The Art and Architecture of Powerful Questions

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*"The important thing is to
never stop questioning."*
A. Einstein

Einstein invites us to continue questioning. Why? This query provokes a variety of impassioned responses:

> Questions are a prerequisite to learning.
> Questions are a window into creativity and insight.
> Questions motivate fresh thinking.
> Questions challenge outdated assumptions.
> Questions lead us to the future.

In fact, with little effort, it is easy to justify the critical role of questions in the development of human knowledge. Nobel laureats will often attribute their experience of successful scientific achievement to asking the right questions. And in much simpler business situations, we have all experienced the importance of asking the "right question." Indeed, if questions are so critical to the capacity to create and the development of human knowledge, we wonder why our public educational system focuses upon memorization and static answers rather than the art of questioning. In contrast to the typical western education, the distinguished Chilean biologist, Humberto Maturana, was recently asked how his schooling influenced his innovative thinking. He replied that he had attended an experimental high school in Santiago where half of their grade was based upon the quality of the student's questions, not their answers.

The Corporate Learning Conference dialogue focused upon the **art and architecture of powerful questions.**   We started by attempting to define a "powerful question," and by considering several examples:

What time is it?

How do you make strawberry ice cream?

What does it mean to be human at this point in history?

Clearly, these three questions differ in terms of power. But how do we describe the difference? And what is the art and architecture of a powerful question? Our prolific dialogue group offered several diagnostics:
A powerful question...

- stimulates reflective thinking.
- challenges assumptions.
- is thought-provoking.
- generates energy and a vector to explore.
- channels inquiry, promises insight.
- is broad and enduring.
- touches a deeper meaning.
- evokes more questions.

Satisfied that we had a working definition of a *powerful question,* the dialogue group turned its attention to the art and architecture -- HOW does one ask a powerful question? One dimension of power clearly must have to do with the linguistic architecture alone. Operating independently of the meaning and scope of a question is the language structure which holds the question. We know, for instance, that salespeople observed decades ago that "open-ended" questions were much more powerful for stimulating a sales dialogue than "closed-ended" questions. *"Do you have any problems with your fax machine?"* tends to yield fewer selling opportunities than *"What problems have you experienced with your fax machine?"*

There are exceptions to every rule. We must keep in mind that in the example above, we are describing a consultative selling process where the objective is to stimulate reflective thinking by probing for needs and concerns. When the context changes to closing a sale, a question like, "Can I write up your order now?" is clearly an **important** closed-ended question, while it may not be a powerful question, as defined above.

This open/closed distinction can be expanded into a richer hierarchy of power through systematically exploring the linguistic architecture of questions. In an exercise MicroMentor first designed for Polaroid's Creativity Lab, participants discover the basic linguistic architecture of questions when they are asked to place the following words into a pyramid of low to high power:

WHO WHERE   **WHEN**   **WHY**

HOW   **WHAT**   **WHICH**

The Linguistic Architecture of Powerful Questions

High Power

↑

↓

Low Power
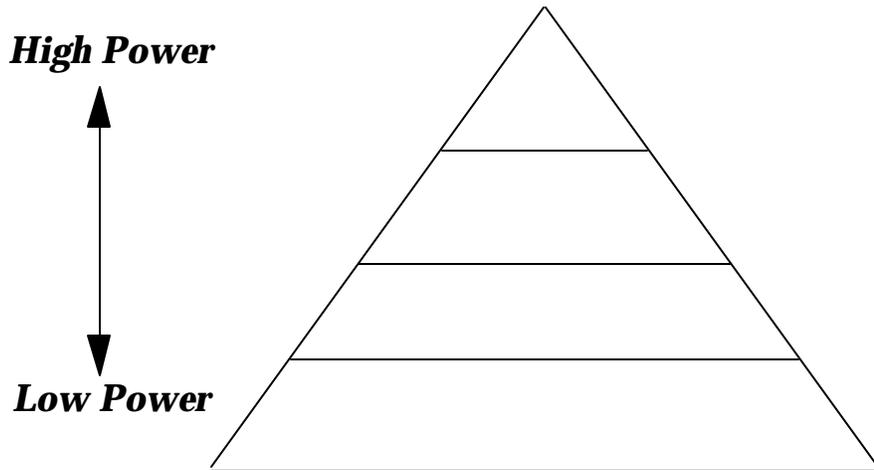
Most groups working on this dimension of linguistic architecture produce a variant of the following general hierarchy:

