

Peirce's *Vera Causa* of Guessing

A *Vera Causa* da Adivinhação segundo Peirce

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Abstract: A thinker, confronted with the somewhat improbable task of making a right guess under stressful conditions involving a high risk to the thinker's well being if the guess is wrong, is able to make the right guess more often than mere chance would dictate. In two cases c. 1907, Peirce asserts that mere chance does not suffice to explain a true guess. But the "*vera causa* of true guessing" involves a trick that the thinker must play on himself in order to dislodge the interference of his own ego in the guessing process. I shall analyze the phenomenon of the *vera causa*, as Peirce describes it in MSS 687 in terms of his notion of the triadicity of a true communication.

Keywords: Vera Causa. Chance. Abduction. Instinct. Guessing.

Resumo: *Um pensador, confrontado com a tarefa de algum modo improvável de fazer uma adivinhação correta sob condições estressantes, envolvendo um alto risco para seu bem-estar caso esteja errado, é capaz de acertar com maior frequência do que o mero acaso poderia determinar. Em dois casos, em torno de 1907, Peirce afirma que o mero acaso não é suficiente para explicar uma adivinhação verdadeira. Porém, a "vera causa da adivinhação correta" implica o pensador pregar uma peça em si mesmo, a fim de afastar a interferência do próprio ego no processo de adivinhação. Análise o fenômeno de vera causa tal como Peirce o descreve em MSS 687-8, em termos de sua noção da triadicidade de uma comunicação verdadeiramente interpessoal.*

Palavras-chave: Vera Causa. Acaso. Abdução. Instinto. Adivinhação.

1. A Question Beyond Whether Abduction is Inference or Instinct

This paper offers an alternative to the argument about whether Peirce ultimately believed that abduction was an instinct, an inference, or both. On the one hand, research about abduction has focused upon its logical form and decisions about choosing which abductions to test. On the other hand, discussion of the instinctive nature of abduction has taken the form of an evolutionary "just-so" story that maintains that good guessing is adaptive to survival while poor guessing is less so. A specific discussion of why correct abductions might prevail over incorrect ones, in inquiries made by particular individuals, is yet open for exploration.

Sami Paavola argues persuasively that, in his later writings, Peirce did not resolve the relationship between his conception of abduction as a form of inference and abduction

as an instinct (see PAAVOLA, 2005). Peirce, during his early period of work on abduction, in the 1890's, characterized it as a kind of weak syllogism in distinction from the modes of reasoning of deduction and induction. During his later period, Peirce views abduction as the first inferential stage of inquiry in which new ideas are developed to be tested later by deduction and induction. Paavola suggests a study of these periods yields a view that does resolve the relationship that may be inferred from Peirce but was not made explicit by Peirce himself. He proposes that the evidential perspective (conceiving abduction as inference) and the methodological perspective (conceiving abduction as instinct) are not contradictory and are, in fact, both explanations of the same phenomenon. A clearer way to mark the transformation of Peirce's two ways of conceiving abduction is to regard work beginning around 1878 as focused on "development of our inborn animal instinct" and a view, beginning around 1900, of hypothesis generation as having an irreducible role within a tripartite reasoning system of abduction, deduction and induction (PAAVOLA, 2005, p. 132-4).

Nevertheless, the interesting question about abduction is why there is a better than even chance that abductions derive "good" guesses. In his 1903 *Lectures on Pragmatism*, Peirce is still driven to wonder at the ability to guess more often right than not:

But how is it that this truth has ever been lit up by a process in which there is no compulsiveness nor tendency toward compulsiveness? Is it by chance? Consider the multitude of theories that might have been suggested. A physicist comes across some new phenomenon in his laboratory. How does he know but the conjunctions of the planets have something to do with it or that it is not perhaps because the dowager empress of China has at some time a year ago chanced to pronounce some work of mystical power or some invisible Jinni may be present. Think of what trillions of trillions of hypotheses might be made of which one only is true; and yet after two or three or at the very most a dozen guesses, the physicist hits pretty nearly on the correct hypothesis. By chance he would not have been likely to do so in the whole time that has elapsed since the earth was solidified. You may tell me that astrological and magical hypotheses were resorted to at first and that it is only by degrees that we have learned certain general laws of nature in consequence of which the physicist seeks for the explanation of his phenomenon within the four wall of his laboratory. But when you look at the matter more narrowly, the matter is not to be accounted for in any considerable measure in that way. Take a broad view of the matter. Man has not been engaged upon scientific problems for over twenty thousand years or so. But put it at ten times that if you like. But that is not a hundred thousandth part of the time that he might have been expected to have been searching for his first scientific theory. (PEIRCE, 1997, p. 230-1)

