Introduction

Scientific reports, one after another, in technical journals and in popular publications declare that the workings of our thought processes are completely unknown. Though science is well aware of how nerve cells in our bodies function, the thought process which those nerve cells amount remains our principal modern mystery.

We people think, and do our lives by way of our thinking. Thought is the highest expression of biology we can imagine. To actually discern thought promises to enable us to open entire panoramas of not only science and medicine but horizons of how we people live our everyday lives in our respective societies.

This discussion introduces an algorithm and its effective reaches, which algorithm opens us to discovering thought's ways and means. What microscopes and X-rays have done for the practice of medicine, is what the algorithm that we discuss here does for our understanding of thought.

The algorithm studied here is titled the "Actual algorithm." What we are doing with this Actual algorithm is simply following along thought as it proceeds - the way that a wilderness explorer might follow a game trail. The Actual algorithm describes the way in which nature itself achieves its own developments, and in this way we can zig where nature zigs and zag where nature zags. Explicitly, we apply Actual algorithm to thought but it is altogether more general than pertaining only to thought.

In this discussion, Actual algorithm will often be called simply, Actual. A principal characteristic of Actual is that it is very simple to engage. Another attribute closely related to the first is, that Actual branches out quite effortlessly at every point of development.

Who is this, telling about Actual? Just some mouthy guy who knows to. The topic itself will never rest silently.

The Actual algorithm:

Actual is a first-principle algorithm. By "first-principle" is meant that it cannot be subdivided into simpler description, and also means that wherever the description of Actual applies, Actual is effective. Actual is defined in one simple term, as follows:

A valent tends to avail a circumstance.

Equivalently, we may say:

That which tends to avail a circumstance is a valent.

Here, the coined word "valent" is introduced according to its relationship with a circumstance. The "circumstance" is defined with complete broadness, to the most full possible dictionary definition of the word. Perhaps in Actual we might even expand its definition.

The relationship of the valent with its circumstance is that the valent "tends to avail" its circumstance. "Valent" is thus defined in context as any that which does tend to avail its circumstance. The definition of "avail" here is explicitly empirical. Any availing what ever so ever that a valent tends towards a circumstance enters them (together) into Actual. "Availing" is specific to the relationship between valent and circumstance, and by no stretch of the imagination applies to an average or weighted sense of the word.

We find that Actual is expressed in three voices, as follows.

Actual voice: the defining, authoritative, voice.

Vectoring voice: to be described.

Assertion voice: to be described.

In Actual, power is defined as "responsive development." This definition is also a general definition of power, for example "a seed well planted has the power to become a mighty tree." Similarly, freedom has power that no other system of organization has.

Perhaps the finest property of Actual is, that Actual does never propel itself. Rather, Actual is drawn forward from beyond itself by the availing that Actual tends towards circumstance about it. Hence, every instance of Actual is power itself and Actual defines the very word, "power."

A circumstance that is availed is a special circumstance. Just so, a valent is the availing

agent and thus the valent is a special agent. The relationship of valent (V) and circumstance (C) produces a "resource" (R).

A resource not only receives avail but also carries that avail. A V1-C1 resource R1 that contacts a plain circumstance C2, distinctly tends to foster within the reaches of C2 a resource similar to R1, but in C2. So, R1 is now become a valent V2 to C2. This fostering is a regular, profuse exponentially, property of Actual - that availing tends to not only do an episode of availing but to extend its availing beyond any initial horizons.

Each of, a valent and its circumstance, tends to become more effective (availed and availing) both to one another and to the environment about as their relationship, their resource, develops.

A word from biology, "vector," refers to one life form that carries with it another life form. It is often a negative attribute, as in the mosquito that vectors the malarial parasite. But the concept defining "vectoring" is that one agent tends to propagate another agent. The positive sense of vectoring is often referred to by way of its accomplishment, such as "bees pollinated the fruit flowers." The bees in this biological example vectored the pollen from fruit flower to fruit flower, though the description of their work only refers to its outcome, that of pollination.

Vectoring:

The agents of Actual are valents, circumstances, and resources. We introduce here an aspect of Actual that refers explicitly to the carriage of agency by one participant to another. This functional distinction, or "voice," of Actual that pertains, traces, and actualizes availing ACROSS boundaries, we call Vectoring. This Vectoring is a regular, thoroughly perfuse, and altogether powerful character of Actual. Vectoring is nothing that Actual itself is not also, and every effectiveness of Actual is Vectored in power.

At this point, building for further discussion, a formal scenario is introduced. It is our "primary scenario" and portrays the principal relationships of the agents of Actual with one another.

Scenario components: Valents V1, V2; Circumstances C1, C2; Resources R1, R2.

In this primary scenario of Actual, we consider a V1-C1 that is a resource R1. R1 contacts a C2 that is in certain respects similar to C1. C2 then, within its own and existing reaches, does come to foster by reason of exposure to R1, an agent V2 within C2's own midst. V2-C2 are now a resource R2. R1 does not need to stay on the job for C2 to maintain R2, and this is especially important where R1 and R2 later become distinct functionally. So we see in our scenario that R1 can foster within C2 an indigenous and independent V2 that makes of V2-C2 an R2, standing on its own.

Assertion begun:

The fierceness of the sea draws some and strikes terror in others.

To those who are drawn the fierceness of the land holds no terror.

KJM - 1994

The Assertion voice of Actual is not so much an analysis or an observation, but it is exactly an entry. The Assertion voice is consummately powerful, engaging, to all those of it, and through them is power unquenchable to others even widely about. With such a depth of engagement, it stands to reason that by no means all people are of a such a case in life as to so Assert. We are trying here to at least conceptually leave the easy chair and gird up for our awesome days.

