



THE ASSOCIATIVE REMOTE DREAMING EXPERIMENT: A NOVEL APPROACH TO PREDICTING FUTURE OUTCOMES OF SPORTING EVENTS

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ABSTRACT

This double-blind study utilised dreaming instead of remote viewing as a precognitive tool within an Associative Remote Viewing (ARV) protocol. In the spirit of Participatory Action Research, but using a quantitative design, a cohesive group of experienced remote viewers (who varied in experience) designed and participated in a year-long study that included 56 trials in which they attempted to have precognitive dreams that would enable them to produce descriptions and sketches that would match a photograph they would be shown at a future time. Five out of 7 remote viewers/dreamers were able to consistently produce dreams at will. Their 278 transcripts were utilized for the purpose of making predictions and wagers on the outcomes of sporting events. They produced an overall rate of 17 hits out of 28 predictions, which a binomial test showed to be marginally above chance (one-tailed). Nevertheless, the overall monetary gain was a little under 400 percent of the initial stake. Further, one individual dreamer had a 76 percent correct hit rate based on 13 hits and 4 misses with 20 passes, while another had 16 hits and 9 misses. These points are discussed along with the notion that raising the threshold of Confidence Ranking Scores (up to a CR of 6) for dream based ARV predictions may help to improve the overall hit rate.

INTRODUCTION

Remote viewers are those who utilize their clairvoyance and other intuitive perceptual abilities in a systematic way to produce a written and pictorial transcript of an assigned “target” (Smith, 2015). Such targets can range from simple pictograms (Warcollier, 2001), photographs and videos (May, Utts, Humphrey, Luke, Frivold & Trask, 1990; Wiseman & Milton, 1998), specific locations (Puthoff & Targ, 1976), objects (Targ & Puthoff, 2005), people (Buchanan, 2003; Katz & Bulgatz, 2013), as well as microscopic organisms (Katz, Beem & Fendley, 2015), organic materials (Vallee, 1988) and less verifiable but more “esoteric” based targets (Swann, 1998; Knowles, 2017). Remote viewing has also been utilized to describe situations related to past, present and future activities and events (McMoneagle, 1998; Brown, 2006).

While protocols differ somewhat between experimental versus applied/operational based projects, inherent in all remote viewing designs is the use of blinding procedures, separation of roles, open response activities and the

participant's use of intentional mental processes to access information not otherwise accessible via logical or analytic processes (Swann, 1993).

Remote viewing has a rich and colorful history, having been birthed in research labs and utilized by over a dozen U.S. military and government intelligence agencies from 1973 through 1995, who contracted with the Stanford Research Institute (SRI) and SRI International to develop remote viewing capabilities. Former directors and advocates of these programs point to continuous approval of oversight committees, contract renewals and funding as evidence of the efficacy of remote viewing (May & Marwaha, 2018). There also exists inter-agency reports that can be found in the Ingo Swann archival collections housed at University of West Georgia's Ingram Library, such as the one drafted by the Defense Intelligence Agency (1984). This declassified report asserts that during the three-year Grill Flame Program, spanning from 1980 to 1983, it was well established that "remote viewing is a real phenomenon and is not degraded by distance or shielding. Remote viewing ability can be improved by appropriate training procedures. Remote viewing has potential for United States intelligence applications" (p. 21).

Formal assessments by May et al. (1989) of experiments utilizing a variety of protocols and consisting of over 25, 000 trials within SRI International and Science Applications International Corporation (SAIC) from 1992 to 1994, and later verified by Utts (1996), found "The statistical results of the studies examined are far beyond what is expected by chance. Arguments that these results could be due to methodological flaws in the experiments are soundly refuted" (p.3). However, other researchers who assessed a much smaller sampling of the conducted studies (Mumford, Rose & Goslin, 1995; Milton & Wiseman, 1998, 1999) disagreed, suggesting that "perceptual information leakage" by researchers could have theoretically impacted findings. What these quarrelling parties did agree on was that future experiments should focus on how to make these phenomena as "useful as possible" (Utts, 1996, p. 3) and that the challenge to parapsychology is to "go beyond the demonstration of significant effects" (Hyman, 1996, p. 58).

Since the declassification of these programs in the mid-1990s, remote viewing has largely taken root within the public sector, with the development of dozens of training programs (Katz, 2018); alongside which, businesses, organizations and social media outlets have emerged for purposes related to solving crime (Coronado, 2019); corporate consulting (Vivanco, 2016; Williams, 2014) and precognitive, financial based projects (Katz, Grgić & Tressoldi, 2018).

Associative Remote Viewing (ARV) is a specific application and subfield of remote viewing, involving a rather complex, double blinded set of procedures initially developed by Schwartz (1977) and used by researchers, personally and professionally, at the Stanford Research Institute. These researchers sought to bypass some of the difficulties of using psi to describe potential outcomes of future events, such as in sporting events or stock market fluctuations, in which the possible winning options are too familiar or too similar to each other for judges to determine which outcome is being described (Katz & Bulgatz, 2013). Unlike such traditional psi based approaches ARV

involves the random pairing of the possible outcomes of an event with unrelated photographs/images.

While applied ARV protocols can vary, they will usually include the nine phases outlined in Table 1 below.

TABLE 1.