By 1907 (see MS 687), Peirce has named the agency of good guessing the *vera causa*. And while both Paavola and Thomas Sebeok have written about Peirce's detective story and agree in finding it an illustration of the instinct of abduction, there remains more to be said about its implications for explaining the ratio of success of abductions. Why would certain individuals reach astute abductions while others would not? What ingredient is added to the stew of instinct and inference to make a good guess? Is a good guess an end in itself of inference or instinct, or is a good guess a stop along the way to somewhere else?

Peirce gives a generic reason why guessing should take place in his account of its instinctive nature: "in the evolution of science, guessing how plays the same part that

variations in reproduction take in the evolution of biological forms, according to the Darwinian theory." In other words, "there can, I think, be no reasonable doubt that man's mind, having been developed under the influence of the laws of nature, for that reason naturally thinks somewhat after nature's pattern" (MS 687: 6-8). Peirce's notion is that the "power of divining" the truths of nature is an aid to survival. Peirce denies again that there could be much meaning to the claim that these variations have been merely fortuitous or that there is much room to think of them as such in the cases of Galileo and "other scientific masters." This generic instinctual power, apparently endemic to our species and especially evident in the evolution of science, would not explain how, in individual cases, a specific person would be able to guess correctly in a minimum of trials.

2. The *Vera Causa* of True Guessing at Work

This is the mystery, why some should guess right under certain circumstances when chance would seem to favor that guessing right should not take place. This is the problem to which Peirce applies his suggestion of a *vera causa*. His two examples display comparable events in the superficial sense that each set of incidents has two ingredients: (1) "compounds of deductions from general rules that we know" and (2) "pure guess" (MS 687: 5).

The first example describes the incident in which Peirce himself took part. After having been given funds from his employer, the United States Coast and Geodetic Survey, to buy a chronometer, and having meticulously researched his purchase from the Tiffany Company, Peirce obtained a timepiece for the steep sum (in 1879) of \$350, and priceless to Peirce in terms of his professional reputation. On his way to New York from Boston by boat, Peirce fell asleep, waking only moments before landing. He rushed from the boat to a cab, and sped to a conference at which he was due immediately, forgetting his coat and the chronometer. Arriving at his conference, he realized his mistake and rushed back to retrieve his possessions. They were gone from his stateroom and nowhere to be found. One can only imagine what he had to do to accomplish the next step, but a short time later, he was able to line up some twenty or so of the waiters, his suspects, for scrutiny. He reports:

I went from one end of the row to the other, and talked a little to each one in a dégage a manner as I could about whatever he could talk about with interest, but would least expect me to bring forward, hoping that I might seem such a fool that I should be able to detect some symptom of his being the thief. When I had gone through the row, I turned and walked from them, though not away, and said to myself, "Not the least scintilla of light have I got to go upon." But thereupon my other self (for our communings are always in dialogue) said to me "But you simply *must* put your finger on the man. No matter if you have no reason, you must say whom you will think to be the thief." I made a little loop in my walk, which has not taken a minute, and as I turned toward them, all shadow of doubt had vanished. There was no self-criticism. All that was out of place. I went to the fellow I had fixed upon as the thief ... (MS 687: 11-2)

The accused is intransigent. He is unintimidated by Peirce, and unimpressed by Peirce's offer of a reward for the watch's return, no questions asked. The boat's captain

is appalled that one of his best men should be suspected and defends the man's sterling attributes. Peirce, in desperation, goes to the Pinkerton Agency to hire a detective, explaining his predicament and his suspicions. The Agency clearly has no idea what a good guesser Peirce will turn out to be and the agent he engages dismisses his ideas on the case as amateurish. Thereby the case sits undisturbed for some time until Peirce decides to take matters into his own hands, putting a quick end to the mystery by tracking down the watch and the culprit on his own. The very man Peirce initially identifies is tied to the crime by a pawnshop where the watch is found and by the coat and watch chain, found at his residence. Watch in hand, Peirce reflects later,

