The Faces and Masks of Prophecy

by

Alan G. Herron, Ph. D.

2009m05d11 Copyright © 2009 Alan G. Herron

A.Herron@telus.net

Introduction

Prophecy, *the foretelling of future events*^[A], has long appealed to the human psyche as a mysterious and wondrous ability. It is offered by sincere mystics as evidence of supernatural talents, or of inspiration by god(s). It is offered by sincere scientists and professional counselors as a primary source of the value in their work to the societies that support them. Magicians, to entertain, and charlatans, to deceive the unwary, use fake prophecy for their respective purposes.

Sincere mystics and professionals also consider prophetic ability as proof of the truth of their respective belief systems, and support their claims to authority and social respect in many apparently unrelated areas, such as ethics and political theory, on this basis. Con artists prey upon the naive, who need to understand the anatomy of prophecy to protect themselves. Thus, the nature and validity of prophecy take on importance far beyond the actual prophecies themselves.

However, despite this importance, the implications and pre-suppositions involved in prophecy are rarely considered in detail or from a rational perspective. We all have a rough idea of which soothsayers we can trust, and which we cannot, but we rarely know why we place trust where we do, or what we should consider in making such judgments. These issues are the subjects of this paper.

Some of the faces of prophecy are real, some are but masks that only seem real, or serve the purpose of imposture. How do you tell the difference? How is prophetic ability defended at all in a rational theory of knowledge? What elements are involved in making a prophecy? What constraints limit

prophetic capability?

Our discussion begins with consideration of a few subjects from the theory of knowledge that are highly relevant to the analysis of prophecy. With this as a foundation the discussion moves to identification of several types of prophecy, and their virtues and flaws. The discussion concludes with a couple of case studies in the form of confidence schemes (cons), and a summary chart.

Rational Criteria of Validity

Information

In essence, information is the resolution of some ambiguity. It specifies which of two or more possible states of a system actually prevails at a particular time.

For example: a dog may be asleep or awake. I give you information if I tell you which state currently prevails. If you already know the dog is asleep my comments do not pass any new information to you...the ambiguity for you is already resolved. That is, you already have the information, the ambiguity no longer exists, and I cannot pass information to you on that question.

Change, or adaptation, always involves the possibility of information. Whatever is capable of changing must have at least one degree of freedom^[B] — one property or characteristic, which *can* take on different "before" and "after" states — or change would not be possible.

Information Content in Prophecy

The whole point of prophecy is to foretell (or appear to foretell) the future, *i.e.* to resolve ambiguity about a *particular* future state of some system. Thus a prediction is actually not a prophecy unless it resolves two questions... "Which of two or more states will a system be in?", and "When?".

For example: suppose we consider a prophecy about weather. Either it will rain or it won't on a particular day in the future. The specification of rain or not-rain is the information content in regard to state of the prophecy. The specification of the particular day covered by the forecast is the information content in regard to time of the prophecy.

Thus, the statement "It will rain tomorrow" qualifies as a prophecy. It

resolves the ambiguities in regard to both state and time.

But "It *may* rain tomorrow" does not qualify. The ambiguous word "may" implicitly carries it's contradictory "or may not" with unspecified (equal?) probability as to which will actually prevail tomorrow. The statement actually carries no state specification, and is not a prophecy (in the strict definition of the word) for that reason.

The simpler statement "It will rain" is a statement about the future because of the word "will", but the fulfillment time is not actually specified. The statement resolves ambiguity about a state, but not a particular state (no time is specified), and is not a prophecy for that reason.

This brings us to our first criterion:

A valid prophecy is free of ambiguity in regard to both state specification and fulfillment time.

Any statement that does not contain information about both state and time is not actually a prophecy.

Another important point in regard to information content: the true *value* of serious prophecy derives from information it provides about the future. This enables us to prepare, and to adapt to the demands of staying alive and motivated. We *need* information about the future to survive and manage our affairs, and this creates both the interest and value in prophecy.

Information Flow

It is very useful, when faced with almost any problem, to consider the various ways by which information is transferred, or is not transferred, in the system.

For example: people use several channels of information — sight, sound, touch, temperature sensing, force direction (for maintaining balance), etc. Much of the information flow is subconscious, as when observing that an alley is dark, and still, and full of nooks which might harbor danger. The result is fear or apprehension, which is the conscious-level reaction to subconscious processing of this information. You may well alleviate the fear, or adapt in a more effective way, if you identify the information (or lack of it) consciously that is provoking your fear.