Showing the nine phases of a typical ARV protocol

Phase	Process
1	Event selection
2	Photo pairing
3	Tasking of the remote viewers
4	Remote viewing
5	Judging/scoring
6	Prediction issuing
7	Wagering (optional)
8	Event occurs
9	Feedback

All phases, except for the remote viewing and feedback, are carried out by the manager or researcher. The process is illustrated in the following example of a wager placed on a future sporting event:

Phase One — Event Selection: Suppose it is the World Cup, and there is an upcoming soccer match between the Brazilian team and the English team. An ARV manager has been asked by a sports enthusiast to help predict which team will win the game.

Phase Two — Photo Pairing: To set up the trial, the manager can choose any two photos, providing the photos are as different from each other as possible in terms of color, shape, size, and overall conceptual content. Furthermore, the pictures will not be related to the teams, or the game; one will simply be randomly paired with the Brazilian team, and one will be paired with the English team. For example, a photo of an office building in a city environment may be paired with the Brazilian team (Photo A), and a photo of black horses running through a green field is paired with the English team (Photo B).

Phase Three — Tasking: The manager sends a random target number to the remote viewers, who are blind to the photo options. The remote viewers are told the target number is representative of the feedback photo they will receive at a *future* date. They are given a deadline by which to submit their written remote viewing session transcripts.

Phase Four — Remote Viewing (which for the present study was replaced with dreaming). This is the only phase in which the participants' intuitive faculties are utilized. Here remote viewers attempt to tune into the feedback photo that they will see in the future and record their impressions on paper. This written transcript will include data about the viewer and will usually

include words and sketches. Some of these impressions may be based on visual images received by the viewer, while some may have come in on an internal auditory or somatic level. Viewers will then submit their transcripts to the manager.

Phases Five and Six — Judging and Issuing Prediction: In this example, the manager notices that the remote viewers' transcripts included words such as "movement", "animals", "several", "open spaces" and "green fields", and there is even a sketch resembling a four legged animal that is shaded in. There is no mention of a manmade structure or anything having to do with a city environment. The manager would rate how well each transcript matched each picture; in this example assigning a high score to the photo of the horses (Photo B) and a low score to the city building photo (Photo A). It can be assumed therefore, given that in the future the remote viewers will only ever be shown the photo attached to the winning outcome, that in this example because Photo B is a strong match to the transcripts, that this is the photo they will be shown. Since photo B has been paired/associated with the English team, the manager can have a strong degree of confidence that the English team will be the winner. Thus, the English team is recorded as the prediction. However, it should be noted that if the manager was not confident about either photo being a strong match, or if both photos had an equal level of matching elements, or if one of the remote viewer's transcript strongly matched one photo and another matched the other photo, instead of issuing a prediction, he/she might issue a "pass" — which is essentially a non-prediction that is generally not factored into the hit/miss rates within applied ARV projects as there is no financial loss or gain (Katz, Grgić & Fendley, 2018).

Phase Seven — Wagering: The manager contacts the client and lets them know that the English team will be the winner, so the client can place his wager.

Phase Eight — The Event: The game is played; the winning outcome is known.

Phase Nine — Feedback: In order to facilitate the process and keeping with the theoretical retro-causal assumptions underlying the ARV process, soon after the game is completed the remote viewers will be shown the photo associated with the winning team, regardless of whether the prediction was correct. This is considered essential, since the target originally assigned to the viewers was the feedback photo attached to the winning team. Theoretically, if the correct photo is not seen by the viewers, there is no feedback, and hence there was never a target for the remote viewers to describe in the first place.

A Brief History of Successes and Failures in ARV

ARV has resulted in substantial financial gain by various researchers over the past four decades. Harary and Targ (1985) earned \$100,000 by forecasting changes in closing prices of the silver futures market, with the aid of nine ARV trials. However, in a follow up experiment, they had nine consecutive losses which researchers attributed to an increase in daily ARV trials per viewer, rendering receiving feedback for one trial impossible prior to

beginning another. This may have led to the viewers describing the feedback photos from the upcoming trial, as opposed to the present one (Houck, 1986; Targ, 2012).

Targ, Kantra, Brown and Wiegand (1995) repeated the earlier “silver experiment” carried out by Harary and Targ (1985), with some notable adjustments to the design. This included limiting trials to one per day per remote viewer, and adaptation of what the authors referred to as an “error detecting protocol”, in which two remote viewers, rather than one, were utilized per trial to ensure that both their transcripts indicated the same target photo. Also, “passes” were called if the remote viewers both accurately described photos in discrepant directions, or if a confidence rating of four was not reached on the SRI 7 point Confidence Rating (CR) scale with a two-point spread between scores. Passes meant predictions were not issued, nor wagers made, and the trial was omitted from overall hit/miss tallies. Twelve of 18 trials resulted in forecasts (i.e., predictions) and from these, 7 forecasts were recorded as trades, even though no monies were wagered. Six of these 7 forecasts were correct (Targ, Kantra, Brown & Weigand, 1995). Had monies been wagered, profits would theoretically have been quite lucrative.

Puthoff (1984) successfully conducted twenty-one of thirty trades with the help of seven select remote viewers, yielding profits of \$25,000. Kolodziejzyk (2012), acting as a single operator over a 13-year period, utilized a unique computer-based approach to the ARV protocol that combined remote viewing, logic, and knowledge of the stock market, yielding a profit of \$146,587.30. More recently, Smith, Laham, and Moddell (2014) conducted a series of only seven ARV trials with university students turned novice remote viewers, earning approximately \$16,000 by wagering substantial amounts of \$10,000 at a time.

