

ESSAY

Responsive Universe Hypothesis for Macro-PK: A Testable Framework Linking Meaning, Measurement, and Outcomes

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ABSTRACT

Psychokinesis (PK) is a class of psi phenomena in which mental intention is claimed to affect matter – both living and nonliving – sometimes at a distance. Reports of metal bending, healing, and other PK outcomes share a striking feature: the form of the outcome is congruent with the semantic content of the intention. For example, reports indicate that when the target material is metal, and “BEND” expresses the intentional thought, a physical process occurs in which the target piece of metal becomes soft and bends. But if the target is a diseased organ in a specific body and the intention expressed in the thought is “HEAL,” a vastly different physical process occurs. If such goal-specific patterns are genuine, they suggest an operative pathway that can be understood as a natural responsiveness to the meaning inherent in a specific need expressed in thought. This paper reviews representative evidence bearing on macro-PK claims, including metal bending, distant healing paradigms, and reports of object displacement. It proposes a Responsive Universe (RU) hypothesis as a testable system model. RU retains key insights associated with Lucadou’s Model of Pragmatic Information (MPI) while replacing MPI’s acausal, correlation-based account in which meaning is not a transmissible causal instruction, with an explicit causal pathway linking semantic goal specifications to measurable target outcomes. The mainstream scientific assumption holds that conscious thought emerges from matter once it reaches a threshold level of complex organization, and that thought is therefore a byproduct of matter – which is fundamental. The phenomenon of goal-directed PK, if robust, demonstrates that the opposite is also true: that the organization of matter can be a byproduct of thought.

SUBMITTED April 21, 2025

ACCEPTED January 6, 2026

PUBLISHED September 29, 2026

<https://doi.org/10.31275/20263703>

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KEYWORDS

Synchronicity, psychokinesis, metal-bending, macro-PK, pragmatic information, semantics.

PART 1: THE PHENOMENON

Psychokinesis (“PK”) is the claimed ability to influence physical objects using the mind alone, without physical interaction. It includes alleged phenomena such as bending metal, moving objects, and biological healing, all

claimed to be the result of intentional conscious thought alone. Current Western science denies that PK exists. This denial exists in part because current Western science has no explanation for how thought can possibly affect the physical state of matter; therefore, PK cannot exist. The fact that there is no widely accepted explanation for a

phenomenon reported across cultures for centuries (e.g., see Gregory, 2002, for medieval accounts) is not sufficient grounds to deny its existence.

In the first part of this paper, I will review in detail facts which would seem to provide sufficient evidence to conclude that PK metal-bending is real. This form of PK has been widely demonstrated, witnessed, practiced, and studied. Besides metal-bending, other types of PK have been reported, including seed sprouting and moving objects as a result of mental intention.

In the second part, I discuss the conclusion that follows from the data: *when a strong desire or need underlies a thought, a specific physical process may, under some conditions, unfold in a way that implements the intention expressed in the thought.* Although there are different types of PK, for example metal bending, object motion, and remote healing, the underlying general principle upon which all PK appears to operate is *mind over matter* which, if true, must take its place as an important cornerstone of the operation of our reality.

The third part of this paper is devoted to the development of a model for situations in which PK metal bending and other psi-type phenomena may be studied. Drawing on insights reported by Houck and Hasted, as well as on structural components found in Lucadou's model of pragmatic information, the proposed model is based on the premise that PK operates within a hidden, cosmologically implemented information-processing framework.

Thought Can Make Metal Soft

The phenomenon of bending metal using the mind was introduced to the world by Uri Geller. Jack Houck, an aerospace engineer who managed a research group at McDonnell Douglas from 1970 to 1990 became interested in this form of "mind over matter" and originated the structured methodology of "PK Parties" where many participants were able to bend metal objects like spoons, forks, and metal rods at times with no force applied. Houck conducted controlled experiments at parties, some in collaboration with metallurgist Severin Dahlen. Although the concept of "parties" sounds unscientific, the rationale for attempting to generate metal bending phenomena within a group in which general excitement and heightened emotion occur is scientifically sound. Houck found that this environment, with from 15 to 40 people present, was most conducive to eliciting and sustaining the phenomenon.

He hosted 370 such parties, observing and documenting over 17,000 instances of the phenomenon, and found that

about 85% of all attendees had success in bending metal using PK. In these cases, the metal did something it never normally does at room temperature: part of it became temporarily "rubbery," like "putty" or "chewing gum," and easy to bend. By 2002, PK parties had been replicated over 100 times by other researchers with similar results (Houck, 2002; Houck, 2004b).

Houck summarized the general instructions he gave to participants as follows:

1. Make a mental connection with what you want to affect.
2. Command what you want to happen.
3. Release it (let it happen). (Houck, 1993, para. 13)

More specifically, his instructions were:

1. Hold the piece of silverware between the thumb and forefinger and rub gently.
2. Project a point of concentration in your head, almost to the point of pain
3. Then move this point of concentration down through your neck, shoulder, arm, hand, fingers, and project it into the silverware. In effect, this process allows the mind to achieve a link from the brain to some point within the silverware
4. Next, verbally command the silverware to bend. ... I have been having everyone shout as loud as they can: "BEND, BEND, BEND!!!" The people are asked not to just shout for the sake of shouting but to concentrate and intently command the silverware to bend
5. Then release that thought, sit back, relax, and use the body sensors (e.g., fingers or a feeling) to find the small time window when the silverware is ready to bend. Occasionally, push on the object with the other hand to see if the object gives. Most people have a hard time releasing the thought, and think that they have to continue to concentrate on the bending objective. I move around and try to break everyone's concentration. (Houck, 1993, para. 13)

"Because I have seen over 85 percent of the people learn to bend, I have tremendous confidence that this simple procedure works. That confidence also may have something to do with the success of the parties." (Houck, 1982, para. 11)

In his party events, Houck characterized three levels of metal bending ability – "kindergarten," "high school," and "graduate school" benders:

- **"Kindergarten" Bending** ... Each person starts with one forged-stainless steel fork or spoon. They hold



it in one hand. That makes the connection step easy because they know exactly where it is (in their hand). Then I have the whole group command their forks or spoons to bend by shouting “BEND, BEND, BEND!” The shouting is not really necessary, but it seems to get the group excited. The bending usually starts within seconds after I say “Release it”, meaning the thought. From that point on, it really does not take any concentration. In fact, the more distractions, the easier it is for people to “let go.” ... Even though the metal used in “kindergarten” could be bent by physical force, the people are trying to find the few seconds that the metal loses its structure (i.e., becomes rubber-like) during which time they can form the flatware into mangled shapes. They usually feel warmth coming out of the flatware when it is ready. ... Approximately 85% of the ...12,000 people [in a later article, written after hosting additional PK parties, 17,000 people; Houck, 2004b] at my PK Parties have experienced this level of PK. (Houck, 1993, para. 15)

- **“High School” Bending** After a person has bent up four or five pieces of flatware, then they are given a silver-plated spoon. Their task is to buckle the spoon bowl. I usually also have steel and aluminum rods available. ... This level is characterized by bending things that could not be bent using only physical force. ... About 18% of my PK Party attendees have achieved this level of PK. (Houck, 1993, para. 17)
- **“Graduate School”** For me, this is the most exciting part of the PK Party. I give two long tine forks (dinner forks) to each participant, and they hold one in each hand at the bottom of the handle. They are not allowed to touch each fork with the other hand. We command them to bend, and 11% of the people have experienced spontaneous fork bending. Sometimes a person has both forks bend or twist. These are not trained magicians. (Houck, 1993, para. 19)

