



SchwartzReport

Intention as a variable in nonlocal consciousness research

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The Schwartzreport tracks emerging trends that will affect the world, particularly the United States. For EXPLORE it focuses on matters of health in the broadest sense of that term, including medical issues, changes in the biosphere, technology, and policy considerations, all of which will shape our culture and our lives.

What is consciousness? What is information? Those, to me, are the two great mysteries. After 50 years of experimentation research studying consciousness I have come to this conclusion. Max Planck and many of his colleagues in the German school who created modern physics were correct. Consciousness is causal and fundamental. Spacetime arises from consciousness not consciousness from spacetime. It is not a new idea, but today, for the first time, we are able to use experimental science to test our ideas about it.

It has always been a fundamental belief. The world is created by nonlocal consciousness as an expression of intention, however humanity has formulated that concept across time, culture, and geography, whether in religious or secular terms. Scriptures the world over begin with this predicate, the only difference being the description of the intender and the cultural context.

Plato (427–347 BCE) one of the first people for whom we have records, saw this in a non-religious context, and he made the information connection. He explicitly addressed the relationship of materiality and the nonlocal information architectures now being studied, saying, “And do you not know also that although they make use of the visible forms and reason about them, they are thinking not of these, but of the ideals which they resemble; not of the figures which they draw, but of the absolute square and the absolute diameter, and so on – the forms which they draw or make, and which have shadows and reflections in water of their own, are converted by them into images, but they are really seeking to behold the things themselves, which can only be seen with the eye of the mind?”¹

Today even dedicated physicalists, who see consciousness as entirely arising from physiological processes, have been pushed to confront the relationship between consciousness and the physical. Integrated Information Theory (IIT) is one such model that seeks to establish the relationship between consciousness and the physical substrate. Masafumi Oizumi and Larissa Albantakis, both of the Department of Psychiatry, University of Wisconsin, Madison, Wisconsin, and he of the RIKEN Brain Science Institute, Wako-shi, Saitama, Japan, present the case this way:

“IIT starts from phenomenological axioms: information says that each experience is specific – it is what it is by how it differs from alternative experiences; integration says that it is unified –

irreducible to non-interdependent components; exclusion says that it has unique borders and a particular spatio-temporal grain. These axioms are formalized into postulates that prescribe how physical mechanisms, such as neurons or logic gates, must be configured to generate experience (phenomenology). The postulates are used to define intrinsic information as ‘differences that make a difference’ within a system, and integrated information as information specified by a whole that cannot be reduced to that specified by its parts. By applying the postulates both at the level of individual mechanisms and at the level of systems of mechanisms, IIT arrives at an identity: an experience is a maximally irreducible conceptual structure (MICS, a constellation of concepts in qualia space), and the set of elements that generates it constitutes a complex. According to IIT, a MICS specifies the quality of an experience and integrated information Φ^{Max} its quantity.”²

I would draw your particular attention to their conclusion about the significance of difference.

Richard Davenport, who was internationally recognized for his pioneering mammalian behaviour research, underscores the point this way: “If we examine the experiences from which our knowledge of the world arises, we can see that they consist of various types of differences. Without difference, there can be no experience. The experience of difference is basic to our notion of existence, the latter being derived from the Latin *ex sistere*, which means “to stand apart,” i.e., to be different. . . .” [S]ince all properties must be experienced as difference, the physical world exists for us only in terms of relationships. . . . [P]hysical reality does not exist before us as an object of study but emerges from our consciousness during our changing experience within nature.”³

Stanford professor of cognitive science Donald J. Hoffman presents the problem faced by materialists:⁴

“... the widely acknowledged failure to create a plausible theory forces reflection on basic assumptions, including object permanence. But few researchers in fact give it up. To the contrary, the accepted view is that aspects of neural dynamics—from quantum-gravity induced collapses of wavefunctions at microtubules⁵ to informational properties of re-entrant thalamo-cortical loops⁶—cause, or give rise to, or are identical to, consciousness. As Colin McGinn puts it, ‘we know that brains are the *de facto* causal basis of consciousness, but we have, it seems, no understanding whatever of how this can be so.’”⁷

Why do these models, so carefully structured and presented, produce so little understanding of the essential nature of consciousness?