In the problem of assessing the validity of prophecy, consideration of information flow is critical. The objective reliability of the information flow process helps distinguish between legitimate and questionable types.

Can information flow from the future to the present, or the present to the past? If the method used to make a prophecy necessitates this "direction" of flow in time one must accept time-reversed flow as legitimate to consider the prophet (and prophecy) credible. This gives us our second criterion:

If time-reversed information flow is essential to the prophecy the credibility of the process should be justified by the prophet.

Methods of prophecy that actually do foretell the future depend on demonstrable and verifiable information flow-control procedures. Others are either fraudulent or unreliable in regard to how the information about (or in) the future is obtained, in which case the prophetic capability remains fraudulent or unreliable, *even if a few prophecies are fulfilled accurately*. We thus reach our third criterion:

Valid prophetic method exercises deliberate control of information flow.

Unexpected Interference: The Importance of Free Agents and Knowledge

In all forms, successful prophecy depends on the absence of unexpected interference with the events that lead to fulfillment. If some unexpected or unidentified influence enters the process leading to fulfillment the expected result (prophecy) becomes probabilistic or accidental at best. It loses it's intuitive sense of value or fascination as well as its true value.

There are two sources of unexpected interference:

1) Free Agent(s): arising from the action of an agent who has free will, usually a person who is beyond the prophet's control.

The meaning of "free" in this context is "not deterministic", "voluntary", or "able to choose between alternatives".

For example, suppose a pitcher throws a baseball low deliberately in order to walk a batter or strike him / her out. The prophecy is that the batter will swing and miss, or decline to

swing, because the pitch is out of the strike zone. If the batter actually does swing and manages to hit the ball, he invalidates the prophecy. The pitcher does not have complete control, and thus has no real ability to prophesize with high confidence, because of the interference arising from the batter's free will.

2) Ignorance: arising from lack of knowledge of (information about) deterministic influences.

For example, you may predict that the afternoon will be great for a day at a coastal beach, only to have a tsunami put life itself in peril. Information about the tsunami may be totally lacking, or may not have reached you despite having been broadcast. Either way your prediction (prophecy) is thwarted by your lack of knowledge of the deterministic process that brought the tsunami to your beach.

The conclusion? Our fourth criterion:

Valid prophecy must anticipate and manage interference.

In some circumstances, such as a carefully controlled laboratory experiment, interference is prevented by design. Where complete control is not possible management may take the form of providing for adaption as information about interference becomes available, or simply by reducing the confidence in the prophecy. In all cases the possibility of interference is *openly* and *explicitly* acknowledged and managed in valid prophetic methods.

The Issue of Burden of Proof

In any rational discussion concerning validity and / or truth one of the preliminary questions is "Which party is responsible for providing objective evidence and coherent arguments?" That is, which party should carry the burden of proof?

The burden of proof is always on the party asserting the existential positive^[C]. That is, it is irrational to expect anyone to prove something will not happen, or does not exist, under unrestricted conditions. Why?

If some idea has no objective counterpart (no actual referent or meaning) there

is certainly no objective evidence for the thing referred to. It is not possible, *in principle*, to give evidence (present something or some influence for examination) of nothing (no thing, not anything, a non-existent).

On the other hand, if something does exist there will *always* be some interaction, some manifestation of its presence which, *in principle*, can be examined objectively. At the very least, a prophet is implicitly claiming the ability to interact with something objective in order to make a prophecy, thereby depending on this principle to lay claim to any credibility.

Imposing the burden of proof, the responsibility for identifying and presenting evidence, is a rational requirement if (and only if) it is possible, *in principle*, to meet the requirement. Or, stated in negative terms, it is irrational to require the impossible; it is absurd and self-contradictory to demand evidence of the complete absence of evidence under unrestricted conditions.

How is this relevant to the nature of prophecy?

An authentic prophecy is a prediction of a state or event that is *inherently* inaccessible to direct objective examination at the time the prophecy is made. The only relevant evidence that *is* available at the time of the prophecy is the *method* by which the prophecy is made.

Thus, in the context of the general burden-of-proof requirement, we reach the fifth criterion:

Acceptance of a prophecy should be expected by the prophet only on

the basis of meaningful evidence about the method used to make it.