He also offered an alternative form of PK at the parties:

- **“Seed Sprouting”** - Some people really do not like bending metal, so I let them sprout seeds. They command the seeds to “sprout”. Often a small sprout about 1/4” long appears within 5 to 10 minutes. (Houck, 1993, para. 18)

Regarding the necessity for “release,” John Hasted, a physicist who researched metal-bending in controlled experiments using strain gauge instrumentation, mentioned:

A most important lesson which is taught to the metal-bender by use of the strain gauge detector is the avoidance of over-concentration; he must learn ‘sudden inattention’ if he wants results. ... The strongest events often take place, it appears, when the subject relaxes directly after concentration. (Hasted, 1981, pp. 54-55)

Houck found that PK was more successful when more than one or a few people were present at a party – between 15 and 40 people yielded the best results (Houck, 1983), and he discussed the notion of a “field effect:”

Many experiments have been conducted within the PK parties. There does seem to be some type of field effect created within the area encompassed by the people at a PK party. In one experiment, we had sealed pop bottles with brass strips and other metals inside, with one bottle assigned to each individual. ... Similar bottles were placed in other homes. All of the rest of the bottles were placed in the center of the circle of people at the party. Even though none of the metal was bent at the end of the party, the bottles were left there for several days. The next morning, the brass strips were bowed and twisted. All of the brass strips at the PK Party location continued to bend for three days, and then stopped bending. Cutting the sheets of brass had apparently introduced stress into the resulting strips. The PK effect acted to relieve the stress, much like if the brass strips had been put in a furnace and allowed to “creep”. The control bottles at the other home did not have any bending in the brass strips throughout the same time period. (Houck, 1993, para. 24)

Another experiment ... was to take two packages of hacksaw blades, each containing two blades. The Rockwell hardness (Superficial 15N Scale) of each blade was initially measured. One blade was kept in a locked safe at my workplace and not exposed to PK. The other three hacksaw blades were taken to four PK Parties in a brown bag and placed in the center of the circle of people during each party. Only my metallurgist (Severin Dahlen) and I knew this experiment was being conducted. The blades exposed at the party were never placed near the control blade. All of the blades were tested for hardness prior to each PK Party over a three-month period. The hardness

of the three exposed blades all reduced to near that of annealed steel from the original very hard steel of the hacksaw blades. The control blade maintained its hardness throughout the experiment. (Houck, 1993, para. 25)

This experiment is fully detailed in Dahlen (1982).

Houck's Theory

In order to formulate a theory of the mechanism that operates in PK metal-bending, it is important to understand the nature of metal. Metal is composed of small, tightly packed crystalline regions called *crystallites* or *grains*, each with its own atomic orientation, separated by *grain boundaries*. Defects called *dislocations* are also present within the crystal lattice. These are essentially disruptions in the orderly arrangement of atoms along a line. These dislocations can move under stress, allowing the material to deform.

From his experiences, experiments, and scientific knowledge about the structure of metal, Houck developed a theory to explain the process that occurs during PK metal bending:

I concluded that the number of "dislocations" in the grain boundaries of the metal is a dominant parameter. The harder the steel, the more dislocations, the easier it is for people to PK that metal. Although we do not know how the mind can arrange to put "energy" into the metal, it does seem to use the dislocations as transducers. With no place to go, the energy turns into heat and melts the grain boundaries. With most of the grain boundaries molten for a few seconds, the metal loses its structure and can be easily formed (kindergarten and high school PK) or relieve internal stress (graduate school PK). (Houck, 1993, para. 26)

Figure 1 depicts Houck's concept of the metal-bending process. When a large enough concentration of grain boundaries, often in the zone targeted by the metal bender, melt together, the metal is hypothesized to "lose its structure" in that zone and become "rubbery." This change of phase event typically lasts from 5 to 30 seconds. Since the metal has thermal conductivity, the heat is conducted away after the peak of the state change event, and the metal "re-freezes." The area labeled STU (Space Time Unit) in the

figure is "a representation of the mind passing into another dimension where all information is stored, similar to Jung's collective unconscious and the metaphysics term 'akashic records.'" (Houck, 2004a) The idea of a dimension outside the physical domain of space and time where information is stored and processed has been discussed elsewhere (e.g., Graboi, 2024). The presence of the "STU" implies that metal bending somehow invokes the operation of a hidden system to implement the changes that take place in the metal to allow it to become soft and bend.

At the high school level, participants were given objects that could not be bent using muscular force alone. At the graduate school level, participants were not allowed to touch the metal area that bent. Figure 2 shows a graduate school bender holding two forks bent using PK (see also Barnes, 2003).

Discussion of Houck's Theory

Houck's theory of the mechanism that occurs in PK metal-bending depends in part on the fact that metals are essentially crystalline. In metaphysical traditions, crystals are often viewed as objects that interact with human psychic energy, consciousness, and intention. They are believed to receive, store, focus, amplify, and transmit forms of energy not yet recognized by conventional science. Practitioners claim that crystals can help "tune" a person's energy field (aura). Crystals are used in practices such as Reiki, claimed to channel universal life energy (*Rei-ki*), chakra balancing, and other energy healing practices. Today, crystalline silicon solar cells provide electricity for thousands of homes, and the chip industry builds virtually all its integrated circuits ("chips") on wafers made from crystals of silicon. (In the *Star Trek* fantasy, dilithium crystals regulate matter-antimatter reactions in the warp drive of Federation starships.) Hasted reported personally witnessing a single crystal of molybdenum about 1 cm in diameter being bent by PK through an angle of about 20 degrees (Hasted, 1981, p. 18).

Paraphrasing Houck's basic idea: *exotic energy*, unmeasurable with current instrumentation, which results from the information structure of *intentional thought*, enters into the crystal structure of metal. This energy interacts with *dislocations*, which are localized zones of stress and distortion in the metal crystal lattice. The stress concentrations of dislocations could act as energy accumulation points like micro-antennas embedded in the metal, as hypothesized by Houck. The more dislocations, the more receptors or entry points for this energy