However, it should be noted that ARV has also resulted in the loss of significant investment. For instance, experienced remote viewers using a forced-choice type ARV protocol completed 100 initial trials, which were not wagered on, and resulted in a stunning 99.8 hit rate. However, once investments were made across 3,500 trials, results evened out around chance levels (Rosenblatt, 2000). While reasons for the decline in results can only be speculated on, participants have suggested in personal interviews that attitudes towards money, and completing too many trials over too long a period of time may have been mitigating factors.

Most recently, approximately 60 remote viewers contributed 177 predictions generating 240 foreign exchange (FOREX) executed trades, resulting in a loss of \$52,186 (Katz, Grgić, & Fendley, 2018). The authors attempted to demonstrate that these losses may have been due to having more underperforming groups of viewers making predictions than those with previous higher hit rates, which impacted the use of a particular mathematical wagering strategy, in that too high wagers were made too early in the process. They also suggested that as in the early Harary and Targ (1985) experiment “too many predictions may have been made in too short a time-span” (p. 44).

ARV in the last couple of decades has also been the focus of formal research projects (Targ et al., 1995). However, a greater number of investigations have been conducted by remote viewing enthusiasts who operate outside of

academia or formal research venues. Even so, these investigations include double-blinding procedures and careful protocols, which qualify them as exploratory or informal research projects (Katz & Bulgatz, 2013). While some work independently, as did Kolodziejzyk (2012), the majority operate in groups, which allows for the separation of roles and responsibilities. Also today, most work at a distance with the assistance of web-based communications and delivery technologies (Rosenblatt, Knowles & Poquiz, 2015).

One such group is known as the Sublime Remote Viewing Group, which formed at a conference sponsored by the Applied Precognition Project and began its first set of informal trials in June, 2012. The group consists of five experienced remote viewers and a manager that have been working together on various informal, applied and exploratory projects, many involving the use of an ARV protocol, although they have also worked on criminal investigations.

After hearing Dale Graff at an International Remote Viewing Conference, describe a decade-long project that he and Patricia Cyrus conducted (Graff, 2007; Graff & Cyrus, 2017) in which the two utilized a precognitive dreaming protocol they had developed for the purpose of intentionally describing a specific newspaper or magazine page they would be shown at a near future date, some members of the Sublime Group came up with the novel idea of designing the current project in which they would utilize Graff and Cyrus' (2017) dreaming methodology, but within an ARV protocol. This would mean essentially swapping out conscious waking psi (i.e., remote viewing) with unconscious precognitive dreaming to describe a *future* feedback photo associated with the winning outcome of a predetermined event. The Sublime Group would utilise a very similar dreaming protocol to that of Graff and Cyrus (2017), but instead of describing future newspaper articles, they would describe photographs attached to winning outcomes of sporting events. The Sublime Group members were simply motivated by their curiosity to see if they could individually (and as a group) produce dreams on demand about future feedback photos.

Further encouragement for the possibility of utilising dreaming as a precognitive tool came from a review of literature focusing on ESP dream-related performance (Krippner, 1993; Sherwood & Roe, 2003; Storm et al., 2017). While all of these studies concluded that psi was in fact demonstrated, they differed in their conclusions about whether dream studies within a laboratory setting (with the use of REM monitoring) were more effective (Sherwood & Roe, 2003) than those conducted outside of it, or as Storm et al. (2017) suggest are approximately equivalent. Graff and Cyrus' (2017) ten year study was performed outside of a dream or experimental lab, without the aid of any sort of monitoring equipment, but rather from the privacy of their own homes, which is how the Sublime Group was used to operating as well.

The present double-blind study represents a novel approach that is the first to utilize dreaming as a precognitive tool within an ARV protocol. A cohesive group of experienced remote viewers, who varied in experience with intentional ESP precognitive dreaming practices, took part in a year-long

study that aimed at completing 50 trials for the purpose of predicting the outcomes of sporting events, with the end goal of increasing wagering profits and hit/miss ratios. While the project is quantitatively based, it borrowed some of the tenets and was carried out within the spirit of Participatory Action Research (McDonald, 2012) that seeks “to study things in their natural setting” (p. 35).

This project was designed as a hybrid operational/research project. Attempts would be made to duplicate the group’s typical “real life” ARV operating procedures while adhering to sound scientific principles and practices. This included submitting the proposal to the Rhine Research Institute’s review panel, maintaining double blinding of both dreamers and manager/judge to the content of the target photographs, and using computerized randomization procedures.

The overall goal of the project was for the group manager to make at least 40 predictions that would be used to make a specific wager on a particular outcome in a systematic way. The results of this would be calculated in terms of both the financial gain or loss for the overall group wager as well as the hit rate for both the aggregate group as well as for individual remote viewers. It was predetermined that only trials resulting in predictions would be used to calculate hit rates, beyond tracking how many trials resulted in predictions versus passes.

Per past informal Sublime Group projects involving remote viewing, it was reasonable to expect that in order to reach 40 wagerable predictions, 50 dream trials would need to take place, as a certain number of trials would likely result in passes. Passes are essentially calls made by the manager to guard against monetary losses and could be called for a number of reasons, such as inadequate/insufficient information within a dreamer’s transcript, not enough dreamers providing transcripts, photo sets being too similar for judges to distinguish between them, no clear difference in scores for either photo (whether both high or both low), or other breakdowns in the protocol. Traditionally in applied ARV projects, passes are considered a manager’s “best friend”, as they can help to minimize erroneous predictions and financial loss when wagering is involved. However, they can also lead to projects having to go on for longer than planned or, as in the present study, mean that fewer predictions than planned were made.