A request by a client for such evidence from a prophet is a rational demand, and should be honoured by any ethical individual.

Expressed in a negative mode: it is irrational to expect anyone to believe, before it is fulfilled, that a prophecy is valid or reliable without offering meaningful evidence of the means by which the connections between the present and future states are made. It is not incumbent on the client to prove the prophetic method invalid, but on the prophet to show it is valid.

For example: it is quite irrational to expect anyone to believe an assertion that unfulfilled Bible prophecies will come true without offering objective evidence as to why. To attribute the prophetic ability to some supernatural being simply begs the question, because no evidence is offered as to how that being does it either.

The burden of proof rests on the person asserting prophetic ability or accuracy to describe the method by which the prophecy is made.

The word "meaningful" in the text box above is very important. Historical success alone is *not* meaningful evidence, for reasons explained in the section on causation and correlation below. Furthermore, assumptions aren't meaningful evidence, however complicated or subtle or indirect they may be (such as the very existence of some supernatural being). More generally, *the credibility of the prophecy isn't any higher than the credibility of the method used to make it.* For example, in the computer world this principle is described in a negative mode as "gigo"...garbage in, garbage out.

Causation

Prophecy may be regarded as a causal relationship in the sense that use of a prophetic method at some time is expected to cause an accurate prediction about a later state of affairs. Application of the method of prophecy causes the accuracy of the prediction.

The idea of cause and effect, when examined carefully, may actually be quite complex, and a full discussion is beyond the scope of this paper. But, to illustrate some of the difficulty, consider the following four cases, all of which carry the essential ideas of "causal", namely that an effect "W" is a consequence of a cause "A" in some fashion, and "W" occurs later than "A".

If the abstract descriptions are troublesome one might imagine an analogy of a set of toppling dominoes bearing names that start with the same letter. For example, Case 1, "A causes W" would be analogous to "The toppling of Alana causes the toppling of Will", and so on, as shown.



"backward" (in time) inference. That is, reasoning from the occurrence of W to the validity of the method used to predict W at an earlier time. This reverse inference is called the *inverse* of the causal relation.

For Case 1, A is *sufficient* to cause W, and also *necessary* for W to occur, since there is no other "input". With these conditions the inverse is valid...one may infer from the occurrence or non-occurrence of W that A did or did-not occur respectively.

In the language of logic, A and W are *equivalent* in Case 1 in regard to occurrence except for the time difference between them.

Bob

Case 2: "A and B together cause W".

The "joint cause" case. Alice and Alice Bob, for example, might be half the width of Alana in Case 1. Then neither Alice nor Bob alone could cause Will to topple, but acting together they could.

Does A then cause W? A is still necessary, but no longer sufficient, to the task. The word

"cause" has a more complicated meaning than that in Case 1.

Regarding the inverse: again, if the effect W occurs we may infer that A also occurred. But, unlike Case 1, if W did not occur we cannot infer that A didn't (B might not have occurred even if A did).

Case 3: "Either of A or B alone causes Y"

> The "multiple cause" case. It may be seen as two "parallel" instances of Case 1 with a common effect. Alice and Bob are the same size as Yolanda, and lined up so the toppling of



Case 2

Will

either alone strikes Yolanda, and topples it.

In this case A is not necessary, as it is in Cases 1 or 2, for Y to occur. And, like Case 1, but unlike Case 2, A is sufficient.

Regarding the inverse: If Y occurs we may not infer that A also occurred. We may infer that if Y did not occur neither did A. Again, "cause" takes on a different meaning than either Case 1 or Case 2.

Case 4: "A (alone) causes Y, then Z, but Y does not become Alana Z"

> The "multiple effects" case, all arising from a single cause. To be clear, Y is not an intermediate state in reaching Z. Both Y and Z, as independent effects, arise from A, but at slightly different delay times.



Alana strikes Yolanda, then, falling a bit farther, strikes Zoe a bit later.

In this case A is both necessary and sufficient cause for both Y and Z. But Y does not cause Z at all even though they always occur together, and are separated by a short time interval.

Regarding the inverse: the occurrence of Y implies both A occurred and Z will occur. The occurrence of Z implies both A and Y occurred.

In this case a prophecy might (mistakenly) attribute Y as the cause of Z, when they are actually both the effects of A. Once again, the sense of the word "cause" has shifted from all previous cases.