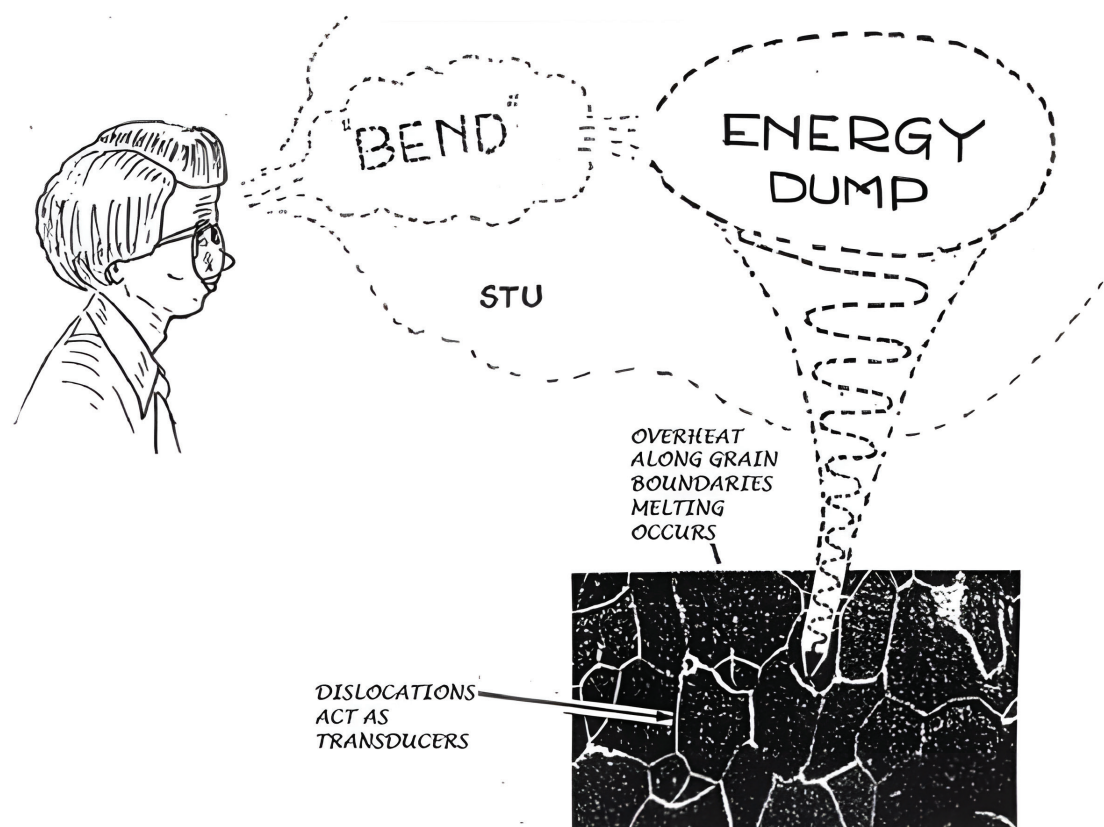


Figure 1. Houck's Concept of the Metal-Bending Process.

Note. The bottom image in the figure illustrates metal grain boundaries: adjacent grains (crystals) have different lattice orientations separated by irregular boundary regions where crystalline order is disrupted. In Houck's metal-bending accounts, the metal is described as entering a brief, localized "rubbery" interval (often reported lasting about 5–30 s) within a targeted zone. The mechanism by which an imperative intention (e.g., "BEND!") would couple to microstructural features such as grain boundaries is unknown. STU denotes "space-time unit" and is described by Houck as an information-handling process in another dimension. In this framing, PK metal bending is not presented as a simple "mind exerts force" model. Reprinted from *Researching Remote Viewing and Psychokinesis* (Fig. 6), by J. Houck, 1993, TREAT V Conference Proceedings (<http://jackhouck.com/rvpk.shtml>). Copyright 2004 by Jack Houck.

to interact with the metal, supporting Houck's finding that metal with more dislocations is easier to bend using PK. Dislocations store mechanical energy (strain energy). In Houck's model, they would act to trap, accumulate, redirect, and transform the incoming exotic energy into physical energy and heat. When the accumulated physical energy reaches a critical threshold, partial melting or softening at the grain boundaries would occur, resulting in a temporary loss of rigidity in the metal. Once the peak energy is released through bending or heat, there would be a natural drive to return to a lower energy state – the rigid solid.

There is no known type of physical radiation that, when directed into a metal, causes it to suddenly lose its structure and become rubbery at room temperature. When metal becomes molten at thousands of degrees, it could be described as "rubbery," but that is not what is happening

here. Many other models are possible, and it remains possible that a totally different mechanism might be in play. The key point is that in order for metal to become rubbery, a process must occur at the atomic scale or involve subatomic (quantum) interactions within the metal. And, by all appearances, it occurs as a result of an intentional *thought or need for a specific piece of metal to bend*. Houck's "Space Time Unit" (STU) acts as a hidden system between the thought and the creation of the energy that enters the metal. There is much research to be done before the exact nature of the physical process, as well as the nature of the thought process, is understood.

PK Bending of Plastic

Stainless steel as found in flatware and seeds are not the only materials that Houck found could be affected by PK.



Figure 2. Graduate School Bender Holding Two Forks Bent Using PK.

Note. A man who had both of the forks he was holding during Graduate School bend over spontaneously is shown [above]. He was holding the bottom of the stainless flatware fork handles, one in each hand. He was concentrating on the fork in his right hand when I noticed that the fork in his left hand was bending over spontaneously (not using the other hand). I asked him if he saw the one in his left hand and then he looked at it and said "How did that happen?" At that moment, the fork in his right hand bent over spontaneously. ... Any amount of fork movement is considered very special and occurs for approximately 11% of the people who participate in the Graduate School phase of PK Parties. Figure and caption reprinted from Material deformation by intention (Figure 2, lower-right panel, "Graduate School Bender"), by J. Houck, 2004 (<http://jackhouck.com/mdi.shtml>). Copyright 2004 by Jack Houck.

He mentioned, "children could easily bend plastic spoons and forks with PK."

It was noticed that children were able to bend clear plastic forks and spoons. Normally, this material is very brittle and breaks when people try to bend it. The PKed area of the plastic looks cloudy to the naked eye. Under optical magnification, the cloudy area appears to have microcracks emanating from a small bubble. It looks as if the spot of the bubble was heated, causing that area to expand, creating the microcracks. This effect seems to have some correlation to the heat being created along the grain boundaries in metal. The nice part about using clear plastic is that another feedback is provided to the person doing the PK in that they can observe the cloudiness as a signal for when the plastic is ready to bend. (Houck, 2004a, para. 24)

Figure 3 shows photographs of plastic spoons bent by children using PK.

Object Motion

Over the course of his parties, Houck witnessed other effects of PK besides metal-bending, plastic-bending, and seed sprouting. He mentioned the ability to move objects using PK:

One time, I saw that the small girl ... had bent a large steel rod. I went over to where she and her mother were sitting and patted her on her head, telling her how great I thought she had done. Her mother then said, "Oh, she can do more than that." I asked, "Like what?" The little girl turned and pointed to the tennis stick figure with a counterweight for balance on the mantle above the fireplace and said: "Move." The figure then spun around on the point of the stand it was on. (Houck, 2004a, para. 18)

Recently, Dullin and Jamet (2018, 2020) and Dullin et al. (2024) have shown that it is possible to rotate plastic domes with PK (see, for example, <https://www.youtube.com/watch?v=L39Cbzavy38>). Dullin et al. (2024) further found evidence consistent with a learning curve: for one subject it was possible with practice to increase the weight of a plastic dome rotated by PK from approximately 10 grams increasing with practice to 400 grams in one year. McClenon (2024) has also reported evidence that online groups of individuals can influence the rotation of pinwheels.