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I propose to you, because they are fundamentally based on a false assumption: brains are not in fact the causal basis of consciousness. In the model I believe to be correct, not because of any philosophical or religious predisposition, but because it is the only one that is fully in accord with the observed experimental data as well as being in accord with millennia of empirical anthropological observational science. One has to stop trying to stuff consciousness into spacetime, but rather understand spacetime to be a component of consciousness.

I am an experimentalist. What I know is based entirely on objectively verifiable data. What shapes my thinking is impeccably conducted research. Precisely for those reasons I cannot answer the two obvious questions I have raised. I do not know what consciousness is, nor do I know what information is, and as far as I can tell, neither does anyone else. Not in a fact-based way. But what I can discuss with some certitude is how consciousness operates and how certain variables can be manipulated to improve our ability to access the nonlocal aspect of consciousness, and increase the quality of that access.

The experimental data has given us three variables we can manipulate and thereby improve the linkage: numinosity, entropic process, the intensity of emotion as a factor of intention. There is nothing abstract about this, no speculative handwaving. All Examining all three would require not a paper but a book, so in this instance I want to focus on intention.

Holding an intention is like choosing search terms and doing a Google search; it creates a nonlocal informational linkage. No, I have no idea what the elements of the process are, but I do know from the experimental evidence that it is outside of spacetime and that neither distance nor time attenuates it.^{8,9}

The key to accessing the nonlocal based on the research is the ability to attain and sustain intentioned focused awareness. Doing this places the normally overwhelming flood of sensorial stimulus and the mentation it creates ("I'm cold, I'm hot, boy those ribs were great for dinner") into the background, allowing one to open to the nonlocal aspect of consciousness, always present but mostly submerged in the sensorium. This is why meditators routinely do better at nonlocal tasks than nonmeditators. Meditators have developed the discipline of quieting themselves and opening to the nonlocal aspect of consciousness. Holding intention, experiments show, can also change both the physical reality as well as the subjective aesthetic reality of an object, person or place. The data shows the effect can be manifested both locally and nonlocally, which suggests it is fundamentally a nonlocal alteration of the intention target's information architecture.

Here are some examples, and I will start with one of my own intention studies and its demonstration of a physical manifestation:

"Through standard techniques of infrared (IR) spectrophotometry, sterile water samples in randomly selected sealed vials evidence alteration of infrared (IR) spectra after being proximate to the palms of the hands of both Practicing and Non-practicing Therapy Practitioners, each of whom employed a personal variation of the Laying-on-of-Hands/Therapeutic Touch rituals. This pilot study presents 14 cases, involving 14 Practitioners and 14 Recipients. The first hypothesis, that a variation in the spectra of all (84) Treated spectra compared with all (57) control spectra would be observed in the 2.53.0 mm range, was confirmed ($p = 0.02$). Ten per cent (15) of the spectra were done using a germanium Internal Reflection Element (IRE). Ninety per cent of the spectra (126) were done with a zinc selenide IRE, and the difference in refractive index between the two IREs skews the data. The zinc selenide IRE spectra alone yield $p = .005$. The authors believe the most representative evidence for the effect appeared in the sample group of Treated vs. Calibration Controls using the zinc selenide IRE ($p = 0.0004$). The second hypothesis, that there existed a direct

relationship between intensity of effect and time of exposure was not confirmed. This study replicates earlier findings under conditions of blindness, randomness, and several levels of controls. Environmental factors are considered as explanations for the observed IR spectrum alteration, including temperature, barometric pressure, and variations dependent on sampling order. They do not appear to explain the effect."¹⁰

Similarly, the second question: is there an objectively measurable subjective aesthetic effect that can be objectively measured, can also be answered in the affirmative.

Beginning in 1994 an independent Japanese researcher, Masaru Emoto, had the idea to freeze double-distilled water, freeze snow crystals from the water and observe through a microscope the snow crystals that formed.¹¹

Emoto's general idea was to see if various stimuli to which the water was exposed would change people's aesthetic experience of snow crystals made from the water. He showed alphabet letters to water. He presented pictures. He played music to water. He then froze the water and had people look at the snow crystals, comparing their aesthetic experience of the treated water with identical water that was not the focus of such intentioned awareness. And he saw differences.¹² The snow crystal pictures make it obvious.