While I was going through the row, chatting a little with each, I held myself in as passive and receptive a state as I could. When I had gone through the row, I made a great effort to detect in my consciousness some symptoms of the thief, and this effort, I suppose, prevented my success. But, then, finding I could detect nothing, I said to myself, "Well, anyway, I *must* fasten on someone, though it be but a random choice," and instantly, I knew which of the men it was. (MS 687: 34)

Elements of the *vera causa* are noted: desperation, desperation renounced, and ensuing "instant" success, yet this sequence does not solve the mystery. It only deepens it – why should the renunciation of his ability to solve a problem enable him to solve a problem? Both Sebeok and Paavola suggest that "unconscious" detection is taking place. Not even recognizing a number of facts himself, Peirce takes into account a lifetime of experience in reading the thoughts of others from their behavior, a general knowledge of human tendencies and habits, a general knowledge of "tells" that individuals make, revealing their beliefs and intentions. Paavola and Sebeok agree that the method used employs previous training and experience, an instinctive capacity for guessing, and uncontrolled awareness of certain particulars of the case. Note that special additional elements of Peirce's experience are his personal detachment from the problem, his resignation to the helplessness of his intellect and his simultaneous willingness to accept any solution whatsoever that the situation might supply. Peirce also puts himself at risk when he speaks with the waiters on the boat, when he goes after his suspect on his own after the Pinkertons let him down, when he confronts the wife and neighbor of the suspect in their home, when he searches their home without legal sanction, and, generally as he interposes himself in situations that require diplomacy and courage.

Peirce's second example of the *vera causa* of true guessing at work requires a more complex explanation, because it was set up as a psychological experiment upon a phenomenon not related to it. Peirce recalls an experiment he conducted with Joseph Jastrow at the Johns Hopkins University. Subjects were asked to distinguish between two grades of pressure applied to their finger, the one alternating with the other, as in Grade 1, Grade 2, and then Grade 1 again. Subjects would then be asked to compare a pressure in the middle of the sequence to its predecessor and to its follower and evaluate the certainty of their perceptions by responding to the claim, for example, "The second pressure was greater than the first and third" by assigning the number "Naught, One, Two or Three." "Three" would mean that the subject "was sure, or almost sure, of being able to say whether the middle pressure was greater . . . than the other two." The number "Two" would mean that "he was by no means sure, yet inclined to think he could tell." "One" would mean that "he did not think he really perceived any difference;

yet suspected that he perhaps might” and “Naught” would mean that “he was sure he could not perceive the slightest variation of pressure.” Once he had been given this first opportunity to evaluate the certainty of his perceptions, the subject was then *obliged to say* whether the middle pressure was greater or less than the others. If his confidence fell in the “Naught” category, the subject would be instructed to make a random guess as to the answer (MS 687: 27-9).

The hypothesis confirmed by this experiment's results is immaterial to the purpose for which Peirce recalls the experiment in his explanation of the *vera causa*. His explanation is concerned with the high frequency of correct guesses by individuals who have come to an impasse in the first phase of testing and do not have any certainty at all about how to evaluate their perceptions of pressure. This group of subjects, when forced to respond after having lost hope that they would be able to respond correctly, guessed correctly in three out of five trials. Three out of five seems to be an extraordinary ratio of success given the guessers' initial admission of not having the slightest idea what to answer and their distress about having to choose anyway. Since ordinary human subjects could be expected to have some capacity for guessing, the rate of good to bad guesses here would seem to indicate another set of conditions, those of the *vera causa*. Peirce notes that this peculiar set of facts supports his idea that the identity of the *vera causa* lies in something extraordinary in these guessers in particular.

In both of Peirce's examples, guessers renounce their ability to guess right and then immediately do so. Is “the little mystery” (MS 687: 26) like a conversation that can go several ways? Peirce's aside that every thinker is two thinkers having a dialogue seems especially apt here. Sometimes, people in a conversation listen to others only in order to let them finish so that they themselves can begin talking. These people are neither attending very well to the matter at hand nor to their conversation partners and consequently derive very little, if any, content from their experience. Others abandon themselves to what their partner is saying to such an extent that their partners find themselves feeling expansive and intelligent, and more confiding. Some people seem to be able to bring out the speech in others. I propose that if we compare the bad conversationalists with the bad guessers and the good conversationalists with the good guessers, we have a fair idea of something new in the formula for guessing, a relegation of ego to the background and a complementary openness to the source of content. Guessing would seem to be not as much a matter of mere chance in general, but of the chances that a guesser would be able to maintain the correct focus in inquiry.