Healing

Houck also witnessed instances of spontaneous healing at his PK parties:

I have noticed a number of events that would be considered spontaneous healing. For example, in the middle of a PK Party, a man would stand up and say that his back had just been healed. The PK "energy" seems to be magnified at PK Parties and is strongest at the center of the circle of benders. This seems to correlate well with the "chi energy" discussed in various martial arts disciplines. (Houck, 2004a, para. 29)

The phenomenon of healing or otherwise affecting the biology of living organisms using thought has been

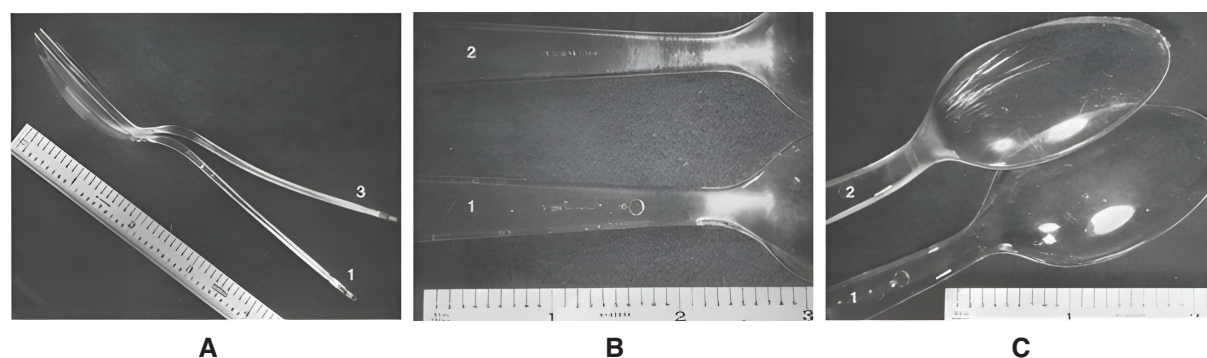


Figure 3. Photographs of Plastic Spoons Bent by Children Using PK.

Note. Panel A: Curvature of the handle of Spoon No. 3 compared to Spoon No. 1. Panel B: Transverse crazing in the handle of Spoon No. 3 compared to Spoon No. 1 (convex sides up). Panel C: Longitudinal crazing in the bowl of Spoon No. 3 compared to Spoon No. 1 (convex sides up). Adapted from Examination of deformed and fractured plastic and metal objects (Figs. 4–6), by J. Houck, 1981, McDonnell Douglas Astronautics Company (<http://jackhouck.com/psd.shtml>).

demonstrated and is an active area of research (see, for example, Achterberg et al., 2005; McCoy, 2011; Radin et al., 2015; Rebman et al., 1995).

Houck concluded:

The implication that if a magician can perform a trick bending a spoon, that everyone bending spoons is being fraudulent is ridiculous. I have given many PK Parties, and I have seen many incredible PK events, and I am totally convinced of the reality of the ability of the human mind to affect things. (Houck, 1993, para. 43)

For additional examples, see <https://www.exometaverse.org/spoon-bending>.

Takeaways

At spoon bending parties, which have been hosted by hundreds, likely thousands of people over the last 40 years, there appears to be much evidence to support the idea that, *as a result of intentional thought, accompanied by emotion*, metal can temporarily “lose its structure” and become “rubbery,” during which time the metal can bend of its own weight or with relatively gentle shaking or nudging. John Kruth, Executive Director, Rhine Research Center, Durham, NC, currently hosts spoon bending parties and noted that “at every event it seemed that the metal was getting softer and more malleable” (J. Kruth, personal communication, 2025). John Hasted, Ph.D., Professor of Experimental Physics; Head, Department of Physics, University of London, specialized in atomic physics and solid-state physics, authored well-regarded technical books, and trained as a scientist. He conducted experiments and observed subjects that produced results without touching the metal

directly. His book, *The Metal-Benders* (Hasted, 1981) documented his observations and experiments. These involved repeatable protocols and instrumenting the metal with strain gauges to measure effects quantitatively. Referring to a “floppy condition” in metal, he mentioned personally witnessing metal in this state.

Given the evidence available today – widely replicated, and witnessed by thousands, photographed, measured with strain gauges, and videotaped, of which a small fraction has been discussed here – taken together, the data appear sufficient to justify serious hypothesis formation around the possibility that, under certain conditions, metal temporarily exhibits anomalous softening in association with intentional thought.

A skeptical reading may argue that PK metal bending never occurs and instead suggest more conventional explanations, such as mechanical leverage, pre-bending, metal fatigue, stress concentration, heat transfer, perceptual artifacts (camera angle/illusion), chemical treatment, conjuring methods, selective reporting, demand characteristics, or social contagion. To support a stronger evidential claim, tests should employ robust controls, including pre-registered bend criteria (e.g., specified angle and/or torque thresholds), standardized and blind-coded metal samples with documented mechanical properties (e.g., hardness and metallurgical characterization), secure chain-of-custody with tamper-evident packaging, continuous multi-angle video, force/torque measurement (e.g., grip sensors or load cells), thermal monitoring (e.g., thermocouples and/or infrared imaging), and blinded outcome scoring. Controls should include matched handling without (or with redirected) intention instructions, along with other controls to assess expectancy and experimenter effects.

PART 2: THE IMPLICATIONS

Instead of focusing on the specific physical process involved in one particular type of PK, it is valuable to consider the general process that operates across different PK situations. Generalizing, the specific physical process that occurs in each type of PK depends on the *semantics* of the particular associated imperative, e.g., “Bend!” vs. “Sprout!” vs. “Move!” vs. “Heal!”, and the target material being affected. The *semantic content of the thought imperative* appears to be a major factor that governs the form of the resulting physical process. It seems amazing that the *meaning* inherent in an *idea* expressed in conscious (and possibly unconscious) thought is a central factor in PK processes. Table 1 contains a list of some of the ideas, or “imperatives,” used in PK and the specific physical effect that each one produces.

Imperatives do not need to be composed of single words. Below describes how Harold McCoy, healer, dowser, and clairvoyant who successfully located a stolen harp over 2000 miles away after receiving a request over the telephone from a person he had never met (Mayer, 2007), used PK to keep ticks and chiggers out of his garden. He called this type of PK a “thought form.”

I got into a meditative state. ... When I was visualizing, I saw a bubble come out of my solar plexus – just energy, a “thought form.” It got larger and larger, and then I was inside it. I was in the geometric center of this bubble. It looked like a “dome” because half of it was underneath the ground, so it could take care of other things. So, in my mind’s eye, I could see this bubble getting bigger and bigger, so that it went out to the edge of my yard and my garden. I was programming the following to happen: I was saying, “Ticks and chiggers will be very uncomfortable in the center of this bubble, and they’ll all want to get out of it. Those that are out will not come into it, because it is filled with energy that is detrimental to ticks and chiggers.” I was visualizing this bubble and these thought forms. You can program things to do what you want. I programmed this bubble so that ticks and chiggers would be uncomfortable in it and move out of the yard. In a few days I realized I had no more ticks or chiggers on me. (McCoy, 2011, p.37)

A thought form is essentially the creation of a thought based on a need which can be associated with a specific

location in space and time and which persists. The semantics of a thought form can apparently influence the behavior of living organisms as seen in McCoy’s example. McCoy wasn’t just wishing vaguely; he was describing a very specific “program” that seemed to keep working in a particular place over time. The actions of thought forms do not sound like coincidences, but rather like the environment responding to the semantic content of intention.