Emoto also directly addressed the question as to whether intentioned focused awareness using the ritual of prayer caused a change, and once again found that it did. The water upon which intention had been focused produced crystals that were judged to be more aesthetically appealing when compared to control snow crystals.

These experiments, although they produced fascinating results, were very controversial, and many critiques of the protocols were advanced. It was not even clear who was the agent of action, whether the effect observed was the result of the intention of the influence used or the researchers' intentions.

Dean Radin, Chief Scientist at the Institute for Noetic Sciences, took up the question and created a variation of Emoto's protocol that in my view dealt with all the issues advanced about the earlier forms. In 2006 Radin's team reported their results:

"The hypothesis that water 'treated' with intention can affect ice crystals formed from that water was pilot tested under double-blind conditions. A group of approximately 2000 people in Tokyo focused positive intentions toward water samples located inside an electromagnetically shielded room in California. That group was unaware of similar water samples set aside in a different location as controls. Ice crystals formed from both sets of water samples were blindly identified and photographed by an analyst, and the resulting images were blindly assessed for aesthetic appeal by 100 independent judges. Results indicated that crystals from the treated water were given higher scores for aesthetic appeal than those from the control water ($p = .001$, one-tailed), lending support to the hypothesis."¹³

Those are physical changes as a result of nonlocal perturbation but in the experiment that follows, one of mine, we see a commensurate aesthetic effect.

In this case the protocol was a series of 12 experiments to assess whether there was some aesthetic difference between wine treated by intentioned awareness and control wine, physically identical but unexposed to intentioned awareness.¹⁴ Three party-giver hosts, blind to the existence of the others and blind to the experiment's purpose and protocol, independently, once a year for four years, gave the parties where the tasting was done. Eighty-four unpaid volunteer participants, seven at a time, of both genders, acted as the tasters at each party, participating only once.

The intender group was comprised of ninety-three individuals all belonging to various metaphysical study groups who shared an

interest in nonlocal consciousness and a belief that intentioned consciousness could produce nonlocal perturbation. All of the intenders were regular meditators with long established daily meditation practices and a history of meditating together as a group at their meetings, which took place anywhere from once a week to once a month. As groups they tended to be made up of a mix of married couples and single people. Ages ranged from late 20s to early 70s. They met in each other's homes under some mutually agreeable arrangement.

I purchased a single 750 ml bottle of wine for each session. The wines were all mid-price range California Cabernet Sauvignons of the quality one might serve at a dinner party amongst good friends, pleasantly palatable but not lastingly memorable. The day of the intention meditation session the bottle was decanted into two identical sealable carafes, 375 ml in each carafe. A pair of dice was thrown to assign the carafes as either A or B. An even number throw was an "A" and odd number throw as a "B." This first throw determined the first carafe's label.

The carafes were each put into separate Styrofoam wine carriers, and a second throw of the dice was carried out. An odd throw determined the B carafe would be the treated carafe for the evening's meditation session. An even throw would make the "A" bottle the treated carafe.

The two carafes in their Styrofoam carriers were both driven to the site of the evening's meditation group. Except for the intention session, each carafe had the same timeline history.

Upon arrival at the meditation site, the group had their discussion period. When it came time for the group mediation with which they closed their meeting, the researcher would go out to the car and bring back the carafe designated as "treated" for the subsequent taster session. The carafe was taken out of its Styrofoam sleeve and put on a table or chair placed in the middle of the room where the group was gathered. They were asked by the researcher to, "Please dedicate your meditation to holding the intention that this bottle of wine is improved during the course of the meditation." The meditations lasted between 20–30 min.

The meditation sessions typically took place on a Wednesday or Thursday, and the tasting sessions on a Friday or Saturday. The two carafes were taken into the house and put in different rooms. The morning of the tasting session the carafes and 14 identical red wine glasses were taken to the location for the tasting session, usually the home of the party host, and given to them. The party host was not told about the meditation sessions and was blind as to which was the "treated" carafe and which was the "control." In his mind it was a question of tasting two different bottles of wine to determine which to buy.

