

SHOW ME YOUR MAP

The Method Behind the Question

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First edition.

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What If?

Most problems do not begin with bad answers.

They begin with a representation that seemed sufficient at the time.

Usually, it was.

The problem begins when useful is mistaken for complete.

That is where the first question begins:

What if?

Not:

What if everything is wrong?

Simply:

What if there is something we are not seeing yet?

The Traffic Lane

Imagine driving on a crowded highway.

Your lane is barely moving. The lane beside you appears faster.

You change lanes.

For a moment, the decision looks correct.

Then you see the sign ahead:

LANE ENDS — MERGE LEFT

The other lane was moving faster.

That did not change.

What changed was what you could see.

So another question becomes possible:

What was I missing?

Observation and Interpretation

Consider the difference:

The lane is moving faster.

The lane is better.

One describes what appears to be happening.

The other adds something to it.

Maybe that interpretation is right.

Maybe it is not.

What if? gives us enough room to ask.

What if the lane ends?

What if the slowdown is temporary?

What if both lanes reach the same bottleneck?

We do not need every possible explanation.

We only need one plausible alternative that makes the current picture worth another look.

A Question Worth Keeping

Sometimes the original representation is enough.

Sometimes another possibility appears.

Sometimes there is not enough information to tell.

Undetermined is still an answer.

What if? does not need to resolve anything.

It only needs to reveal whether something is worth examining.

If it is:

How would we find out?

How Would We Find Out?

What if? gives us another possibility.

Possibility alone does not tell us much.

So:

How would we find out?

One way is to test it.

Back to the Traffic Lane

The faster lane appears better.

Then you notice that it ends ahead.

One possible explanation is that its advantage disappears when it merges back into slower traffic.

So watch what happens.

Does the advantage disappear?

Does it happen again?

The first result gives us something to remember.

The next gives us something to compare.

A Testable Expectation

A hypothesis gives us an expectation.

For example:

Changing into the faster lane will not meaningfully reduce travel time when the lane ends ahead.

Then we see what happens.

Once.

Again.

Maybe again.

If the results remain similar under the relevant conditions, something resembling a baseline begins to form.

If they do not, that matters too.

Consistency

One result is an observation.

Repeated similar results give us more reason to expect something similar again.

That is one reason the scientific method is useful:

question → *hypothesis* → *test* → *observe* → *revise*

Then repeat when useful.

It does not make the conclusion universally true.

It tells us how consistently the expectation survives the conditions under which we tested it.

Three similar outcomes may give us little reason to change course.

Three different outcomes probably deserve more attention.

A Working Baseline

For now, we have something tested to compare against.

And when the comparison stops matching:

What changed?

What Changed?

A baseline gives us something to compare against.

Then the result changes.

What changed?

A Different Example

Imagine a machine performing the same task several times.

The first runs look familiar.

Then one does not.

The process appears the same.

Maybe something around it was not.

Load.

Temperature.

Timing.

Material.

Wear.

Sequence.

Instead of beginning with:

What failed?

try:

What was different this time?

Follow the Difference

Suppose the load changed.

Return to the familiar load and observe the result.

Change it again.

Compare.

Maybe the outcome follows the load.

Maybe it does not.

Either way, the difference has given us somewhere useful to look.

The point is not to vary everything we can think of. It is to follow the differences that might explain why the result stopped matching the baseline.

We do not need to redesign the machine because one result changed.

We need to understand the change well enough to decide whether the existing explanation still works.

When Small Changes Accumulate

Not every meaningful change looks important by itself.

A road marker moves.

A familiar label changes.

A confirmation point disappears.

None of those may alter the route.

But each changes how easily someone can tell whether they are still on it.

One small difference may be negligible.

Several small differences may begin to change the usefulness of the original representation.

So the question is not only:

How large was the change?

It is also:

What did this change affect in relation to everything that had already changed?

A delta can matter because of its size.

It can also matter because it joins a pattern.

How Much Can Change?

Some systems tolerate variation easily.

Others respond to very small changes.

So another question appears:

How much can change before the result changes with it?

The answer may be narrow.

It may be broad.

We only know by comparing what happens against what happened before.

What the Difference Shows

A baseline gives the difference meaning.