In each case mentioned in Table 1, a *different specific physical process* appears to be implemented in order to achieve the intended result. It is as if the imperative comes first and the universe, using what has the appearance of masterful intelligence, takes the semantics of the imperative as a specification to guide the construction of a temporary physical mechanism to implement the result implicit in the meaning of the imperative expressed in the thought. For example, whatever physical mechanism causes an object to move, or a particular body organ to heal, or a seed to sprout, or ticks and chiggers to move out of a garden, must be quite different from the physical mechanism that causes metal to bend. And each physical mechanism appears to have impressive structure and complexity.

The statement that the universe designs and implements a complex process is a description in human terms of what the universe appears to do. It must be clarified that the highly intelligent behavior does not automatically imply the presence of mind, consciousness, or a divine being operating outside or above nature. High intelligence and highly appropriate goal-oriented system behavior can be produced by purely deterministic means, as modern artificial intelligence demonstrates. This point will be developed further later in the discussion.

The Connection Between Thought and the Way the Universe Works

The idea that the universe “designs and implements” a physical process to manifest a thought imperative implies that there must be a close – an intimate – connection between *thought* and the *way the universe works*. What kind of universe is it that can work in this way? More broadly, what does the reality of PK imply about the fundamental characteristics of *thought*, *emotion*, *release of thought*, and the *fundamental operation of the universe*? One implication is that the universe is *responsive to need*. “Intention” may not be the best choice of a term that describes the driving factor in PK. An “intention” may be whimsical - one can intend something out of duty or logic – whereas a need implies a more consequential state of disequilibrium that



Table 1. Example Imperatives Used in Macro-PK and the Resulting Specific Physical Effect.

IMPERATIVE	EFFECT
"BEND!"	Bends a piece of metal, often in the hands of the person issuing the imperative.
"SPROUT!"	Causes a seed to sprout, often in the hands of the person issuing the imperative.
"HEAL!"	Heals a biological disease or physical biological issue in a target individual.
"MOVE!"	Causes objects of various materials to move unidirectionally in space and time.
"SPIN!"	Causes objects of various materials (e.g., plastic, metal, wood) to spin.
Multi-word Imperative Example TICKS AND CHIGGERS WILL BE UNCOMFORTABLE IN A SPECIFIC SPACE Causes ticks and chiggers to leave a garden (see text)	

Note. Depending on the type of PK involved, as specified by the semantics of the imperative used, different physical processes must occur to achieve the desired result. Depending on the target object or effect of the PK, the actual physical process that occurs appears to be able to influence matter at its deepest physical levels – molecular, atomic, or sub-atomic (quantum).

seeks resolution. Needs are often affectively charged (by urgency or personal significance) and may operate partly outside focal awareness, whereas intentions are typically explicit, articulated, and consciously framed. In this sense, “need” better captures the combination of motivational depth, emotional strength, and goal relevance that many anecdotal accounts treat as the conditions under which anomalistic outcomes are most likely to occur.

A Responsive Universe

The phenomenon of PK, if it exists, implies that a “responsive universe” is a fundamental working principle in our reality. Other psi phenomena indicate that this basic PK principle can affect neurological processes in an individual. As an example, consider an incident reported by Patrick Casement, who, against his will, found himself

thumbing down a particular car passing by him on the road:

My grandmother lived about four miles from the little church my parents usually attended. I was to go to the service there on Easter Day. Afterward, I decided to walk the four miles back rather than wait forty minutes for the bus because I wanted to test out my solution to a familiar school mathematics question. I had worked out exactly how fast I would have to walk so the bus wouldn't catch me up. If my calculations were wrong, I would admit defeat by taking the bus for the rest of the journey. I was absolutely determined to walk those four miles at just the right pace, to prove that I'd worked it all out correctly.

However, after about twenty minutes, I was shocked to find that – in what I can only call a reflex action, as though my right arm had suddenly taken on a life of its own – I put out my right hand to thumb down one particular car. I was utterly astonished to watch myself defeating my own purpose. To my relief, the car drove past – my race against the bus was, I thought, not to be spoilt. But a moment later, the car suddenly stopped. Since, regrettably, I had thumbed it down, I felt I had to accept the offered lift.

I got into the front beside the chauffeur. I imagined he had first driven by and chosen to ignore me, but had then been told to stop by the lady in back. So I turned to her, and simply said, "Thank you."

She immediately asked, "Were you at Winchester?" I had no idea what prompted the question, but I replied that I was currently at that school.

She replied, "If you are there now, you won't know the person I am thinking of. He was called Roddie Casement and he went to Winchester, but that must have been a long time ago now." When I told her that she was actually speaking of my father, the lady was delighted, and

immediately asked, "Is his mother still alive?" I informed her that she was, and that we would soon be driving past her door, two miles down the road we were on. The lady then told me a story almost exactly parallel to the one I had been hearing from my grandmother all week. This lady had been trying to trace her close friend – my grandmother – ever since they had lost touch during the war. She was, in fact, the friend my grandmother had been seeking for ten years. They spent that day together – probably their last chance, as my grandmother died soon thereafter. (Mayer, 2007, pp. 21-22)

The car contained a woman who had a need to see Patrick's grandmother, who also had a need to contact the woman in the car, with whom she had lost touch. In this case, the chain of events can be interpreted, within the RU framework, as if a responsive process had coordinated circumstances in a way that reconciled the needs of two people.

Note that Patrick said, "in what I can only call a reflex action, as though my right arm had suddenly taken on a life of its own." Given this description, it is possible that the deep-level physical process the universe implemented included directly stimulating the efferent nerves that caused Patrick's right arm, hand, and fingers to move into a hitchhiker position, bypassing his neurological executive control (decision) function. He simply watched in astonishment. Alternatively, Patrick's "deeper unconscious self" may have received information to signal a hitchhike at a higher level than individual neuromuscular commands, leading to unconsciously moving his body in the appropriate way. Either way, what Patrick considered to be his "free will" was not applicable. Other incidents of this type of behavior are found in the literature (e.g., see Mayer, 2007).

The principle of "intelligent need fulfillment" by the action of a "responsive universe" can also be termed, "synchronicity." Synchronicity has been discussed as a potential driving factor in the way the universe works by Carl Jung and others who speculated that it reflects a deeper layer of reality in which events are linked by *meaning* rather than cause and effect (Jung, 1960/1952; Lucadou et al., 2007). Jung defined synchronicity as "a *meaningful coincidence* of two or more events, where something other than the probability of chance is involved (emphasis in original, Jung, 1952/1960, p. 655)."

For the remainder of this discussion, this type of general behavior will be termed the "*Responsive Universe Hypothesis*" (RU).



PART 3: MODELING PK-TYPE PHENOMENA

Lucadou (1995; see also Lucadou et al., 2007) proposed the *Model of Pragmatic Information* (MPI) as a framework for understanding a range of reported psi-type and synchronistic phenomena. MPI draws on the formalism of Generalized Quantum Theory articulated by Atmanspacher et al. (2002). An important component of MPI concerns how PK-type anomalies and other psi phenomena might be modeled. In line with Generalized Quantum Theory, MPI treats such effects as *acausal*, *entanglement-like correlations* that can arise within a coupled participant–target–measurement system.