The party host arranged for seven people to come in to ostensibly taste two wines and then have a party. The story the tasters were told was that a friend was considering buying several cases of wine and had winnowed it down to two candidates. Before spending several hundred dollars he wanted to see which was the preferred one. It was explained that he was not present, and all labels and other quality hints had been removed to avoid any possible cueing, so the tasting would be unbiased and just a matter of taste.

The party host measured out seven equal portions of wine from each carafe into the identical glasses. Each glass was numbered A1 and B1, A2 and B2 and so on. The tasters tasted each wine and then marked on a card they were given which glass of wine they preferred. They also noted their gender and handed the card back to the party host, were told the group's assessment, and had a social evening.

The scientific question being tested was: which wine was preferred? Given that the tasters were all in the same room, it could not be assumed that their responses were independent of one another. Therefore, the analysis was based on the consensus of the majority at each party. The parameter p was the probability that the treated wine would be preferred by a majority in a group of seven tasters, and $1p$ was the probability that the untreated wine would be

preferred. A tie could happen if one (or three or five) tasters had no preference. In the case of a tie, the data from that party would not be used in the analysis because neither wine was preferred by a majority of the tasters.

A one-sided hypothesis test was appropriate, because the research hypothesis was that the treated wine would be preferred. Therefore, the hypotheses to be tested are:

$H_0: p = 0.5$

$H_a: p > 0.5$

For the 12 parties, 11 resulted in a majority preferring the treated wine and one resulted in a tie. Using an exact binomial test, the p -value is $(0.5)^{11} = 0.00049$. This result is similar to the probability of flipping a fair coin 11 times and getting heads each time. Therefore, the null hypothesis could be rejected for any reasonable significance level, and it could be concluded that the probability that a majority would prefer the treated wine was greater than 0.5. With 95% confidence it could be said that the probability that a majority would prefer the treated wine is at least 0.76.¹⁵

This experiment of itself, of course, does not prove that focused intention can alter the subjective aesthetic perception of a substance. However, this experiment is not "of itself." As with the water spectroscopy experiments, the issue of intentioned awareness affecting the aesthetic experience of individuals partaking of a substance, compared to controls, has been addressed from a number of angles.

In 2007, Dean Radin led a team that did something similar to the wine study in which chocolate was the focus of the intention. As they describe their protocol, it is easy to see the parallels.

"Individuals were assigned to one of four groups and asked to record their mood each day for a week by using the Profile of Mood States. For days three, four and five, each person consumed a half ounce of dark chocolate twice a day at prescribed times. Three groups blindly received chocolate that had been intentionally treated by three different techniques. The intention in each case was that people who ate the chocolate would experience an enhanced sense of energy, vigor, and wellbeing. The fourth group blindly received untreated chocolate as a placebo control. The hypothesis was that mood reported during the three days of eating chocolate would improve more in the intentional groups than in the control group."¹⁶ The results they reported closely align with what was found in the wine study.

"On the third day of eating chocolate, mood had improved significantly more in the intention conditions than in the control condition ($p = .04$). Analysis of a planned subset of individuals who habitually consumed less than the grand mean of 3.2 ounces of chocolate per week showed a stronger improvement in mood ($p = .0001$). Primary contributors to the mood changes were the factors of declining fatigue ($p = .01$) and increasing vigor ($p = .002$). All three intentional techniques contributed to the observed results."¹⁷

Six years later, in 2013, Yung-Jong Shiah at National Kaohsiung Normal University in Taiwan and Radin carried out another study paralleling the wine study. As they reported, "Each evening, for seven days in a row, volunteers recorded their mood using the Profile of Mood States (POMS) questionnaire.

On days three, four, and five of the test, each participant drank 600ml of oolong tea in the morning and again in the afternoon. One randomly assigned group blindly received tea that had been intentionally treated by three Buddhist monks; the other group blindly received untreated tea from the same source. On the last day of the test, each person indicated what type of tea he/she believed he/she had been drinking."¹⁸

Once again, the change was a subjective aesthetic judgment. How did it come out? As with the wine study there were significant subjective differences.