The project’s designers debated as to whether to set the goal of continuing indefinitely with the project until 40 predictions could be reached, but felt that having an unknown completion date exceeding the duration of one year would put too much strain on the participants, and therefore capped the total number of trials at 50. Each prediction would be for an “over-under” outcome of a particular sporting event (e.g., baseball game). An over-under total game score is a common type of bet offered by sportsbooks/casino’s where statisticians have calculated what is likely to be the total sum of both teams’ scores. They set this as the betting line, and then patrons can make predictions as to whether or not the total end score of the game will be over that set betting line or under it (Total Bets and Over/Under Bets, 2018). For the present project, each of the aimed for 40 predictions would result in an outcome of either a “hit” or a “miss”.

Two specific apriori planned predictions were made. The first was that participants would be able to dream on demand, recall their dreams, and produce transcripts of these dreams in a manner consistent with previous remote viewing sessions of future feedback photos. This would lead to a financial gain, though the specific dollar amount was not specified. The second, was that the aggregate group hit rate would be above that expected by chance alone. Exploratory analysis was also conducted on the individual dreamer's hit rate, although no formal hypothesis was made.

METHOD

Participants

The group of seven dreamers consisted of four men and two women aged between 48 years and 80 years (mean 59, SD 14). The members of the RV group all had a variety of experience, as outlined in Table 2.

TABLE 2.

Showing various levels of training/experience for the six remote viewers

RV	Trained in controlled RV	Trained in extended RV	Training in non-RV clairvoyance	Number of RV sessions completed	Regular meditator	Regular dreamer
RV1	Yes	Yes	Yes	500–1000	Yes	Yes
RV2	No	Yes	No	40 years	Yes	Yes
RV3	Yes	No	Yes	200–500	Yes	Yes
RV4	Yes	Yes	No	500–1000	Yes	Yes
RV5	Yes	No	No	100–200	Yes	No
RV6	No	No	Yes	100–200	No	Yes
RV7	No	No	No	51–100	Yes	Yes

They all believed it was possible to dream through intentional precognition, and yet they also said that precognition was not the main reason they believed they dream. RV2 was the only participant who had experience with intentional dreaming of a future feedback photo, although all believed it was possible, and reported having had at least one or more spontaneous and unintentional precognitive dreams in the past.

Alongside these there was one manager/rater (Nancy Smith: NS) who was responsible for all phases of the project and management, including choosing events, judging, communicating with participants, and tracking data.

In order to maintain separation of roles, once the experimental phase began, co-researchers DK and MB acted only as dreamers until all trials were complete, giving all authority and management responsibilities to NS. At no time did they have access to any of the photos, prior to being sent their feedback photo at the designated time. Further, they have never and will never have access to the un-actualized photos (i.e., those photos attached to non-winning outcomes) from the sets.

Materials

Sixty high resolution static photo pairs (each associated with a binary outcome within a single event) were selected by an independent team of ARV managers (Jon Knowles, Alexis Poquiz, and Igor Grgić) experienced in selecting photo pairs in terms of orthogonality (i.e., they must be different from each other in every respect), and interest level. These colored photos were mostly of real locations existing somewhere in the world, but also included some photos of objects. Some locations included people, animals, or other objects or activities taking place. The pairs were encrypted and randomized by the photo selection team using an online computer program that paired each set with a random target number. The numbers were then sent to the manager, NS, who did not access the photo sets until after all transcripts were submitted for each trial.

Scoring of the match between dream transcripts and photos was conducted using the SRI 7 point Confidence Ranking (CR) scale. This scale was originally developed at SRI in the early 1970s (Targ et al., 1995) and ranges from zero to seven. Where a score of zero indicates no correspondence; a score of one when there is little correspondence; a score of two when there is some correspondence, but too little to indicate more than is operating at chance expectation. A score of three indicates a mixture of correct and incorrect elements with more of the former, indicating contact has been made with the target. A score of four indicates good correspondence with some incorrect data; a score of five indicates good correspondence with unambiguous matching elements, but still some incorrect information. A score of six indicates good correspondence, including some analytic (such as naming the function of the target) and very little incorrect information; and a score of seven indicates excellent correspondence with no incorrect data.

Procedure

To capitalize on the group's cohesiveness (which traditionally includes sharing transcripts following completion of a trial), and mitigate the likelihood that some of the viewers might not be able to dream at will or remember their dream for each trial, it was decided that all six group members would participate in the same trials and that their transcripts would be assessed using a group aggregate approach. This meant that the manager/judge would utilize all available transcripts to make a single prediction and wager per trial (although as noted above, individual scores leading to what could be individual predictions would be tracked and evaluated in the final analysis).

Furthermore, all dreamers operated from the same photo sets, receiving the same photo feedback. This was to minimize the likelihood of dreamers "peaking" at each other's feedback photo when engaged in their psi related task, which has been an issue in the past when each of the team members were assigned different photo pairs. While decisions such as this have been criticized by some parapsychologists concerned with a stacking effect, according to Brier (1970), who first discussed the stacking effect in relation to forced choice task type experiments involving multiple trials in one setting (such as when a deck of 52 cards is being "guessed" at), there are valid reasons

to sometimes assign all participants the same target types, in the same order, and this should never disqualify a design as being flawed (Thouless & Brier, 1970). The specific timing and order of each phase of the task is summarised in Table 3.