High Power

↑

↓

Low Power

Why

How What

**Where Which
When Who**

Closed-ended (yes/no)
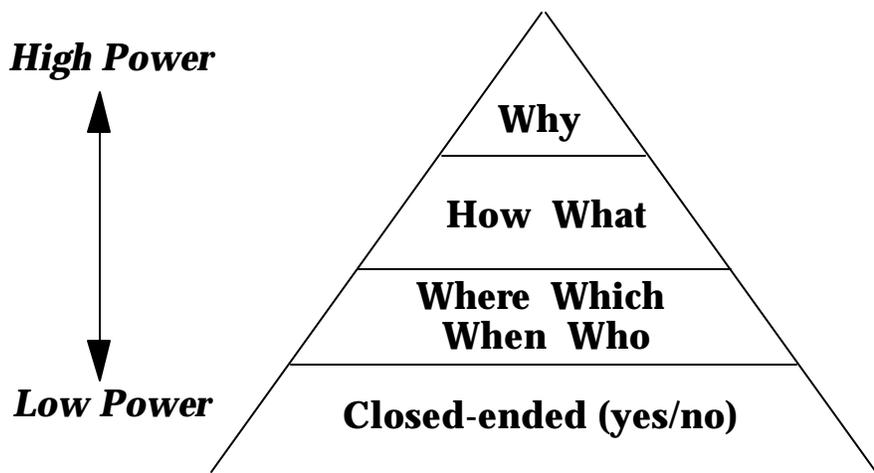
The general thesis is that virtually any question can be converted into a more powerful question by moving up the pyramid. As an example, consider the following sequence:

>*Are you feeling okay?*
>
>*Where does it hurt?*
>
>*How are you feeling in general?*
>
>*Why do you suppose you aren't feeling well?*

As we move from the simple yes/no question towards the why question, you probably notice that the questions tend to motivate more reflective thinking, and are generally more "powerful."

There are refinements within this dimension of linguistic architecture available to an interested practitioner. For instance, using the conditional tense rather than the present tense will often invite greater reflective speculation:

>*What can we do?*
>seems to offer fewer possibilities than...
>
>*What could we do?*

The dialogue group concluded that clearly one dimension which defines a powerful question is this linguistic architecture. However, other factors are also at play when we consider the relative power of the following two questions:

>*Why is my coat unbuttoned?*
>*Where can we find spiritual peace?*

This is an instance where most people would say that the "where" question has somewhat greater power than the "why" question. After reflection, we hypothesized that there were probably three dimensions which define a powerful question:

Three Dimensions of Powerful Questions

Architecture

Meaning/Context
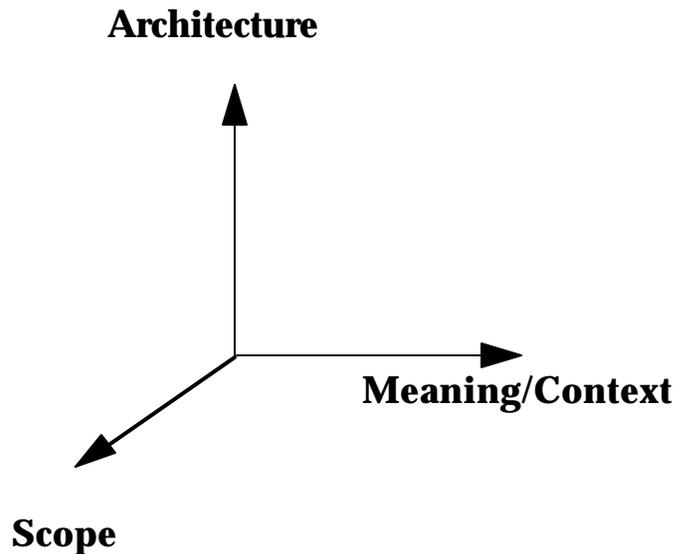
Scope

The Scope Dimension of Questions

The "scope" dimension suggests that questions which encompass more people, more volume, more time, or more concerns have greater scope, and tend to be more powerful questions. An example might be the following contrast:

> *How should we manage our salesforce?*
> *How should we manage the planet?*

In this example, the question increases in scope and the implied "we" increases in scope as the object changes from salesforce to planet.