“Those who drank treated tea showed a greater increase in mood than those who drank untreated tea (Cohen’s $d = 1.4$, $p = .02$, two-tailed). Change in mood in those who believed that they were drinking treated tea was much better than those who did not believe (Cohen’s $d = 1.45$, $p = .00002$, two-tailed).”¹⁹

We now have two related bodies of research. One is described here: the ability of intentioned focused awareness to produce a non-local perturbation effect on what are thought of as inanimate systems, specifically water and wine, so often associated with religious ritual and practice, augmented by the results of similar research involving chocolate and tea.

There is a far larger corpus of research on another category of studies reporting on the effects of intentioned focused awareness on living organisms, what religions call healing prayer or curses, and science calls therapeutic intention (TI).

Before going any further, though, I want to bring attention to this observation: as with the inanimate systems previously described, from the beginning therapeutic intention research produced significant and successful results. It is not a large effect, but it is remarkably consistent. If we restrict ourselves to studies with no issues concerning placebo effects, researcher cuing effect, or any of the other critiques of human therapeutic intention research, and focus only on the nonlocal consciousness essence of the effect, it becomes easy to see. We can do this by considering non-human studies involving laboratory conditions and simple organisms, specifically fungus and bacteria studies.^{20–23}

In this category, perhaps the earliest therapeutic intention study done to standards that would be accepted today, is this one. In 1968, research physician Jean Barry of l’Institut Metapsychique carried out an experiment using Violet Tooth fungus cultures which had been cultivated under optimal conditions: ten petrie dishes with the culture for each participant, in all a total of 195 dishes. Of that total, 151 of the cultures in the dishes showed inhibited growth. There were 10 participants, each of whom carried out nine sessions expressing TI. Their task was to inhibit the growth of fungus cultures. To do this they concentrated for 15 min from a distance of about four feet (1.2 M) away, never touching the cultures. Of 194 dishes 151 showed retarded growth.²⁴

But what makes this study particularly interesting is that whilst most Therapeutic Intention studies are focused on improving the health of the organism that is the target of the therapeutic intention, this early Barry study already recognized a very important distinction, one that is also a factor in spiritual practices: therapeutic intention works both ways. Perhaps because it is something you could never formally test in humans, although it has a strong religious history involving curses, hexes, and “evil eyes”, it is not widely considered, nor often discussed today, but a number of these simple organism studies have confirmed this two-way effect.²⁵ I picked the Barry study for that reason and because of its primacy.

In 2010, Larry Dossey, Bravewell Fellow, physician, and author, and I explored this in detail, and found a study done by biologist Carroll Nash of St. Joseph’s College, Philadelphia, particularly compelling because it was so explicit in this regard.

As we reported, “Nash carried out a therapeutic intention study involving bacterial colonies, cultured in common, and then split into three independent subpopulations.²⁶ His purpose was to replicate earlier studies by nun and biochemist Sister Justa Smith²⁷ and nursing pioneer Dolores Krieger who along with Dora Kunz would later develop the nonsectarian approach to therapeutic intent known as Therapeutic Touch.²⁸ Smith’s studies had shown significant differences between treated and controls measuring changes in hemoglobin

and enzyme activity, which were the focus of the expressed intention. But Nash had a second question. He asked, ‘Could intention alone not merely affect the cell colonies, but could it do so both positively and negatively, when compared to controls?’ The results showed that it could, although positive intention produced a more significant result than negative intention.”²⁹

What is the conclusion here? On the basis of the evidence, I think we have to say that when at least some individuals attain and sustain intentioned focused awareness, whether in a religious or scientific context, they open to a part of themselves that is essentially nonlocal, that is, it is not physiologically based nor limited by spacetime. In this altered state of consciousness they can both acquire information, formally non-local perception, as well as produce small measurable effects on spacetime, nonlocal perturbation.