A delta is simply a difference from that baseline.

It is not automatically a defect, a cause, a risk, or a correction.

It is a place worth investigating.

Its significance may remain undetermined until comparison gives us reason to weight it. Sometimes the existing explanation still works. Sometimes it needs adjustment. And sometimes the difference suggests that what appeared to be the same thing may not be represented the same way at all.

Are we looking at the same thing?

Are We Looking at the Same Thing?

Two people can look at the same information and reach different conclusions.

The information may be the same.

The interpretation may not be.

Same Data, Different Lens

Imagine two doctors reviewing the same patient information.

They have access to the same test results.

One recognizes a familiar pattern and considers it relatively routine.

The other notices an unusual detail and gives it more weight.

The data is the same.

What each doctor notices, remembers, or considers important may not be.

One may have seen the pattern many times before.

The other may remember a similar case that ended differently.

One may be comfortable with the remaining uncertainty.

The other may give more weight to an unlikely possibility because its consequences would be greater.

None of this changes the test results.

It changes the lens through which those results are interpreted.

Another Way to Ask

We could begin with:

Which doctor is right?

But that may be too early.

A more useful question might be:

What might each person be noticing that the other is not?

We do not need to know exactly what either person is thinking.

We only need enough room for more than one interpretation of the same information.

The Lens in the Picture

The person doing the interpreting is part of the picture.

That may explain some of the difference.

But perhaps not all of it.

What if the difference is not entirely internal?

What If the Difference Is Not Entirely Internal?

Two people can look at the same information differently.

Sometimes the difference begins with the person looking.

Sometimes something around them is helping shape what they see.

Same Person, Different Room

Imagine the same employee in two workplaces.

In one, questions are expected.

In the other, questions are treated as hesitation.

The person has not changed.

But what happens around a question has.

That difference may affect what gets said, what gets noticed, and what gets left alone.

The Group Has a Lens Too

People rarely make decisions without reference points.

Teams develop habits.

Professions develop norms.

Organizations develop expectations.

Communities develop shared ideas about what is normal, important, acceptable, or unusual.

Those reference points do not determine every decision.

But they can influence what seems reasonable before anyone stops to examine why.

So when an interpretation does not make sense from the person alone, it may help to look around them.

What gets rewarded?

What gets discouraged?

What has become routine?

What would feel unusual here even if it would seem ordinary somewhere else?

Part of the Picture

The environment may explain some of what the individual lens could not.

That does not make it the whole explanation either.

Person and environment can both contribute without either being sufficient on its own.

Which means two apparently different perspectives may each be showing us something real.

What if both perspectives are useful?

What If Both Perspectives Are Useful?

Different perspectives do not have to cancel each other out.

Sometimes they are answering different questions.

Two Routes

Imagine two people choosing a route across the same city.

One chooses the fastest.

The other chooses the safest.

Their maps may produce different paths.

That does not necessarily mean one misunderstood the city.

One map gives more weight to time.

The other gives more weight to risk.

Ask which route is correct and the disagreement may look larger than it is.

Ask:

What does each route make visible?

and the relationship changes.

Different Representations

A road map and a topographical map can describe the same place.

One makes roads, intersections, and distances easy to see.

The other reveals elevation, slopes, waterways, and terrain.

Neither needs to contain everything the other contains.

Their usefulness depends partly on what we are trying to do.

If we are driving, the road map may be enough.

If we are deciding where floodwater is likely to travel, the topographical map may suddenly matter much more.

The area did not change.

The representation did.

Compare Before Choosing

When perspectives differ, we do not always need to decide immediately which one wins.

First compare them.

Where do they overlap?

Where do they diverge?

What does one reveal that the other does not?

Sometimes one perspective will prove more useful.

Sometimes both will.

And sometimes comparing them reveals something neither contained alone.

The picture is getting broader.

But broader is not the same as complete.

What are we still not seeing?

What Are We Still Not Seeing?

Adding perspectives can make a picture clearer.

It can also make completeness easier to assume.

The Intersection

Imagine several people observing a busy intersection.

One watches traffic flow.

Another watches pedestrians.

Another watches delivery access.

Together, they see considerably more than any one observer would.