The Meaning/Context Dimension of Questions

The "meaning/context" dimension is a more complex, subtle axis and commanded the attention of the group for most of the dialogue. One way of defining the meaning/context axis is to return to our definition of a powerful question, and highlight the characteristics which describe the meaning/context axis. Questions which are powerful in terms of meaning/context probably exhibit the characteristics shown in bold type below:

A powerful question...

- stimulates reflective thinking.

- **challenges assumptions.**
- is thought-provoking.
- **generates energy and a vector to explore.**
- channels inquiry, promises insight.
- is broad and enduring.
- **touches a deeper meaning.**
- evokes more questions.

It became clear during our exploration that an understanding of the nature of the interaction between questions and assumptions is critical to a full appreciation of powerful questions. Understanding the role of assumptions in questioning may be, in particular, a key to gaining greater insight into the meaning/context dimension of powerful questions.

We observed that questions which challenge or alter assumptions have the power to shift context and change mindsets. In the three-dimensional model, these questions would naturally locate themselves further to the right (higher power) on the context/meaning axis. An example might serve to elaborate this dimension. Compare the two questions:

> *How can we compete with the Japanese?*
> *How can we collaborate with the Japanese?*

The second question shifts the context, and opens up a different exploration and a different set of subsequent questions. We hypothesized that the art of re-framing questions as practiced in fields such as neuro-linguistic programming must implicitly be operating on this axis of meaning/context as well.

Developing the conscious ability to articulate more powerful questions along this dimension may hopefully become one of the more popular courses in the transformed public education system of the next century.

Our final exploration led us through an examination of what happens to assumptions through the incisive articulation of powerful questions. Borrowing on the computer model of Create, Read, Update, and Delete, we decided that questions may have one of the following four impacts upon assumptions:

Create   Reinforce   Alter   Destroy

The order of these verbs may reflect the power of the question. For instance, it is much easier to reinforce someone's prevailing assumption than it is to alter it.

Similarly, it is generally easier to create a new assumption than destroy an existing assumption. Therefore, as we explore the nature of powerful questions, we might ask, "How does this question interact with the listeners' assumptions?" If the answer is that it alters or destroys the listener's prevailing assumptions, we have have identified a more "powerful question." Returning to our model of powerful questions and our sample high power question, we might map the question onto the model somewhat like this:

Architecture

Meaning/Context

What does it mean to be human
at this point in history?

Scope
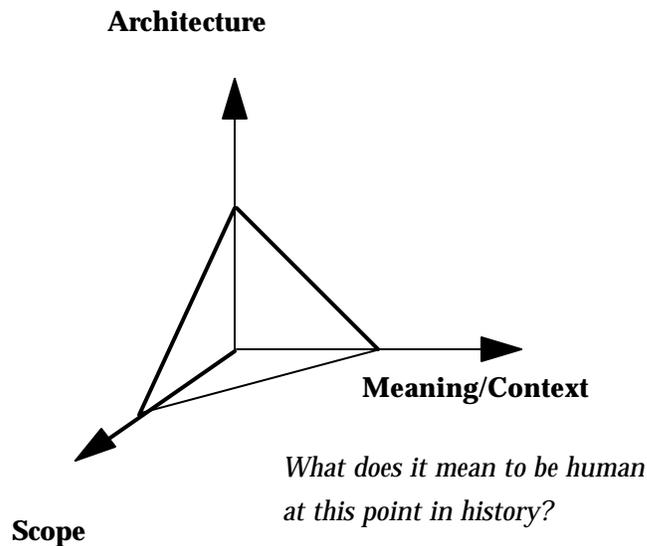
Models have value only if they provide insight and lead to different actions. I invite the reader to play with the three-dimensional model of powerful questions offered above. Start with the blank model below and map the following three questions:

- What time is it?

- How could we make the world's best strawberry ice cream?

- How can we bring meaning to our work?

Then attempt to increase the power of each question by changing first its architecture, then its scope, and finally its meaning/context, the art of powerful questions.