The subtle, but important, changes in the detailed sense of "cause" in these four cases illustrate that one must be very cautious in validating predictive methods by examining their effects. For this reason it should be apparent that any evidence offered for the validity of a prophetic method should include consideration and control of troublesome alternatives to the simple idea of "cause" in Case 1. Thus our sixth criterion arises:

Description of a prophetic method must include

a definition of the causal model being used.

Without such a definition the link between the method (the cause) and it's prediction (the effect) is ambiguous, potentially accidental, or even fraudulent. It is certainly *not* a demonstration of any validity of the method.

Correlation

In informal thought we often assume *correlation* implies *causation*, but this is not true in general. It is quite possible to have high correlation with no causal relation, or low correlation with necessary causal linkage, to consider extreme positions.

An example of high correlation with no causal influence would be the relation of Y and Z in Case 4 above with A causing both Y and Z independently. An example of low correlation despite a necessary causal connection would be the relation between A and W in Case 2 above, with the existence of B unknown and therefore not taken into account.

The "Football Con" described below is an interesting example of high apparent correlation with absolutely no prophetic capability. This is a superb demonstration that *correlation between a prophecy and the actual outcome alone does not imply causation, nor prophetic ability.*

In general, a prophetic method will incorporate a theoretical model of the causal relationships (as in the "Case" details in the foregoing section). Various models imply various degrees of correlation and circumstances under which the correlations will occur. This leads to the seventh prophecy criterion:

Correlation claims must be consistent with the causal model assumed.

Conversely, if the causal model is not specified correlation information is

useless as a validation criterion. This is a very common mistake made in validating prophecy.

Method Ambiguity

Since there are many prophetic methods (see below), we get our eight criterion:

Any attempt to validate one particular prophetic method

must rule out any role of the other methods.

That is, we must not simply demonstrate some prophetic ability by the criteria discussed above. Unless the features that distinguish one method from another are examined *explicitly* it is impossible to remove any ambiguity as to which method(s) is actually operative, or is responsible for any accuracy of the prophetic information.

To restate this in a negative mode: the hazard is that the (apparent) authenticity of one method will be falsely substantiated on the basis of another's efficacy rather than its own. Or, to use the paper's title metaphor, the mask of one type may be hiding the face of another.

Psychics often claim that attempts to control the use of other methods of prophecy interfere with their powers. From a rational standpoint this is an indirect admission that they depend on those other types, and that they themselves have mis-identified the true source of their (supposed) abilities, deliberately or mistakenly.

We are now in a position to consider various types of prophecy (various methods by which prophecies are made) and make some assessment of their accuracy, reliability and true value.

Faces and Masks of Prophecy

Deterministic

Deterministic prophecies consist of causal relations initiated at (or before) the time of prophecy but requiring process time to complete. These are the

prophecy faces of scientists, lawyers, draftsmen, tradesmen and so on.

The predictions of eclipses, which may be done years in advance with amazing accuracy, are very clear examples.

Speculation is a sub-type of deterministic prophecy in which the information or theory necessary to be totally confident isn't available. The method is the same as, say, a scientific prediction, but the soothsayer acknowledges and allows for unavoidable sources of uncertainty. In fact, the uncertainty itself is often estimated as part of the method.

The idea of fate or destiny expresses a deterministic view of the world, one in which people have no free will (or negligible influence). Any prophecy resting on these ideas thus comes into rational conflict with positions that assume free will, such as moral or legal responsibility for one's actions.

In deterministic prophecies...

- there should always be information content concerning both state specification and fulfillment time, because deterministic methods are genuinely effective. There is no need to be deceptive or incomplete. Any uncertainty arises out of lack of available input information or current limits on the theory used, which is openly acknowledged and managed.
- information flow is normal, that is, from present to future, and is managed responsibly.
- unexpected interference, both free agent and ignorance types, is deliberately and openly managed. The control provisions are often required and / or approved by professional bodies.
- the burden-of-proof requirement is handled properly for this type in that verification is based on published methodology, not on results alone.
- credibility is commensurate with that of the deterministic "laws" being used and the reliability of required input information.
- independently demonstrable causal relations are the essence of deterministic methodology. The "case type" of causal relation, however, is rarely identified explicitly, probably because the need for it

is not widely recognized. But it can be identified if the question is raised.

