF FRAN'S PANIC DISORDER AND AGORAPHOBIA

5A-6A. FRAN'S CASE FORMULATION, TREATMENT PLAN, AND  
COURSE OF THERAPY

***Session 1. Introduction to the Paradoxical Procedure and  
Arranging a First Experience With It***

***Session 2. Processing Experiences with the Paradoxical Procedure and Planning More***

***Session 3. Adding as a Booster an Hypnotic Induction and a Hypnotic Suggestion***

7A.THERAPY MONITORING OF FRAN'S CASE

8A. FRAN'S THERAPY OUTCOME

3B. EMILY'S GUIDING CONCEPTION

4B. ASSESSMENT OF EMILY'S AVIOPHOBIA

5B-6B. EMILY'S CASE FORMULATION, TREATMENT PLAN, AND  
COURSE OF THERAPY

***Session 1: Developing a Treatment Plan***

***Session 2. Reviewing the Homework Reading and Preparing for a Hypnotic Suggestion***

***Session 3. Review of Listening to the Hypnosis Recording***

***Follow-Up Phone Call***

7B.THERAPY MONITORING OF EMILY'S CASE

8B. EMILY'S THERAPY OUTCOME

S.R. Hamburg

*Pragmatic Case Studies in Psychotherapy*, <http://pcsp.nationalregister.org/>

Volume 22, Module 1, Article 1, pp. 1-34, 02-19-26 [copyright by author]

## 9. DISCUSSION OF THE CHANGE MECHANISMS IN THE TWO CASES AND THE FUTURE OF PARADOXICAL INTENTION

*Why Was Fran Willing To Try Paradoxical Exposure After Just  
One Initial Therapy Session?*

*What Accounts for Emily's Improvement?*

*How Does Paradoxical Exposure to Anxiety-Provoking Stimuli Work?*

*Why Did Paradoxical Intention Disappear From The Research  
Literature On Treatment of Panic Disorder?*

*Is Anyone Out There Using Paradoxical Intention to Treat Panic Disorder Anymore?*