Entanglement phenomena observed in quantum physics are often described as “acausal” in the sense that measurements performed on spatially separated parts of an entangled system show correlated outcomes without any detectable signal appearing to pass between them through space-time. For example, when one particle changes its spin state, the other also changes its spin state. These correlations can persist even when the particles are separated by enormous distances. The observed correlations occur at theoretical speeds greater than thirty thousand times the speed of light (Santamaria Amato et al., 2023).

However, entanglement is fragile, since interaction with the environment or measurement typically destroys the entangled state. For this reason, entanglement cannot be used as a means for transmitting controllable information. The *acausal non-transmission-oriented correlation* mechanism in the MPI framework is termed the *NT (Non-Transmission) axiom*: no meaningful communication occurs between the elements involved in a psi anomaly. This framing of psi phenomena in terms of *acausal*, *entanglement-like correlations* can help explain why reported psi anomalies often appear difficult to stabilize, highly sensitive to context, and resistant to conversion into a reliable signaling method.

In the MPI model, “pragmatic information,” refers to information that can affect the state, interpretation, or action of a system – in other words, what information in a given situation can actually make a difference. This differs from the conventional Shannon information as used in communication theory, which quantifies uncertainty reduction in a message independent of meaning, or information calculated simply from symbol count. Pragmatic information includes only information that is capable of having an effect on a system.

Pragmatic information in MPI depends on two factors: *novelty*, meaning the degree to which an input departs

from what is already expected, and *confirmation*, meaning the degree to which the resulting pattern can be recognized or interpreted in light of the observer’s existing schemas and constraints. For example, a page of text written in an unknown language may be highly novel, but if it cannot be recognized or interpreted, its confirmation is low, and therefore its pragmatic information is also low.

A “system” in the MPI framework refers to an organizationally closed, coupled arrangement comprising the participant, the target, the observation or measurement process, and the context in which the outcome matters.

MPI treats five elements as mutually interactive in a psi occurrence: *context* (the situational framing); the *participant* (the intention-bearing agent); the *target* (what is purportedly influenced); the *measurement process* (the means by which outcomes are recorded); and *meaning* (how participants and observers interpret outcomes relative to goals and significance). Because outcomes can feed back into attention, expectation, interpretation, and procedural choices, the system is characterized as *self-referential* rather than as a fixed, observation-independent mechanism.

The concept of pragmatic information together with other aspects of the MPI formalism can be incorporated within the RU framework as a principled way to quantify the factors that support or suppress an effect. Figure 4 illustrates such a framework in a configuration intended to capture metal bending as reported in PK party settings.

The RU Model

Figure 4 illustrates a model of the PK metal bending process based on the RU hypothesis. The RU model retains many aspects of MPI’s core emphases – including pragmatic information, context sensitivity, within-system coupling, feedback dynamics, and measurement constraints. And it illustrates the key aspects of RU, including an operational communications channel between the PK agent’s thoughts and a hidden “design and implementation” element that translates the semantic imperative in the thought into a physical process which includes a physical interface actuator which can affect the atomic structure of metal.

In the Figure 4 diagram, several time-varying variables are associated with pragmatic information, $I(t)$. These variables are *context* $C(t)$ (with the subfactors *framing*, *stakes*, *protocol*, *expectations*, *social setting*, and *beliefs*), *need* $N(t)$, *intention* $W(t)$, *release*, $R(t)$, and (post-observation) *confirmation* $B(t)$, and *novelty/surprise* $E(t)$. These are treated as internal state variables in the participant, which may

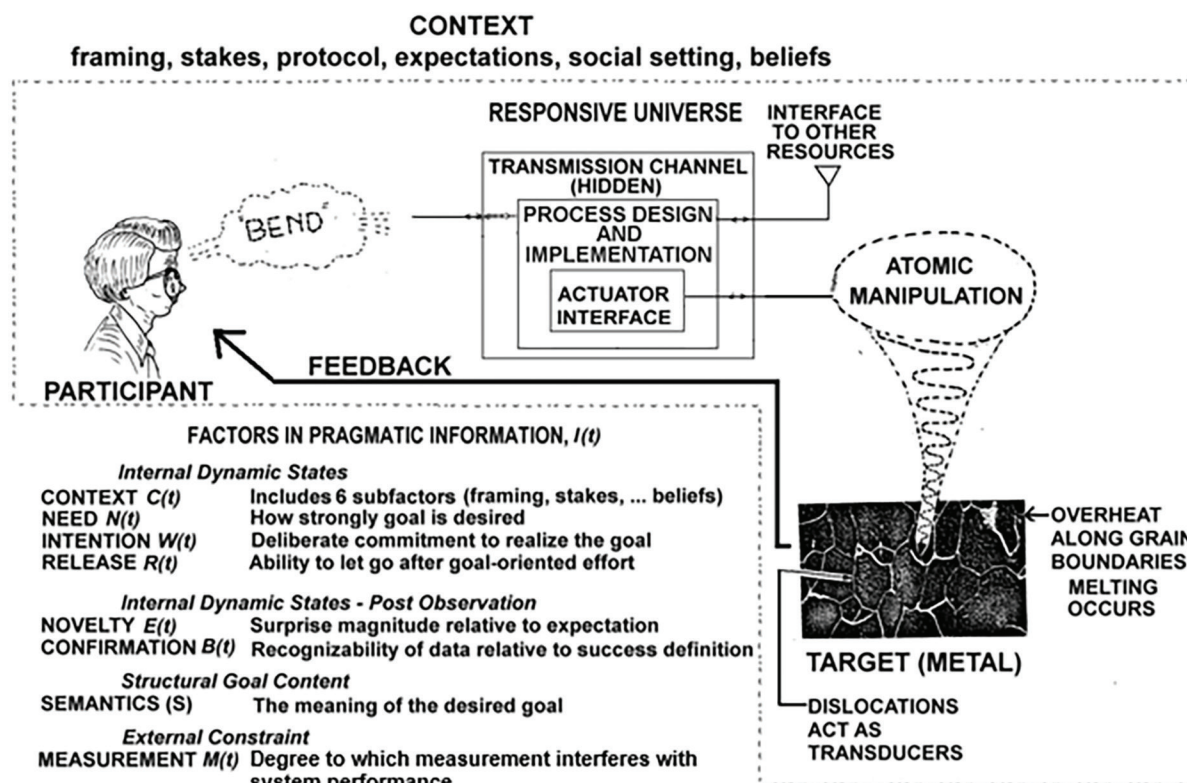


Figure 4. Process Model of PK Metal Bending in an RU Framework.

Note. This figure depicts an organizationally closed coupled system in which multiple “BEND” attempts may occur within the framework of the Responsive Universe (RU) hypothesis. See text for discussion. Adapted from Researching Remote Viewing and Psychokinesis (Fig. 6), by J. Houck, 1993, TREAT V Conference Proceedings (<http://jackhouck.com/rvpk.shtml>). Copyright 2004 by Jack Houck.

fluctuate with feedback, learning, self-monitoring, and changes in attention or motivation.

Semantics refers to the *meaning/content* of what is being attempted (e.g., “bend the metal in my hand,” or “spin the pinwheel I am looking at”), often stable across a session rather than as a continuously changing variable in the participant’s mind. The semantics act as a *goal descriptor*.