- correlation of prediction and fulfillment is usually very high, because it results from solid control and knowledge of the causal relations involved.
- method ambiguity is usually very low, because client confidence rests on knowledge (or certification by responsible councils) of the method used. If it is present it is the result of known boundaries to knowledge, and is unavoidable.

Self-fulfilling

This type of prophecy involves free-agent interference during the process of fulfillment. The agent is aware of a prophecy and has the power and motivation to cause it to be fulfilled. The interference is *intended* to bias the outcome of the prophecy in line with the prophet's wishes.

The interference can take two forms. State or time ambiguity can be resolved in the agent's favour at fulfillment time, or the agent can manipulate the system prior to fulfillment to achieve the predicted outcome.

The interference may be honest and open, or expected by the client, in which case the method is honest and morally legitimate. But if the interference is deliberately kept hidden from the client the method is being misrepresented, and constitutes a form of fraud. If the prophet doesn't recognize the inherent problem, or is self-deluding, then he / she is simply incompetent in regards to the theory of knowledge being used.

Methodology that incorporates self-fulfilling interference is not actually prophecy because the interference is optional. The prediction is really a statement of intent rather than a description of an inevitable future that "prophecy" connotes in our usual use of the idea.

In self-fulfilling prophecies...

- ambiguity or absence of complete determinism is essential if the free agent's role is to be part of the prophetic sequence.
- if the state and time predictions are unambiguous information flow is

normal, present to future. If they are ambiguous there isn't enough information content in the prediction to qualify it as a prophecy.

- free-agent interference is the essence of the method. The prophet (or interpreter) is actually exercising their free will to bring about fulfillment despite uncertainty. The method is fraudulent if it relies on ambiguity, or if the interference is concealed. But it is quite legitimate in circumstances such as a major construction project, or surgical intervention for a curable disease.
- the burden of proof requirement can be a problem if the interference is concealed. A professional's activity is based on open methods, whereas a con artist deliberately hides the interference to deceive. The "grey" zone between these two extremes, sincere mysticism, often rests on defective epistemology^[D] or self deception, at least from the view of rational analysis.
- causal relationships are ignored or poorly defined in fraudulent forms. They are explicit and well defined in legitimate forms.
- correlation is high, because it is forced high by the interference and intent. But correlation will be meaningful only for legitimate forms.
- method ambiguity may be used to set up appropriate conditions for fraudulent interference. It is not essential, but can be useful.

Precognitive, or Observational

Definition^[E]: "Precognition, n. Antecedent knowledge..."

This form of prophecy rests on having special sensory capabilities wherein future states or events can be observed passively, in a fashion analogous to the way we normally hear or see^[F].

In precognitive prophecy...

- if the observer's abilities are genuine there is no need for ambiguity. However, if the abilities are illusory, or fraudulent, ambiguity may be exploited to achieve the apparent prophetic ability.
- information transfer is reversed, that is, from future to present. As far

as we know this is not possible, so anyone professing precognitive ability should be challenged on the point.

- information flow is, ostensibly, managed by the prophet, but the method of management is not made accessible to the client. In essence, the prophet says "Trust me", without offering any legitimate reason to do so.
- in combination with the direction of information flow, interference raises an interesting problem in that the future state must be fixed or determined at the time the prophecy is made for the prophesy information to be accurate. There can be no unexpected interference in the interim. Yet the systems about which the prophecy is being made often include people or other animals in major roles, or the earth with all its unpredictable quakes and weather etc. *Interference can't simply be controlled, as in deterministic prophecy. It must not be possible.* Again, anyone professing precognitive ability should be challenged on these difficulties.
- burden of proof requirements are usually ignored in that no detail of the methods used is provided. The prophet simply claims they have exceptional sensitivity to information, and expects acceptance without objective description or verification. This, of course, fails the rational criterion of demonstration of methodology, as opposed to simple historical success or failure rates (which have been shown to be meaningless on a stand-alone basis. See the section on cons below as well.).
- causation is a serious issue too. What method is being used that can move information from future to past? As we saw in the section on causation, a causal relation is not necessarily invertible. Is the causal case type defined? Is that case type invertible? If not, does this invalidate the methodology?
- correlation is highly questionable, precisely because the methods supporting prediction are not available for objective assessment. In general, precognition is defended on the basis of its results, not its methods, and is thus open to all the problems described under "Correlation" above.
- method ambiguity is usually an issue. Method ambiguity is especially

prevalent in that observation of body language and "pumping" clients for information are very conspicuous in most practitioner's techniques. In trials controlled to exclude alternate methods, for example, the precognitive ability usually plummets, and forces the practitioner to beg interference — hard evidence of method ambiguity.