TABLE 3.
Key phases of the ARV protocol

Phase	Event	Action
Phase 1	Event Selection	Manager visits ESPN website, chooses a sporting event. Manager then visits 5 Dimes Wagering website and records over-under betting line set by sportsbook. The goal will be to predict if the total sum of the two teams will be over or under the line set by the sportsbook (gaming statisticians).
Phase 2	Photo Pairing	Outside photo creation team chooses and pairs photos that are different from each other, randomized via computer and attached to target numbers. Photo A is paired with the over outcome, Photo B is paired with the under outcome.
Phase 3	Tasking	Manager sends target number with deadline to viewers.
Phase 4	Remote Viewing/ Dreaming	Viewers/Dreamers tune into future feedback with psi protocol, create a transcript containing words and sketches, and then send it in to manager.
Phase 5	Judging/Scoring	Manager compares transcripts to each photo; assigns score based on SRI 0-7 Confidence Ranking Scale.
Phase 6	Predicting	Manager either issues prediction for outcome attached to highest rated photo or “passes” if scores were too low or the same for both.
Phase 7	Wagering	Manager places wager through online betting platform.
Phase 8	Event Happens	The game is played; the outcome is announced and recorded.
Phase 9	Feedback	Manager sends feedback photo attached to winning outcome to dreamers. They spend time comparing transcript to feedback to complete feedback loop, and may debrief with manager.

Trials were carried out once a week, so as not to overwhelm the dreamers or judges, with pre-planned breaks in between sets of 10 trials and occasional pauses when the manager (NS), required them. Details of the nine phases of the trials are mapped out above.

For ‘event selection’ the manager would go to www.ESPN.com which is a popular website that offers up-to-date information and statistics about upcoming and past sporting events. She would then look up the game schedule under a specific category (e.g., Basketball, Baseball or Football), and always select the 3rd game listed to be played on the upcoming Sunday. She would look up and record the Over/Under spread, published on both the ESPN website and 5 Dimes website, for that particular game. The spread is

a common wager that is set up to identify what the combined points of the two teams will be when the game is over. This includes a “line” so that bets can be made predicting whether or not the actual number will be higher or lower than the set number (Williams & Siegel, 2014). For the current project, the Over/Under predictions were chosen instead of the winning team predictions because the O/U has been found to be less emotionally volatile for those who are avid sports fans.

Having decided the event the photo pairing phase involved selecting pairs of photos from a list of encrypted sets and pairing them in the master document with the target number for the upcoming event. The photo-pairs were already labeled (A) and (B). Hence, for example, photo A was paired with the “over” outcome, and Photo B was paired with the “under” outcome.

The third and fourth stages involved tasking the group to dream and then recording their dreams. Each dreamer participated and operated from their own homes as is their typical procedure, given they live in different parts of the United States. The exception to this is one of the remote viewers, RV7, who is husband of and lives with the group manager (NS).

NS sent out emails of the upcoming dream task to each participant a few days prior to the chosen event. The email reminder contained the target number that would be paired with the feedback photo for each particular event/trial. Target numbers were made up of the date the feedback would be given, which was also the deadline for submission of transcripts. This email also included a brief reminder to dream on that Saturday evening (or Friday if that was more convenient) and to email back their written transcripts containing words and sketches by the deadline, which was typically 9:00 a.m. Central Standard Time (CST) on that Sunday morning.

The dreamers specifically followed protocols to increase the likelihood of dreaming and recall (Graff & Cyrus, 2017). These instructions included purchasing a dream journal of their choice. On the Saturday evening, they would write out an intention statement on a page in their journal with the freedom to add to it as they saw fit. Some dreamers found it useful to add in a congratulatory message about what a great job they were about to do while conjuring up enthusiastic emotions over this imagined success. Dreamers were advised to write down the target number in their journals or papers, as they have all been trained to do at the start of the remote viewing session, except instead of proceeding with a remote viewing session, they would go directly to sleep. This intention/tasking included telling their subconscious to have the needed information appear during the final dream of the evening, prior to waking, so that it could easily be recalled and distinguished from the earlier dreams of the night. It included the intention to have visual information come into the dream that could easily be converted to a sketch upon awakening. It was also recommended that, when possible, they give their dream a title.

Dreamers were instructed to record all dream impressions of the evening without delay upon awakening into their dream journal or onto a piece of paper if they didn't have a journal nearby. If they awakened prior to having a dream that could be recalled, they needed to either try to go back to sleep if time allowed, or to simply send an email to NS with the words “no dream”.

They were advised that it was never a problem if they could not dream and were instructed and reminded to never supplement the dream with attempts at retrieving information psychically while awake.

Some of the dreamers reported occasionally being uncertain as to whether information came in while asleep or just upon awakening. If they were not sure if it was a dream or not they could submit the information. However, if they knew they had obtained the information through conscious remote viewing related activities, they were encouraged to not send this information in. All dreamers were required to turn in their transcripts or report “no dream” by 9:00 a.m. CST time. They did this by taking pictures of the page(s) of their journals with their camera phones, uploading these to their computer and emailing them to the manager.

The fifth phase provided NS with a narrow window of time to judge which photo matched the dream transcripts to see if there was a viable prediction. NS would start with one dreamer’s transcript and compare this to one photo in the set (e.g., photo A paired with the option of “over” for the over/under wager). NS would assign each transcript a CR score before looking at the next photo paired with the option of “under”. Once she had assigned CR scores to both photos she would evaluate whether the dreamers scores were high enough for one photo and also assess the spread in between the sum of CR scores for both photos, per dreamer and collectively. According to informal guidelines established by several managers who participated in the Applied Precognition Project Conferences (including NS and other researchers here), and in alignment with other researchers (see, Targ et al., 1995), it is generally accepted as good practice to only proceed with a prediction if there is at least a CR score of 4 (i.e., good correspondence), and a 2-point gap between the scores or sums of scores for the two photos. However, there were no predetermined guidelines for how NS would handle situations where two or more dreamer’s transcripts were matches for different photos, or if half of the dreamers had strong transcripts and half had weak ones for the same photo. Therefore, decisions regarding how to handle this situation, which occasionally did occur, were left to the discretion of the manager.