3. Vision, Revision, Original Vision and Abduction

Kenneth Laine Ketner has written and spoken about Walker Percy's “Cardenas effect” in a number of contexts and I draw inspiration from these and from conversations with Professor Ketner in order to outline the comparison of guessing with original insight. Percy is interested in focus, but not the kind that lines up its sights for the kill, in “The Loss of the Creature,” an essay concerned with the recovery of original vision. To have original vision is to see something in its own right, for what it is, much like a guess apprehends, or metaphorically, sees “some new fact.” Percy writes,

Garcia Lopez de Cardenas discovered the Grand Canyon and was amazed at the sight. It can be imagined: One crosses miles of desert, breaks through the mesquite, and there it is at one's feet. Later the government set the place aside as a national park, hoping to pass along to millions the experience of Cardenas. Does not one see the same sight from the Bright Angel Lodge that Cardenas saw? (PERCY, 1987, p. 46)

Percy's question constitutes an implicit denial that the flavor or texture of Cardenas's experience could be transmitted without compromise. He urges that the compromise incurred by "second handedness" is so damaging that it makes the subject of Cardenas's experience utterly inaccessible to others.

It is assumed that since the Grand Canyon has the fixed interest value P , tours can be organized for any number of people. A man in Boston decides to spend his vacation at the Grand Canyon. He visits his travel bureau, looks at the folder, signs up for a two-week tour. He and his family take the tour, see the Grand Canyon, and return to Boston. May we say that this man has seen the Grand Canyon? Possibly he has. But it is more likely that what he has done is the one sure way not to see the canyon. (p. 46-7)

The man in Boston has viewed the medium that has replaced the Grand Canyon. He has seen what the brochures say he is going to see, or what the fixed view from the Bright Angel Lodge has circumscribed for him, or the photos he will take from behind the safety rope. In Percy's word, "it is almost impossible [to see it] because the Grand Canyon, the thing as it is, has been appropriated by the symbolic complex which has already been formed in the sightseer's mind" so that "seeing the canyon under approved circumstances is seeing the symbolic complex head on." The canyon is invisible; it has been obscured by representations of the canyon that mask the fact that they are representations.

According to Percy, the invisibility of the Canyon is multiplied by the invisibility of countless other events and phenomena, a condition that causes no small amount of alienation and unhappiness. Ralph Waldo Emerson notes a similar effect in his "Divinity School Address" as does Jean Baudrillard in his criticism of the Disneyfication of America. Percy asks what the would-be seer of the Canyon would do to recover a vision of it for himself. His final proposal gives us another instance of the *vera causa* at work while his interim proposals paint an eerily similar picture to Peirce's desperation phase of inquiry. The seeker of a virgin Grand Canyon might waive his right to the real view and capitulate to the tourist's version. The seeker could leave the beaten track and "surprise" himself by coming across the canyon by a different route. Another, but deeply cynical method of approach, as Percy admits, could be to watch the other tourists watch the Canyon and embrace the medium of unoriginal representations. In the most desperate scenario, Percy imagines the seeker recovering the sight of the Canyon after a great natural disaster, itself the result of a great social disaster that ends the world as it has formerly existed, for example, by a nuclear explosion. By then, the canyon is practically a ruin, as is everything else, and one sees with the eyes of the new world in which all past representations are destroyed because their context has literally dissolved or become too painful to remember.