<u>Ambiguous</u>

As explained in the "Information" section, ambiguous predictions aren't really prophecies. I have included them as a type because they are very common, and usually offered as prophecies despite their theoretical failings.

These forms of prophecy play on ambiguity in regard to either information content, time of fulfillment, or both. The general idea is to set up an ambiguous prediction, then pick the evidence and / or option that suits your purposes at the time of fulfillment. In other words, the methodology is really interference based on ambiguity.

There are two sub-forms, distinguished by their use of information or time ambiguity.

Equivocal (ambiguity over the fulfillment state)

The "It may rain tomorrow" example above illustrates the equivocal type. The prediction is simply stated using "weasel" words, and the ambiguity resolved at the time of fulfillment.

As an interesting aside here: note that this works for someone attempting to reject the hypothesis also. There is just as much logical validity on the failure side as on the success! It is often quite effective to use this to illustrate the problem in challenging the prophet over the issue.

<u>Totalitarian</u> (ambiguity over the time of fulfillment)

Given enough time just about anything that is actually possible will occur (this is known in physics as the totalitarian hypothesis, hence the name for the prophecy type). An arbitrary prophecy may be fulfilled by simply waiting for circumstances that match the fulfillment conditions (if the prophecy has any probability of ever being fulfilled), then declaring that moment to be the predicted time of fulfillment. The "It will rain" example above illustrates the type.

In ambiguous prophecy...

- information is missing in regard to either content or fulfillment time, or both. This is jointly essential to the method, in conjunction with interference.
- one cannot have information flow if there is no information content. If the ambiguity is only in regard to time of fulfillment the flow direction is forward.
- information flow, if there is any, is managed, but is concealed.
- interference is jointly essential to the method, along with ambiguity.
- the burden of proof, if the issue is discussed at all, is usually problematic for the prophet. If the true method is identified it becomes obvious the prediction isn't a prophecy at all.
- questions of causation are avoided, as they would lead to lack of ambiguity, which would destroy the technique.
- correlation is usually relevant in that it is offered as "proof" of the prophetic capability. It is high, but only because the ambiguity is resolved at the time of fulfillment to make it high.
- method ambiguity is essential in that the actual technique must be masked to achieve client confidence.

Our fascination with prophecy is often exploited for nefarious purposes in the form of confidence schemes. It is worth considering a couple of such cons because they illustrate the foregoing discussion with "real world" examples, and are entertaining too.

Cons That Mask as Prophecy

The Time Delay Con^[G]

This type of con is a deliberate fraud, but has the mask of precognitive prophecy (the method cannot be revealed). The prophet's strategy is to arrange to obtain relevant true information earlier than his or her mark(s), then pretend he or she has precognitive powers during the time it takes for their audience to obtain the information by independent means (preferably through broadcast or by publishing). The apparent precognitive ability is actually just reporting, but it appears to the mark(s) as genuine precognition.

For example: the prophet may predict the outcome of a horse race, and set things up so the mark actually hears a delayed radio broadcast. The race is actually over when the prophet "predicts" its outcome, but the mark is led to believe the reports they hear are live, in "real" time. Naturally, the apparent precognitive ability is amazing, and that is used to pull off the con. The movie "The Sting" was based on this scenario.

There is some suspicion that the Oracles at Delphi involved this fraud too. See the reference end note for more detail.

Note that the information flow is actually present to future, but appears to be future to present because of the delay interval. If the mark could manage their own information flow (perhaps with a personal pocket radio) the con would become obvious.

The Football Con^[H]

This con is quite ingenious, and illustrates very well how a total lack of prophetic capability can be made to pass as a very high level thereof through systematic control of the evidence.

Suppose that one team in a football league plays at least 6 games, and that the league rules make ties impossible. You need the final game to spring the trap, leaving 5 to set up the con.

The setup is illustrated in this chart.



As indicated by the bottom row there are 32 possible chains of outcomes, so you write 32 letters to 32 mutual strangers predicting the outcome of Game 1. Half of the letters predict a win, half a loss for your selected team. (Assume the actual results for your selected team prove to follow the coloured path.)