The sixth and seventh phases involved predicting and wagering. If a prediction was issued, NS would then return to the 5 Dimes online Betting Website (www.5Dimes.eu), go to her account, and place a wager of \$110, which could potentially result in a payoff of \$100. If a pass was called instead of a prediction, no wager would be made.

The final phase of the procedure involved feeding back the winning outcome. Within an ARV protocol, focusing on the feedback photo by the remote viewer or dreamer is seen as critical as it is only this photo that will be paired with the actual outcome. In order to close the “feedback loop” it is critical that the dreamers received their feedback photo in a timely manner and actually do what Rosenblatt et al (2016) refer to as a feedback session. This involves time spent by each remote viewer/dreamer closely comparing his/her earlier transcript and impressions/experiences with the feedback photo. This involves looking at each word and sketch in a transcript and evaluating whether it was correct or not, trying to understand what worked and what did not, and making some notes to share with the manager. For our

project, dreamers were asked to send a short, informal email back to NS sharing their thoughts, so that she could ensure they had in fact spent time engaging with their feedback photo and also as a debriefing, stress relieving measure. Occasionally, a day or two following completion of the trial, NS would put together a compilation of parts of the dreamers transcripts that had matched the feedback photo, and it would be sent to all dreamers in order to boost morale and group cohesiveness, examples of this can be seen in Figures 1 and 2.

RESULTS

It was anticipated that 50 trials would result in 40 predictions. However, a total of 56 trials were conducted leading to 28 predictions and 28 passes. The extra 6 trials were run when it became evident that the number of predictions was lower than that anticipated. Passes were due to low CR scores for both photos (i.e., neither photo matching the dreamer's transcripts), or due to high scores for both photos, with a lack of a two-point gap between scores for both photos. Sometimes they were due to contradictory scores

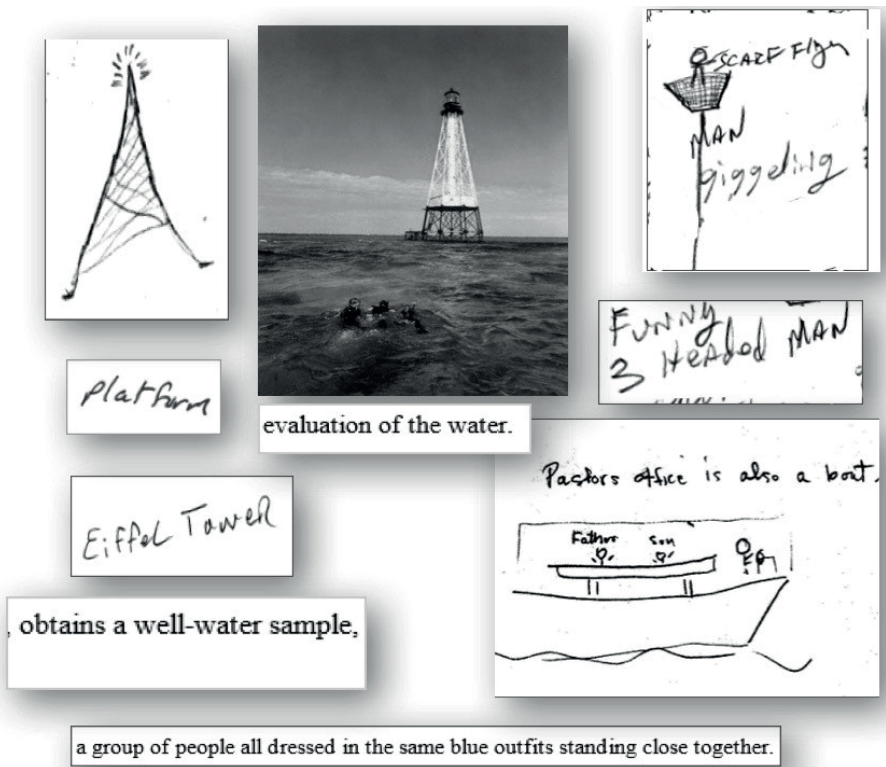


Figure 1. Example of feedback with group's compilation of words and sketches provided to dreamers (target image top-centre).