Another important factor in the PK metal bending situation, as emphasized by Houck and also Hasted and Robertson (1979), is the *ability to “let go”* after focusing on achieving a result. This suggests that the variable, *release* (R), should be recognized as a significant factor.

Measurement is an external constraint parameter that describes the strength and character of the coupling between the measurement process and the system, including factors such as resolution, coverage, intrusiveness, and audibility. In the MPI framework, “measurement constraints” reflect the idea that measurement tends to disrupt an entanglement-like system; thus, in PK, the more precise or complete the measurement, the more likely the

MPI framework would predict it would interfere with the occurrence of the event. Lucadou (1995, 2024) suggested a practical compromise for improving the likelihood of capturing video footage of anomalous events: reduce the resolution or interpretive completeness of the observation method, for example, by defocusing the video camera. In the RU framework, “measurement constraints” are not reflective of measurement effects in the context of entanglement, but typically refer to features of the environment that can make the PK agent uncomfortable or inhibited, thereby degrading performance.

Comparison of MPI and RU

The NT (Non-Transmission) axiom, according to which no meaningful communication occurs between the elements involved in a psi anomaly, marks one critical difference between the MPI formalism and the RU hypothesis. The other critical difference is that MPI is essentially an acausal framework whereas RU is essentially a causal framework. Within MPI, each independent occurrence

of a PK event of a given type is understood as a case of meaningful correlation that is not mediated by ordinary signal transfer or a causal mechanism in the usual sense; it is viewed as a form of synchronicity. By contrast, the RU framework implies that each PK event involves the operation of a hidden information-processing system that interprets the semantic content of the participant's intentional thought and then, given sufficient need, designs (if necessary) and implements a physical process capable of realizing that specific thought imperative. In RU, there is therefore a causal, meaning-bearing pathway between the thought imperative and its physical realization.

Because MPI treats each psi anomaly as a fragile context-bound acausal and infrequent correlation event rather than as the output of a stable causal mechanism, the production of diverse goal-specific PK effects on demand by the same person across time and settings would be difficult to account for within the MPI framework. Yet the parapsychological and biographical literature contains a number of prominent case claims and practitioner reports describing relatively stable and reliable performance by particular individuals, including Ingo Swann, Stefan Ossowiecki, Harold McCoy, Nina Kulagina, and Ariel Farias (see Barrington et al., 2005; Gimeno & Burgo, 2017; Keil and Fahler, 1976; McCoy, 2011; Swann, 2017; Wehrstein, 2021).

If PK outcomes can be proven to be reliable or even semi-reliable, then an RU model that includes an explicit communication channel and implementation layer offers a more explicit explanatory framework for how goal-related semantic content could, in principle, be mapped onto repeatable physical outcomes.

Time-synchronized, highly repeatable PK events show up in distant intentionality studies using randomized "send/no-send" blocks and objective neurophysiological measures (fMRI/EEG). These studies report reliable condition-linked differences under sensory isolation and find that such occurrences occur across many repetitions in randomized time-specified blocks (Achterberg et al., 2005; Richards et al., 2005). Likewise, in DMILS/remote-intention paradigms and meta-analyses (Schmidt et al., 2004), effects (when present) are estimated across dozens of trials per study and large numbers of sessions overall – emphasizing semi-reliable repetition rather than isolated anomalies.

PK events described within the RU hypothesis must be represented in a template appropriate to the situation at hand. This variability arises because what counts as the organizationally closed, coupled system depends on the type of psi claim involved and on where interpretation, feedback, and agency actually reside. In some cases,

such as PK-party metal bending, the target is inert metal. In other paradigms, such as sender-receiver telepathy or Ganzfeld, both participants function as active subsystems, each with expectations, interpretive schemas, and feedback processes capable of updating attention and strategy. In still other synchronicity-type narratives, such as the "unwilling hitchhiker" case mentioned above, the relevant coupled system appears to span three agents together with the social and physical circumstances that enable the outcome. In that case, it's not just "something odd happened." Rather, a *chain of coordinated content-specific events* occurred: the desire to walk home that day; the hitchhike reflex; the car stopping; "Where you at Winchester?"

If that "system" is broadly defined (Patrick + woman + grandmother + timing + location), implementation and goal satisfaction in this case extend across a considerable span of space and time. What occurred would be difficult to interpret as merely a set of acausal coincidences. These examples therefore point to the need for RU to be expressed within a *flexible system specification*. For each paradigm, one must explicitly define the agents included, the feedback pathways, the agent or agents performing the observation or scoring, and which contextual variables (e.g., experimenter expectancy, audience belief/affect, protocol constraints) affect confirmation and novelty. These choices determine what constitutes the "pragmatic information" in a given case.

Where MPI explains psi-like events as acausal correlations, RU instead hypothesizes a hidden goal-responsive information-processing component (HGRIP for short) that formulates an effective coupling and constraint pathway between the participant's semantically framed need and intention and the target. In this view, the semantics of the need and intention functions as a *goal specification* that the HGRIP transforms into an operational plan which is then executed via an *actuator interface* that implements the appropriate activity in the target. In this framework, RU contains an explicit implementation pathway by which complex, directional macro effects could, in principle, be semi-reliable and repeatable.

The cases RU aims to explain typically involve (1) goal specificity - not merely "something odd happened," but *this prespecified outcome happened*; (2) complex targets - e.g., a body or seed is not a single-bit system; (3) persistence or semi-reliability - the phenomenon resembles a usable capacity rather than a one-off coincidence; and (4) cross-context performance - similar effects appear across settings, times, and observers. These are the features that acausal, non-transmission-oriented models tend to treat as fragile, unstable, or effectively disallowed, because they

begin to resemble the operation of a message-like channel rather than a purely correlation-based anomaly.

Reports of semantically specified, goal-directed macro anomalies (e.g., bend / rotate / move / heal / sprout) appear in both documented case reports and, in growing amounts, controlled experimental paradigms. If PK effects are assessed to be real and dependable under certain circumstances, models in which meaning of a desired effect is causally inert become increasingly strained, and a “responsive universe” hypothesis – in which such meaning functions as an organizing constraint on outcomes – becomes comparatively more plausible.

The plausibility of RU therefore rests on whether blinded designs, in which targets, scoring rules, and analyses are specified before data collection, can demonstrate semantic specificity, repeatability, and possibly a learning curve at levels difficult to reconcile with an acausal, non-transmission model. If so, then the question shifts from whether PK and other psi events are essentially acausal correlations to whether they are glimpses of a lawful responsiveness, that is, a dimension of reality in which meaning is not merely a passive description of events but a constraint that drives the selection of the events that occur.

CONCLUSION

Witness statements and uncontrolled demonstrations cannot, by themselves, establish proven causal claims or substitute for preregistered, blinded experiments. The foregoing discussion has reviewed witness reports of macro-PK events from credible sources and cited controlled experiments from peer-reviewed journals to create a convergent, hypothesis-generating body of material. This has allowed clarification of relevant and common features reported across PK contexts and other psi phenomena (e.g., goal specificity, apparent “need” conditions, and the structure of observed effects). Case reports, rare events, and historical observations are routinely used in mature sciences to guide theory construction and experimental design when replication is difficult – particularly for sporadic phenomena.