Percy's final method finds the right focus. Percy, like Peirce, arrives at the point of success just after reaching the lowest point of his speculations. The search for a right way to search comes when the searcher has nothing left to lose. The loss of the "creature,"

that is, human sovereignty, is dire, and its recovery is only possible at the end of an admission of its direness. Percy writes,

The dialectic [of sightseeing which succeeds in subverting the efforts of planning] is not known to objective theorists, psychologist, and the like. Yet it is quite well known in the fantasy-consciousness of the popular arts [...] A movie shows a man visiting the Grand Canyon. But the moviemaker knows something the planner does not know. [Think the Statue of Liberty in *The Planet of the Apes*.] He knows that one cannot take the sight frontally. Who is the stranger at the Bright Angel Lodge? Is he the ordinary tourist from *Terre Haute* that he makes himself out to be? He is not. He has another objective in mind, to revenge his wronged brother, counterespionage, etc. By virtue of the fact that he has other fish to fry, he may take a stroll along the rim after supper and then we can see the canyon through him. The movie accomplishes its purpose by concealing it. (p. 50)

In other words, by not taking on the object of one's desired vision directly, one can see it sideways and catch it unawares or catch oneself unawares. Like the seeker of his own Grand Canyon, the guesser may peek around the side of the medium, in the form of his own ambition or ego, in order to see the object of his desired vision.

Another way to compare the seeker of the Canyon and the guesser who desires success is to examine each in terms of dyadicity and triadicity. Peirce understood perceptions as being derivations, though not infallible ones, from the structures of the things that prompted them. Perceptions could give rise to other perceptions, but the first prompting of a perception, he claimed, would have to be independent of perception. The form of the original perception would be something like the form of the thing perceived. This original object of perception is comes in a bundle, along with its Thirdness, that is, an idea, a relation, a triadic connectedness. Peirce distinguished relations of Thirdness from those of Secondness. If a man throws a stone and it happens to land unintentionally on a Jinnee's eye, the relation between the stone and the Jinnee is dyadic. There are two objects, one of which imposes force on the other. In this case, the man who throws the stone is in a dyadic relation to the Jinnee as well. The man, the rock and the Jinnee appear to be three, but the stone is merely an extension of the man, and is, for the purposes of the example, identical to the man in terms of a relationship with the Jinnee, a force imposed. But, if Peirce were to ask his dog to fetch his slippers and the dog were to obey, the relation between the dog and the slippers is triadic, for the dog fetches the slipper for Peirce, and the purpose of the act is in the relation between the dog and the slippers. No one component of this triad could be abstracted from the others and proclaimed autonomous with respect to the others without compromising the integrity of the entire transaction. One could, of course, postulate that dogs do not obey out of free will, and so the meaning of obedience is questionable and the "purpose" of the dog's act in question also. Notwithstanding this question about the dog's intentionality, there is no getting around the recognition that the transaction has a dimension beyond that of the application of mechanical force.

A Peircean appraisal of this event involving Peirce, the dog and the slippers involves seeing the relationship between them as one of mutual involvement. Were we to abstract Peirce's relationship to his dog away from the picture, we might infer that he has a whimsical dog who fetches slippers unbidden, or, worse, derive a view of the scene that involves only a description of the mechanical forces used in conveying slippers from one location to another. In that case, we would have understood little about what

transpired. Imagine then a guesser trying to understand an object that plays a role or has a purpose which is invisible unless one considers the possibility of its being so. Now imagine the guesser becomes frustrated with his inability to crack the code of the object and gives up. Further, imagine that after giving up, the object is still tantalizing to the guesser and the guesser muses that the object has a life of its own independent of the guesser. While this last adjustment carries no guarantee that the guesser will successfully determine what the object is all about, it does most definitely place the guesser into a position in relation to the object, of potential Thirdness, rather than Secondness. If, in fact, the universe is filled with continuity as Peirce claims, the purpose of the object can be imagined to be something other than its purpose for the inquirer. Demanding an answer, forcing objects to yield their secrets, won't work on objects that are truly defined by their triadic relatedness and not their dyadic components. The *vera causa* allows the guesser to conceive that objects do exist which do not exist simply for the guesser and in doing so, frees the guesser for productive speculation about objects, for example, their own contexts, their own relationships, their own rules and regularities. In imagining the object of one's desired vision to inhabit a natural environment of its own, the inquirer frees the object from the inquirer's characterization as a mere recipient of force.