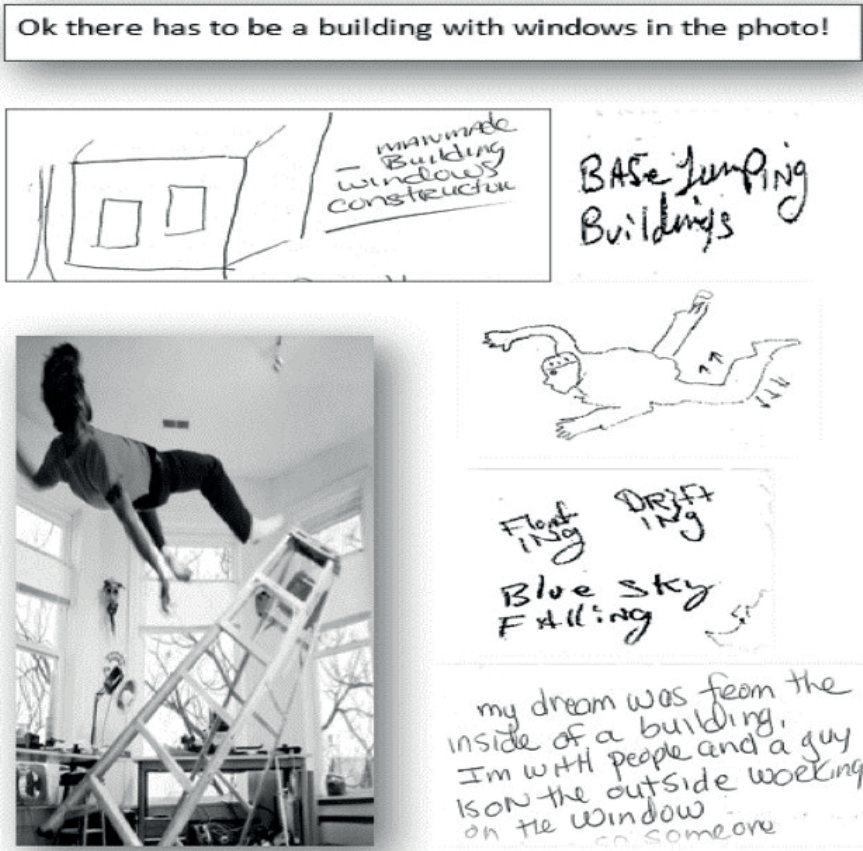


Figure 2. Example of feedback with group's compilation of words and sketches provided to dreamers (target image top-centre).

between participants. However, despite the lower than expected number of predictions it was not possible to continue the project beyond this point as some of the dreamers moved onto other projects.

Aggregate Group Earnings

A total of \$110 was invested for each of the 28 predictions. There were 17 hits leading to a financial gain of \$410.

Aggregate Group Totals for 56 Trials

Of the 28 predictions, 17 resulted in hits and 11 resulted in misses, bringing the hit/miss ratio to 61 percent, see Table 4. This was below the hoped-for rate of 65% typically achieved in prior remote viewing attempts when remote viewing has been the preferred method of psi as opposed to dreaming.

However, a binomial test indicated that the proportion of hits at 0.61 was marginally greater than chance expectations at 0.5, $p = 0.07$ (one-tailed).

TABLE 4.

Showing aggregate group total hits, misses, passes and cancellations as a function of the total 56 trials and the 28 predictions

Prediction	Frequency	Percent of 56 Trials	Percent of 28 Predictions
Hit	17	30%	61%
Miss	11	20%	39%
Pass	23	41%	
Scratch or Cancel	5	9%	

Individual Dreamer Totals

A total of 278 dream transcripts were provided by the seven dreamers across 56 trials. Because five of these trials were canceled, Table 5 shows the results of each individual viewer/dreamer for all 51 viable session trials. Some of the individual dreamers did quite well. Four out of seven of the remote viewer's individual hit rates were well above the 50% rate, with two dreamers hitting chance and one below chance. Results suggest that five of the seven dreamers, operating from their own households, without REM monitoring equipment, were able to dream on demand. RV1 reported at least three times where she had woken up within an hour of the deadline without having had a dream, and then told herself (and her family) she had to go back to sleep to retrieve a dream and was able to do so in time to turn in a transcript. On one occasion this was accomplished within 30 minutes of the deadline, producing a transcript resulting in a hit.

TABLE 5.

Individual viewer/dreamer results (225 total dream transcripts submitted out of 357)

Viewer	Total Trials	Missing ¹	Passes ¹	Predictions ¹	Hits ²	Miss ²
1	51	14 (27%)	20(39%)	17 (33%)	13 (76%)	4 (23%)
2	51	10 (20%)	17(33%)	24 (47%)	15 (62%)	9 (37%)
3	51	11 (22%)	17 (33%)	23 (45%)	13 (56%)	10 (44%)
4	51	41 (80%)	4 (8%)	6 (12%)	3 (50%)	3 (50%)
5	51	32 (63%)	12 (24%)	7 (14%)	4 (57%)	3 (43%)
6	51	12 (24%)	11 (22%)	28 (55%)	15 (46%)	13 (54%)
7	51	12 (24%)	15 (29%)	24 (47%)	12 (50%)	12 (50%)

¹ Percentages given as a function of the total number of trials.

² Percentages given as a function of the total number of predictions made.

The bulk of missing transcripts came from just two dreamers, one who dropped out after the first ten trials due to being in a place in his life where dreaming was not practical; the other who participated sporadically. Other participant’s missed transcripts were attributed to changes in sleep schedules related to house guests, traveling, and special circumstances out of their control. Most of the dreamers reported disturbances in their sleep cycles on the designated dream evenings.

Examination of 7-point Confidence Rating Scale

As noted above the CR scale ranges from 0 to 7 and while not the main focus of this project, it was felt that some examination of the CR scores relating to hit and miss outcomes would enable researchers to discover whether setting the prediction threshold at a CR score of four or higher was effective. This data is summarised in Table 6.

TABLE 6.

Showing number of hits and misses and total combined as a function of the average CR score. Only CR scores above 3 are given.