The types of PK discussed in this paper can be interpreted in terms of outcomes that appear to be driven by need-shaped intention and semantically specified aims. Broadly, this perspective resembles *intelligent need fulfillment by a responsive universe*. In his book *The Intelligent Universe*, Fred Hoyle (1983), astronomer and mathematical physicist, suggested that the universe is structured in such a way that intelligence is a built-in feature. This “cosmic

intelligence” is implied in the laws of physics and is viewed as capable of shaping matter and life toward complexity, possibly as a type of self-organizing principle. The RU hypothesis is consistent with a weaker, empirically testable claim: that meaning and motivation may, under constrained conditions in PK, function as variables that help organize which material outcomes occur.

Considering Houck’s and Hasted’s research and their insights into metal-bending and accepting – as a working hypothesis – that a key driving factor in PK-type events can be framed in terms of the *semantics of the desired result*, we are led to consider the possibility that we are embedded in a reality that is not merely indifferent to meaning, but sometimes (or always) organized by it. If even a subset of PK events can be confirmed under stringent, blinded conditions with adequate controls and prespecified analyses, they challenge a central metaphysical assumption of the modern worldview: that thought and its meaning have no causal standing in nature.

In the RU framework, *need* reflects the amount of motivation in a situation – urgency, stakes, and significance – under which it may become operationally effective. Intention, desire, will, importance, and emotion are not treated as decorative inner states, but as components of a goal-structure that, if RU is correct, can be reflected in physical outcomes through lawful constraints not yet captured by currently accepted models.

RU is testable because it commits to an explicit causal sequence linking semantic goal content to a hidden implementation pathway and, ultimately, to measurable change in the target. RU therefore generates preregisterable predictions that can fail. A particularly strong test is semantic specificity under blinding. Because RU claims that the *meaning* of the goal specified by a particular person’s thought helps determine the form of the outcome, one can preregister tasks in which the semantic target is randomly assigned and temporarily concealed from scorers and experimenter, and then test whether the outcomes exhibit goal-congruent structure. Other preregistration considerations would include, in the metal-bending paradigm, an objective bend criterion (e.g., “success = bend angle change > 1 degree”) and utensils matched with respect to measured torque-to-bend and delivered via a secure chain of custody.

Participants could be prepared and qualified by going through the progression used by Houck at a PK party, and participants at the graduate school level could be assigned instructions such as “bend the fork in your hand.” Higher resolution might be tested: “bend fork A” versus “bend fork



B" or possibly "bend left tine" versus "bend right tine," with objective, instrumented scoring. Evidence of reliable, blinded semantic congruence would support RU's central claim; a consistent absence of semantic mapping, even when anomalies are otherwise detected, would count against it.

Learning may improve the effectiveness of the RU implementation pathway, analogous to a controller that refines performance through feedback. Early on, effects (if present) may be limited to coarse realizations (e.g., "bend somewhere"), whereas practice could bring about improved attentional stability, emotional engagement, and ability to "release," enabling finer instructed distinctions (e.g., "bend the left tine"). Alternatively, learning may increase the frequency or magnitude of effects without improving semantic specificity, suggesting an effective ceiling on fine-grained goal controllability, possibly due to limited resolution or bandwidth in the hypothesized transmission channel.

From a simplistic perspective, RU could be described as an anthropomorphic concept of a responsive cosmos acting with intention. Yet history shows that such interpretations are often adopted at one stage of understanding and later abandoned or reinterpreted. In ancient times, for example, the cosmos was widely imagined as populated by many gods, each acting within a particular domain to bring about specific events in nature and human life. Other examples include theological models in which divine will was invoked to explain the detailed workings of the natural world. In many such cases, what first appeared to require personal intention later came to be understood in terms of impersonal law, structure, or mechanism.

The highly intelligent behavior attributed to HGRIP does not, by itself, imply a mind, consciousness, or a divine being operating outside or above nature. High intelligence and highly appropriate goal-oriented system behavior can be produced by purely deterministic, algorithmic, and mechanical systems, as modern artificial intelligence demonstrates. Such operational systems could, in principle, be self-organizing and arise from relatively simple initial conditions, just as immense complexity in the universe appears to have emerged from the highly uniform and much less complex conditions thought to have existed at its origin.

Therefore the appearance of intelligence, purposiveness, or goal-directedness in a system does not by itself require us to conclude that the system is conscious, anthropomorphic, or divine. It may instead reflect the operation of a deeper lawful process capable of producing highly organized and adaptive outcomes without personal intention.

The effects of PK may be conceived not as the action of a supernatural mind, but as the expression of a deeper optimizing process that can, under certain conditions, generate goal-congruent physical outcomes. What appears to be intention may instead reflect the systematic tendency of a complex process to move toward states that satisfy constraints, reduce tensions, or optimize in other specific ways. In the case of PK, this possibility can be interpreted in terms of a cosmos acting mechanically toward *optimization*. The governing principle is simple: when need is successfully met at any relevant level of organization, a more optimal state is achieved. Here, "need" is defined as a state of tension, deficiency, imbalance, or unrealized requirement within a system, such that its fulfillment would increase coherence, stability, adaptation, or functional fit at the relevant level of organization.

This line of thinking offers a more explanatory account of how PK effects might be manifested, instead of understanding them as "correlations" that tend to "happen" through a largely opaque "entanglement-like mechanism" that prohibits meaningful communication.

If PK effects are manifested through an automatic optimizing process, this opens up a Pandora's box of very deep questions. It would suggest that the semantic content of thought is, in some way, accessible to the cosmos and that, when need reaches sufficient strength, an automatic cosmological process may be engaged that tends toward the realization of that need. In such a view, the process would appear capable of operating across multiple levels of physical reality, including atomic, spatial, and biological domains. It could therefore, in principle, account for reports of thought alone leading to metal becoming temporarily pliable, pinwheels spinning with apparently no force acting on them, bone fractures healing in response to thought, and people being brought into significant contact. The implication would be that this process is not local or occasional, but pervasive and continuously available wherever the relevant conditions are satisfied.

Such a level of operability is far removed from the assumptions of current Western science. But if PK is eventually established as a genuine empirical fact, a fundamental reorganization of our understanding of thought and its relation to the cosmos will become unavoidable. If phenomena of this kind are validated, they will require a major revision in how we understand mind, matter, and their cosmological interface.

Today's dominant view of conscious thought within the current scientific paradigm is one of "emergent materialism." Its premise is that consciousness and the thought that

accompanies it emerge from the arrangement of matter when it exceeds a threshold of sufficient complexity. In this perspective, all aspects of thought spring from physical processes that occur in matter, which is fundamental. The phenomenon of PK provides compelling evidence that, at least in certain circumstances, it is *thought* that plays a primary causally organizing role, and the physical processes that govern the organization of matter can arise from specific needs expressed in thought. Relevant concepts include *will, desire, importance, emotion, and release*. In this view, so called “anomalous events” are not in a class of curiosities at the edge of science; they become clues that our metaphysics has been too small - treating conscious thought as a spectator when it may be part of the machinery. If the universe can function as if it is responsive to the semantics associated with needs expressed in thought (e.g., “Bend!” vs. “Sprout!” vs. “Move!” vs. “Heal!”) and can act to bring specific individuals together in win-win scenarios – without such action being traceable to pure coincidence – this implies a universe that works on principles quite different than purely physical mechanisms and inherently meaningless recombinations of matter.

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