4. The "Open Heart," the Vigorous Truthful Dialogue and At Last, a Light Shone on "the Little Mystery" of the *Vera Causa*

The core of "the little mystery" of the *vera causa* might be approached by another comparison. Ketner speaks about the condition of the "open heart" described by Peirce in a fragment about "Knowledge of God" written in 1896 in order to explain the response some readers have had to Percy. Percy's novels evoke "that mysterious phenomenon" of the reader making a connection to the story by designing his own "mental diagram" paralleling the elements of the story to his own life in his own terms. Some readers of Percy enter an "interesting state" of receptivity that Ketner says is well described by Peirce also:

Where would such an idea, as that of God, come from if not from direct experience? Would you make it a result of some kind of reasoning, good or bad? Why, reasoning can supply the mind with nothing in the world except an estimate of the value of a statistical ratio [...] And skepticism, in the sense of doubt of the validity of elementary ideas – which is really a proposal to turn an idea out of course and permit no inquiry into its applicability – is doubly condemned by the fundamental principle of scientific method – condemned first as obstructing inquiry, and condemned second because it is treating some other than a statistical ratio as a thing to be argued about. No, as to God, open your eyes – and your heart, which is also a perceptive organ – and you see him. (CP 6.493)

Ketner calls this state the condition of the open heart and compares it to Simone Weil's "cry of the heart." Ketner describes it further:

This is a condition in which the ego has fallen away or is reduced to a state of scientific disinterestedness, and hypotheses, observations, perceptions, ideas, inspirations, interpretations, and guesses are admitted and sorted out in an

unselfish – which is to say scientific – manner. This is the condition Buber speaks about in his classic *Ich und Du*. He calls it the I-thou condition, Walker called it in *Lost in the Cosmos* the Edenic state (or in *The Message in the Bottle* he associated it with the Cardenas syndrome: you know, the guy who saw the Grand Canyon for the first time). I have referred to it as the condition of relational purity ... (KETNER, 1996, p. 4)

Finally, Ketner describes the result of opening the heart as a special kind of dialogue, not persuasive, nor chit-chat, nor dutiful, nor authoritative, but something else altogether:

Then there is Vigorous Truthful Dialogue, or VTD [...] Its purpose and hope is to prepare the intellect to open to allow contact with the soul. Here is a zone in which serious and crippling philosophical mistakes are made. One can easily become hypnotized by the sheer fun of intellectual engagement, so that it becomes like a game, and if so the opening to the soul will not become available. One can become trapped in an entertaining traversing of the shell, like a compulsive traveler of the earth's globe who must constantly be in a new locale periodically. An alternative version is perhaps elitist professor or Fail-a-holic, whose life consists in repetitious intellectual one-upping of students. Or one can become frightened by the vigor of the dialogue – after all one's cherished beliefs are being brought forth for critique. Many persons have been taught to fear or run from doubt; perhaps their childhood included considerable indoctrination, which is a mirror opposite of VTD. A feature of successful VTD is that one learns to love doubt, for doubt is a friend. Another trap is the fact that great results pertaining to applied science can be obtained by a well-executed VTD, but one can become so mesmerized by the power that can be derived from such technological results that one overlooks the possibility for sideling or sneaking around the corner into the soul's domain. . . . With all these ways things can go wrong, how then is VTD to serve as entrance to the soul? VTD introduces one to the method of truth for truth's sake, as opposed to reliance on egocentric method. VTD creates a community of persons subservient to truth. When such a community is functioning under VTD, the various non-ego phenomena emerge irresistibly [...] All of this has the general tone of an allowing, as opposed to that of a willful bringing-to-pass-because-I-want-it. "I want it" means I know the outcome and will enforce it upon the situation. The allowing is: "I don't know what is going to come of this – won't it be interesting to see what arises." (p. 5)

5. Conclusion

Peirce's open heart, his *vera causa* and Ketner's VTD as the dialogue of the open heart are one and the same. Their similar features allow successful guesses to take place. However, while their descriptions emphasize that anyone presuming to extract information from a source without having a transaction or an exchange with it will be sorely disappointed, their descriptions also offer the further temptation to take the *vera causa*'s little mystery a little further. As a scientist, Peirce would be happy enough to get a good guess out of allowing the *vera causa* to play out its function. However, if we take Peirce's notion of "the heart" quite seriously, the result that might be derived from performing and perfecting a series of inferences with the intellect is only a way station

on the road to somewhere else. If you see the derivation of a good guess as a final destination, you may miss the panorama on which it is one of the stops. The notion that the heart has access to things the intellect can only guess at lays open a rich field of inquiry about Peirce and a reinterpretation of the scientific enterprise as not one of probing and interrogation but one of transaction and exchange.

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