	Average CR Score (from 3 to 7)								
	3	3.5-3.75	4	4.5	5	5.5-5.75	6	6.5	7
Number of Hits	23	30	46	18	41	11	9	1	0
Number of Misses	20	34	37	20	29	10	2	0	0
Total	43	64	84	38	70	21	11	1	0

A visual inspection of the data in Table 6 shows that the CR scores for both photos in the sets revealed that 103 CR scores were 5 or higher. Of these, 62 resulted in hits and 41 resulted in misses. According to the scale, scores of 5 or higher should have “good correspondence with unambiguous, unique, matchable elements, but some incorrect information”. Furthermore, scores of 6 should have “good correspondence with unambiguous, unique, matchable elements, but some incorrect information”. Of all the CR scores for both photos in the judging sets only 12 transcripts resulted in CR scores of 6 or more. Of these 12, ten resulted in hits and only one in a miss. Scores of 5.5-5.75 resulted in an equal number of hits and misses and scores of 4 and below were also fairly close. There were more scores of 5 that resulted in hits than misses, but there were still 29 leading to misses.

DISCUSSION

This project examined whether experienced remote viewers, most new to intentional precognitive dreaming, could sufficiently describe a *future* photographic target which would be linked to a positive sporting outcome that would lead to a profit. The data show that from an investment of \$110 a profit of \$410 was obtained. Furthermore, the overall hit rate was marginally better than chance. Exploration of individual dreamer trials showed four out of seven were above the 50% rate.

Results of this project are modest but promising. While \$400 is a small amount as far as earnings go, one has to take into account the conservative amounts of \$110 that were wagered. Prior ARV projects may have made more profit but this relied on individual wagers of as much as \$10,000. Given this, and the reported success rate reported here, one could postulate that had a more ambitious wager been made of \$1000 per bet, a profit of \$4000 could have been made. This would translate into a potential profit of \$40,000 if wagers of \$10,000 had been placed per bet. Hence, future research needs to give consideration to the amount of money that should be wagered. Future projects therefore might consider wagering higher amounts. Also, given that a few individual dreamers' stats were higher than the group's stats as a whole, with one dreamer's hit/miss ratios as high as seventy six percent; future projects might incorporate using selected individual dreamers versus a group aggregate approach. For example, JL the project statistician, performed simulated calculations on how much money could have been made for the one individual remote viewer who had a 76% hit rate. He calculated that if \$110 was risked on each bet to make a \$100 win, or a loss of \$110, "individual performances would have been quite profitable, growing the investment to \$860". One could then postulate that if \$1000 had been wagered each time \$8,600 would have been earned.

The overall average hit rate at 61% was only marginally above chance at 50%. Given that this was only marginal and one-tailed it needs to be interpreted with caution. Nevertheless, this is an encouraging trend. As mentioned earlier, this marginal effect may have been due to a lack of statistical power given the low number of trials. Therefore, it is suggested that one major adjustment to the protocol for future research is to have a set number of predictions rather than a set number of trials.

Several suggestions are also recommended for further projects related to scoring and decision making around issuing predictions.

Targ et al. (1995) have suggested that a CR score of 4 was sufficient to proceed with a prediction. However, for our present study, close to half of the transcripts earned scores ranging from 3.5 to 6.5, and yet many of these higher scores resulted in predictions made to the incorrect photo-option pairing, resulting in 10 misses out of 29 predictions and to many of the passes when the higher scores were split amongst options. Our assessment of individual viewer's performance showed that more transcripts assigned a 4.5 CR score would have resulted in misses than in hits, if wagered upon individually.

The reason for having so many high scores pertaining to the wrong photo cannot be easily deduced from the data. Overly permissive judging would be the first suspect. Judging biases towards a particular dreamer may also have played a role in scoring and prediction issuing, by NS's own admission. Therefore, it is recommended that for future projects, the manager teams up with another judge or judges, to help provide checks and balances which might mitigate potential biases towards one of the photos in the pairs; towards certain content within a viewer's transcript; or towards one of the dreamers over another.

Further, it is speculated that in addition to correct data, the dreams may have produced a substantial amount of extraneous and irrelevant content

compared to that which is typically produced during waking remote viewing efforts by experienced participants, especially when multiple dreams were reported. This data may have matched the wrong photo (or the correct photo at the wrong time) simply due to chance. It does appear that occasionally, displacement to the wrong photo may have occurred.

In light of the above, it is recommended, that for ARV trials involving dreaming, that the threshold for which a prediction can be made when applying the SRI 7 Point CR Scale be raised from the currently established score of 3.5 or 4, to a CR score of 6. If the threshold is set higher, however, as noted above, it would be imperative to adjust the experimental design by swapping out a set number of total trials with a set number of predictions to be reached.

Another suggestion would be to disallow the assignment of half points or other percentages to the SRI 7 point CR scale (i.e., scores of 4.5 or 5.75). This would force the judge to make a more concrete decision in one direction or another. Half scores were not included by the originators of the SRI 7 point CR scale and there is no precedence to suggest they add anything to the judging procedure, except indicating where the judge may be conflicted.

Targ et al (1995) in their redundancy experiment, suggested that predictions and wagers should not be made and instead passes called, in situations where one or more remote viewers had the same or close scores for both photos, or when one team member has a high score for one side, and another team member has a high score for the other side. In the present project, the judge did not always follow this rule. Our analysis showed some of these trials did result in misses; however had the rule been followed in all cases, some hits would have not been achieved. The recommendation of whether or not to follow this rule would therefore be based on the financial stakes and risks involved with the bottom line being, how important it is to avoid such misses.

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ACKNOWLEDGEMENTS

Many thanks to the Sublime Group Members: Dave Silverstein, Sam Smith, Nancy Smith, Chris Georges, Dale Graff, Michelle Bulgatz, Debra Katz. Thank you to the Rhine Research Institute for Reviewing our Proposal.