It is I think a notable distinction that both inanimate substances and living organisms can be affected in ways that can be objectively measured. Changes that are both physical and that produce subjective aesthetic reactions in individuals who have a sensorial interaction with such substances,

Anthropologically, the wine study I report here, along with the other studies I have cited, should also be understood as examples of empirical science. I see this process echoed in acupuncture, which developed over 6,000 years ago, although where is unclear,^{30,31} and ayurvedic medicine, which began with the Indus Valley Civilization (3300–1300 BCE) in India and “is based on the belief that health and wellness depend on a delicate balance between the mind, body, and spirit.”³²

All of these arose from close observation passed down generation-to-generation. The answer to the question, does intentioned focused awareness, whatever ritual is used to employ it or dogma is attached to it, actually produce a measurable effect? Is it belief or is there evidence? The answer is: there is evidence. The dynamics of numinosity even extend into the letters of the languages in which scriptures are written. Can that be possible? It is such a radical idea that I want to present eight experiments carried out in different places, at different times, by different researchers. Five of them involved a prediction of improved memory, one involved improved confidence, and one involved a greater sense of “spirit” for real vs. fake words. They all focused on a model of consciousness reported by British biologist Rupert Sheldrake that he called Morphic Resonance,³³ a model that is closely resonant with the idea of numinosity.

The first test involved memorization of a nursery rhyme in Japanese by non-Japanese speakers, one a real nursery rhyme and two that were meaningless. Then participants in the UK and the USA were asked which they could remember better, predicting that the real nursery rhyme would be easier to remember because of morphic resonance. Rupert Sheldrake, who formulated the idea upon which the study was based, reports “that this was indeed the result, to a statistically significant degree.”³⁴

A second test was reported by Gary Schwartz, then a Yale professor of psychology, currently Director of the Laboratory for Advances in Consciousness and Health at the University of Arizona. Schwartz used 48 three-letter Hebrew words from the Old Testament, of which 24 were common and 24 were rare words. From each of those words he produced a meaningless anagram by scrambling the letters, thus producing a total of 96 “words.” Participants who did not know Hebrew were shown these words one by one and asked to guess their meaning by writing down the first English word that came to mind. They were also asked to estimate their confidence in their guess. He found on average that the group of 90 participants were significantly more confident about their guesses when viewing real words than scrambled words, even though they did not know some of the words were real and others false.³⁵

The third test was reported by Alan Pickering a psychologist specializing in cognitive psychology. At the time he was a lecturer at The Hatfield Polytechnic (now the University of Hertfordshire) in

England. Like Gary Schwartz, Pickering used real and scrambled words. In this study they were drawn in Persian script. Participants were shown a word for 10 seconds then asked to draw it. Independent judges evaluated the reproductions without knowing which words were real or scrambled. The judges assessed that the real words were reproduced significantly more accurately than the false words. This finding was later successfully repeated in student projects using Persian and Arabic words.³⁶

A fourth study was carried out by Arden Mahlberg, an American psychologist at the Integral Psychology Center. Mahlberg took a slightly different tack; instead of language as that term is usually understood, he used a code. In 1836, Samuel Morse, inventor of the telegraph, assisted by Joseph Henry and Alfred Vail, created a code that permitted messages to be sent as a series of electric signals. The code consisted of a sequence of dits, a short signal, in written form represented by a dot, and dahs, a long signal, represented by a dash.

Mahlberg created a series of real Morse code messages and a similar-looking but fake code. His participants were all people who did not know Morse code, a rather specialized skill. The protocol was a comparison of the ability to learn the fake and genuine Morse code. On average, participants learned real Morse code significantly more accurately than the new fake code.³⁷

The fifth and sixth studies were carried out by German psychology professor Suitbert Ertel at the University of Göttingen. Ertel tested recognition of hiragana, a phonetic form Japanese writing, and predicted that these characters would be recognized better when they were the right side up than when upside down, since right side up would correspond to the “morphic form” known by Japanese writers. This is what he found.³⁸ In another experiment, he compared memory for fake vs. real hiragana characters, and found that real characters were remembered better than fakes.³⁹ Ertel then ran additional, more complex tests, which resulted in ambiguous outcomes.

Robert Schorn, professor of psychology at Department of Psychology and Medical Sciences, University for Health Sciences, Medical Informatics and Technology (UMIT) in Tyrol, Austria, Gottfried Tappeiner, professor in the Department of Economic Theory, Economic Policy and Economic History at the University of Innsbruck in Austria, and statistician Janette Walde, Department of Statistics also at the University of Innsbruck, conducted a seventh study relevant to the anthropology of religion. They used symbols such as flags, emblems or trademarks that were once well known but were now forgotten, or symbols that are very familiar to some people but not others, such as the Chinese Coca-Cola symbol, or Far Eastern religious symbols.