None of them notices the timing of the traffic signal.

More perspectives improved the picture.

They did not finish it.

Sometimes what is missing is another perspective.

Sometimes it is a variable no one thought to observe.

Sometimes it is something everyone assumed was already understood.

A useful question is:

What would have to be missing for our current picture to still be incomplete?

Change the Observation Position

Before adding another explanation, try changing how the system is being observed.

Describe what can be observed before deciding what it means.

Then ask whether the same picture appears from another position.

Perfect independence is unlikely.

Everyone brings experience, expectations, and a point of view.

The useful question is not whether an observer has no lens.

It is also:

Which influences does this observer share with the current reconstruction, and which do they not?

Sometimes changing the observer reduces a familiar assumption.

Sometimes changing the interface changes what becomes visible.

Sometimes operating inside the environment reveals constraints that disappear when viewed from outside.

The differences between those observations are themselves information.

Sometimes the missing variable is not inside the system we are observing. It is in the way we are observing it.

Look Outside the Current Map

Then compare the reconstruction with something outside it.

A record.

A measurement.

A prior example.

Another observer.

An external source does not automatically settle the question.

It gives us another comparison state.

It may support what we already think.

It may contradict it.

Or it may introduce a detail no one had considered important.

That detail does not have to become meaningful immediately.

Its significance may simply be undetermined.

Do not decide that an observation is useful or useless before its usefulness can be measured.

Preserve it long enough for later comparison to earn the classification.

Eventually one of those additions may change more than the amount of information we have.

It may change the meaning of information we already had.

Does this change what we thought we knew?

Does This Change What We Thought We Knew?

New information does not always require a new explanation.

Sometimes it fits easily into the one we already have.

Sometimes it does not.

The Repeating Failure

Imagine a piece of equipment that has failed several times.

Each time, the same component was replaced.

The equipment returned to service.

The history seems straightforward:

component fails → component replaced → equipment works

Then a technician notices something.

The fault disappears when a connector is moved.

That observation does not make the previous replacements imaginary.

Those components were replaced.

The equipment did return to service.

But the new detail changes what those events might mean.

Maybe the component was failing.

Maybe something else was causing it to fail.

Maybe replacing the component disturbed the connection and temporarily restored operation.

The old information remains.

Its relationship changes.

Compare Before Replacing

When a new observation does not fit, there is an understandable temptation to throw out the old explanation.

That may be unnecessary.

Instead ask:

What still fits?

What no longer fits?

What needs another look?

The answer may require a complete reconstruction.

Often it requires much less.

A connector may move from incidental detail to probable contributor.

A repair history may shift from evidence of repeated component failure to evidence of a recurring pathway.

The representation changes without requiring everything inside it to change.

Keep What Still Works

Revision does not mean the previous representation was foolish.

It was built from the information available at the time.

New information changes what can reasonably be said now.

Keep what still works.

Revise what does not.

What should we do with the new version?

What Should We Do With the New Version?

A revised representation may be more useful than the one that came before it.

That does not mean every possible response follows from it.

A better map is not the same thing as a decision.

What Changes Now?

Imagine a process that has been revised after a hidden dependency is discovered.

The new representation is clearer.

Now what?

Change the procedure?

Add a safeguard?

Watch for recurrence?

Do nothing yet?

The answer depends on what the new information actually makes possible.

Response Has a Cost

Every response uses something.

Time. Effort. Resources. Attention.

Sometimes disruption. Sometimes new risk.

Continuation has a cost too, so the question is not simply:

What could we change?

It is:

What does it cost to continue, and what risk does continuation carry?

A deviation does not require correction merely because it exists. The response should fit its significance, the cost and risk of continuation, and what can actually be changed.

Sometimes the smallest useful change is enough.

Sometimes doing nothing costs more.

Sometimes the best next step is to monitor, tolerate, preserve, or leave the condition alone.

For This Situation

A revised representation may change a priority.

It may change where we look.

It may change a process.

Or it may leave the current action unchanged while increasing what we know.

That is still useful.

The purpose of the new map is not to force movement.

It is to make the next decision better informed.

And the decision that works here may not work somewhere else.

How far does this version travel?

How Far Does This Version Travel?