Half of the 32 letters will have the actual loss as a prediction, so you drop the addressees with the incorrect win prediction from your mailing list and send the 16 people for whom your prophecy was correct Game 2 predictions. Again half of the letters predict a win, half a loss.

Half your predictions will be right, and you send 8 predictions for Game 3 to the addressees who had correct "prophecies" for the first two games. You carry on until you have predicted 5 games. One recipient (the one with the coloured, extended line in the chart) will have watched you predict the outcome of all 5 games correctly, with apparent odds of 1 in 32, substantially better than chance. That is a good enough record to convince your 5-time-right recipient you can make reliable prophecies (assuming they haven't read this paper), and thus that your offer to let them in on a substantial wager on the 6th game is a sound investment.

Naturally, you will expect a commission for your services, and will handle all the details of the bet as well as the prophecy. When they send in their bet you simply make off with it, and take up residence in the Bahamas.

In fact, you had <u>no</u> ability to predict the outcome of a specific game, but the design of the scheme makes it appear as though you had quite a phenomenal

ability to do so, at least to one person out of 32. The odds of success on the 6^{th} game are not the 100% your historical "abilities" suggest, but 50% (assuming evenly matched teams). Your mark would do just as well flipping a coin as paying you for your services, but it doesn't look that way to them.

The con could not succeed if the mark insisted on knowing the method, rather than relying on results alone, to assess the legitimacy of the prophetic ability.

Summary

The preceding discussion is summarized in the following table, in which the rational criteria are listed down the side, and the types of prophecy across the top.

	open s-fulfill, deterministic	fraudulent self-fulfilling	pre-cognitive	equivocal	totalitarian
free of ambiguity	OK, openly qualified if not	no ambiguity, match is forced	usually not, OK if ability were real	no state spec is essential	no fulfillment time is essential
information flow	OK (forward)	information doesn't move	backward, impossible?	no info to move	none, or forward
information flow management	OK, openly available	concealed, not available to client	not available to client	concealed, or info not present	concealed, or info not present
interference	OK, managed and visible	free agent essential, hidden	uncontrolled (assistant, prior research?)	exploited to remove ambiguity	exploited to remove ambiguity
burden of proof	OK, openly accepted	problematic, must hide actual method	inaccessible - completely subjective	problematic, must hide actual method	problematic, must hide actual method
causation	OK, basis of method	used to set up ability to choose	free will vs interference - inverted causation	none	none
correlation	OK, as good as theory & info	excellent, forced	probably a mask	excellent, forced	excellent, forced
method ambiguity	OK, no deception	essential to mask actual	probably, not controlled	essential to mask actual	essential to mask actual

Please refer to preceding text for more detail.

Conclusion

Based on this analysis, the only kinds of prophetic method that can be supported rationally are those that rely on deterministic information or open self-fulfillment. Even these methods are limited by absence of available information or limits to relevant theory, but it is the best we can do. All the other forms contain severe theoretical problems, or are outright fraudulent.

It is very likely that I have missed a few types of prophecy, and, perhaps, some of the theory-of-knowledge problems involved. This paper actually proved fairly difficult to develop and organize, but the process has been very instructive to me and well worth the effort. I hope it proves the same for you.

References

^A The Concise Oxford English Dictionary of Current English, Fourth Edition page 962

^B See my paper "Sharpening Occam's Razor", available from <u>www.GreatBlue.ca</u>

^c See my paper "On the Burden of Proof", available from <u>www.GreatBlue.ca</u>

^D See my paper "Epistemology, the Roots of War", also available from <u>www.GreatBlue.ca</u>

^E The Concise Oxford English Dictionary of Current English, Fourth Edition page 940

^F See my paper "Two Views of Emotions, Two Views of the World", available from <u>www.GreatBlue.ca</u>

^G "Netherworld", by Robert Temple, Arrow books 2003 ISBN 0 09 941466x pp 94-*et seq* The Time Delay Con is suggested as the *modus operandi* of the ancient oracles, such as that at Delphi. The priests in charge of the oracles are purported to have had a communication network of carrier pigeons, which gave them earlier access to news events than the general population, hence apparent prophetic capability.

^H See "How Long is a Piece of String" by Rob Eastway and Jeremy Wyndham, Robson Books, London. Copyright 2003, 2004, 2005 ISBN 1

86105 625 7, page 13. The description there is much more colourful, and I recommend the entire book to anyone interested in similar recreational mathematics topics.