For each real symbol a fake symbol was created using similar patterns and complexity. Participants were then shown pairs of symbols, one real and one false, in a random order, and they were asked to judge which of each pair had more “spirit.” They selected real symbols significantly more often than the fake ones. In a follow up test this group compared real Russian words written in Cyrillic along with meaningless anagrams. Again, real and false words were presented in pairs, and participants judged which word had more “spirit.” As before, real words were selected significantly more than the anagrams.⁴⁰

Kimberly Robbins and Chris Roe, both part of the Psychology Division at the University of Northampton, Park Campus, in Northampton, England, designed an experiment similar to the one used by Ertel, this time using real and fake Chinese characters. Sixty participants, who knew nothing of the Chinese language or the characters used to write it, were shown five real and five fake Chinese characters in a random sequence. Then on a sheet with 20 characters they were asked to circle the 10 they had just seen. They recognized the real characters significantly better than the false ones.⁴¹

Is this the effect of some kind of field?

How can a field move through time? How can the human neuroanatomy possibly generate such a field, one capable of altering the state of another organism thousands of miles away in an objectively

measurable way, when the electromagnetic potential of the human brain is just enough to light a single tiny LED bulb? Nerve cells are users, rather than generators, of electricity. How would the neuroanatomy of a human target one person out of seven billions? How could a field generated by the human neuroanatomy possibly locate a previously unknown archaeological site thousands of miles away and describe objects to be found there down to fractions of an inch? On what basis could such a location be made?

Insofar as I have been able to discern, the key to all nonlocal task performance is a single focus state of consciousness in which the normal sensorium that overwhelms our ability to discern the nonlocal aspect of our consciousness recedes into the background for a moment, and we open to the nonlocal. It is my view, based on the data, that this occurs in three ways: 1) one develops a discipline like meditation; 2) neurosis, and a neurotic obsession; 3) a transitory but utterly engaging experience that totally focuses one's consciousness.

Conscious intentioned awareness is not a handwaving term but a validated neuroscience reality; look at Andrew Newberg's neurotheology papers; look at thousands of published papers in several disciplines on meditation. And it is a core principle of thousands of years of empirical observational science. It is the reason that martial art dojos and religious communities like monasteries, ashrams, and nunneries of every human faith across time, geography and culture emphasize meditation.

Intentionality is a state, and this is what makes it hard to measure. Phenomenologists highlight the role of intention, but they – for the most part – are not interested in measurement, thinking that there are no measures that can do justice to lived experience.

And we have a very clear example of collective intentioned awareness motivated by heightened emotion producing an objectively measurable effect. The Global Consciousness Project was originally created in the Princeton Engineering Anomalies Research Lab at Princeton University by Roger Nelson, who now manages it as an independent project. It is a very elegant extension of laboratory experiments where a single individual through nonlocal perturbation causes a random event device to go non-random. Nelson took this individual effect to the social level and discovered, “There is a highly significant overall effect on the GCP instrument (a network of REG devices scattered around the world) during special times we identify as global events when great numbers of people experience shared emotion. The effect is a tiny statistical deviation from an expected randomness, but the patient replication of tests has gradually created very strong statistical support for the reality of a subtle correlation of human consciousness with deviations in random data. The probability that the effect could be just a chance fluctuation is less than 1 in a trillion.”⁴²

The GCP, I think, is verifying an effect produced by intentioned focused awareness at a scale where physical reality in a broad sense is altered (unlike the personal effect produced by Therapeutic Intention). Because the random number generators (RNGs) like all of spacetime are first and foremost a form of informational architecture that can be altered by intentioned consciousness, the devices just catch and reflect this manipulation of spacetime.

What is clear in all this research is the role of intention as a variable that can be manipulated and ought to be considered in the design of any protocol involving nonlocal consciousness, whether it is nonlocal perception or nonlocal perturbation. Developing a discipline for attaining and sustaining intentioned conscious awareness on the basis of the research evidence, whatever technique is used, produces intentioned focused awareness, and that level of heightened single focus produces increased access to nonlocal consciousness.

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