A useful representation may work well in one situation and poorly in another.
That does not necessarily make it wrong.
It may simply have limits.

Try It Somewhere Else

Suppose a process works well at one location.
You apply the same representation at another similar location.
It works there too.
Then you try somewhere less similar.
The scale is different.
The environment is different.
The people are different.
The constraints are different.
Maybe the model still works.
Maybe only part of it does.
Maybe it breaks completely.
Each result tells us something.

Similar Is Not Identical

Two situations do not have to be identical for the same representation to be useful.
But they do need to be similar in the ways that matter.
That gives us a better question than:

Does this work everywhere?

Ask:

Are these situations similar enough for this representation to remain useful?

Sometimes the whole model travels.
Sometimes only part of it does.
Sometimes none of it should.

Where Does It Break?

Limits are information too.

A model that works for ten people may not work for a thousand.

A process that works with abundant resources may fail when those resources disappear.

A decision that works under normal conditions may become inappropriate during an emergency.

The breakpoint helps show which assumptions were carrying more weight than we realized.

A representation does not need to be universal to be useful.

It only needs to travel far enough for the question we are asking.

But if some part keeps surviving the journey, that part deserves a closer look.

What has to remain the same?

What Has to Remain the Same?

A representation can change shape without losing everything that made it useful.
The question is what actually has to survive the change.

Different Form, Same Relationship

Imagine two tools built for different jobs.

They look different.

They operate differently.

Their environments are different.

But both may still follow the same basic relationship:

input → *control* → *output*

The surface changes.

The relationship remains.

That difference matters.

Strip Away the Extras

When something continues to work across several situations, some of its features may turn out to be incidental.

Change the setting.

Change the example.

Remove a detail.

Then ask:

What can I change without changing everything?

If the relationship still holds, that detail may belong to the form rather than the structure.

If removing it changes the relationship itself, it may be carrying more weight than we realized.

A Candidate Kernel

If a relationship continues to work while the surrounding details change, the remaining structure deserves attention.

But persistence alone is not enough.

Something may appear essential simply because we never changed it.

That makes it a candidate.

Not a conclusion.

Move the Anchor

Once the viable changes around an apparent invariant have been explored, the invariant itself becomes testable.

Change it. If practical, substitute something else into the same position.

If safe and feasible, remove it provisionally. Preserve as much of the surrounding comparison as practical.

Then observe what happens in each state.

If the relevant relationship remains materially unchanged after substitution or provisional removal, the original invariant was probably not the kernel.

It may have been familiar, persistent, convenient, or correlated.

But it was not necessary.

If changing or removing the invariant materially changes the relationship, we have stronger evidence that it contributes something load-bearing.

If removal makes the system worse, the suspected problem may also have been limiting the magnitude of another problem.

And sometimes the contribution does not belong entirely to the invariant itself.

It may belong to the interface through which that invariant acts - or to the relationship between them.

Change the interface and compare again.

The difference helps reveal whether the important structure belongs to the element, the connection, or the relationship between them.

What Must Remain

The question is no longer simply:

What keeps appearing?

It becomes:

What must remain for this relationship to keep working?

The kernel is not what stays the same because we kept it fixed.

It is the smallest necessary structure that remains load-bearing as the surrounding form, apparent anchors, and interfaces are challenged.

The Relationship May Be the Kernel

Sometimes changing either node leaves the system intact.

Changing the connection between them does not.

In those cases, the kernel is not the component, person, role, or anchor.

It is the relationship that must remain.

Eventually, even the anchor gets audited.

And once we have a structure that appears to survive those tests, there is still one problem.

Conditions change.

New information appears.

The terrain moves.

What do we do when the map changes again?

What Do We Do When the Map Changes Again?

A useful map is not a finished map.

Conditions change.

New information appears.

Old assumptions stop holding.

When that happens, we do not necessarily start over.

We find where the map stopped matching the terrain.

Keep what still works.

Revise what does not.

Leave unresolved what the evidence cannot yet support.

A map does not remain useful because it remains unchanged.

It remains useful because it can change without pretending it was ever the terrain.

Eventually every useful map reaches something it did not contain.

What if?

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for cartographical purposes.*

Today's model is tomorrow's baseline.