So far in Actual we have built for ourselves an awareness of that which is inherent to exactly all accomplishment. There is no any that Actual does not. It may not be obvious (massive understatement, here!) how so merely what we have seen of Actual traverses every distance. But such is our present stance.

We may compare our instant case of Actual to the land. Many many horizons and

panoramas of horizons open and do so broadly to us. Yet against the shores of that land, there is a whole fierceness of crashing waves. Far out from those shores, an entire universe of thrashing mountains paroxes according to its own timings. What now we are doing, bringing our Actual into Assertion, is boldly taking hold of the reality that is borne at the intersection of Can and Do.

It is a wild ride that not everybody can.

Assertion is composed in Actual. Thus, Assertion has a circumstance and has a valent that tends to avail the circumstance. We describe the circumstance for Assertion as being composed of several members. Since Assertion becomes clearly evident with these several members, we call the members the "evidence." The valent for Assertion is described as its "agent." Assertion is a high-level application of Actual, and so needs these specially detailed descriptions.

The agent avails the entire group - evidence and agent - into being a resource above and beyond that which they were when apart. The agent has a specific provocation of this resource that they become, and the provocation is here called a "forwarded context." A forwarded, or forwarding, context (FC) is that by which the agent acts towards the evidence. The agent, that is, has an esteem of the evidence such that they, all, draw deeply into their potential. This esteem finds its expression as a context that the agent works, or does, forward - hence, a forwarding or forwarded context. The FC also works on the agent, within the agent's own horizons, conditioning the agent's own reality. This is typical of all Actual, but here we elaborate closely so as to see Assertion more personally, more slammingly.

Since the evidence is actually several members that come to act in some concert, we may call these members "players." So the players form the evidence, and the agent influences them according to the agent's FC. FC, here, says a resilient robust and powerful vitality. Together they form a vigorous resource. We are zinging along here. They are an ever widening episode of Actual.

The agent and the players range the world in their burgeoning, in their power. What ever their world is, that they range with no any left wanting by them. They go where ever so ever going is, especially in the sense that they (the players, especially) had no idea previously that

such - such! - going could even be.

The situation remains, though, the same as it began. Their reaches, though vibrant and real, are anchored in the agent's FC among the players. The players do have no concert among them that outdoes the FC, and the agent is the sole source of the FC. This is because the FC is a living representation, a living consequent, of a living and real life.

So the players, for all their incredible courageous insight and novelty, do have continually zero awareness IN CONTEXT of how BEING a such an agent can be. The players, that is, are flat up against the very limit of their increase. They can do and they can be anything and everything in and about their world, except that they can to no extent move or define their world.

The agent both moves and defines their - all of them, the agent too - world. So now the thorough task to the agent is the only task that ever mattered anyhow. The agent has as the exact and only possible "next," the only nexting of time, to bring the players into their very authority. Then the players will have the very life, within them, that the agent is to and among them.

Now it gets real. This is exactly the day for all comers. Now - at this now - all any that can be, is.

The agent's agency among the players gets ripped, gets torn, gets a tattering. This is an everyday development, as in all life, and life refreshes such tatters by not being a THING, but rather by being. This tattering we remark, however, in that it is addressed not to the agent, but is taken up by the players among themselves. Addressing the tattering to the agent would merely prompt an effective response from the agent. This would simply elevate them all, to a higher sameness of the static system. Here we look at that most phenomenal day through which they all exceed their prior limits, exceedingly unlimitably.

The players' tattering of their agent rules out the agent's authority towards them - and, they have no authority over each other - therefore it begins to make them each into the living and unique champion of their concert. So there is a vast pressure upon them to the continuance of their tattering rampage. Each self-made king of them, for so they each all are, is discovering ways and means that have no overriding authority (no agency, that is, from the agent) and the kings each come ever more fully into their self-effectiveness.

Notice that the agent is not only being overruled, but ruled out altogether since the

tattering is becoming within the players a defining movement. So the agent arrives at a striking moment. The agent had been DRAWN along, as is with every valent, by the avail that the agent had been through the players to the world about. Now, the players no longer draw the agent ahead. The agent's only relationship is now the option of self-propulsion, which is identically terminal. There is no Actual in self-propulsion.

So as regards the life of the agent with all the life of the players, the agent is now no longer their Actual. The players have not actually become authority. They have merely become kings.

Our players now are called the "kings," as each and every of them is one. First, it was through the players that the whole of Assertion became evident - so, they were the evidence. Then, with the agency of the Assertion agent relating them in concert, they were the players. Now, dislodged of their concert, they are kings.

Each king is drawn vigorously to task by external realities - and each king draws quite personally on that one's own reality and strength. This personal resource is put forth, answering the external calls. They are (the kings, that is) well built together and forth through the strength and reality which has been the living phenomenon of their now phantom agent.

King one (K1) comes up against a thorny issue, and resolves the issue by some reliance on K2. The impromptu accord takes root for them both, as a distinct discovery in their newfound empire. So goes discovery for all the kings, each and in ever-inventive combination, coining individually and among themselves a hunger for strength with and by the other kings. This hunger is rebuilding within them, BY them, the reliance outside them each that they had formerly known in relying on the Assertion agent. But now, in them, among them, by them, they are hungering and becoming their collective full wholeness of the phantomed agent.

The agent's agency, we recall, is not-drawn by the kings and only can self-propel to make itself effective. And self-propulsion is in exactly all cases terminal, violating Actual.

The agent is fully vital, but just has no life to say. "To say"? that, saying, is the job of agency: the agent's agency, we have called the FC (forwarding context). This FC is the highly resilient, freshly updated, robust expression of the agent to the evidence. About the FC their whole increase (vast and incredible though it is!) has been formed.

So now the agent has not only an opportunity but a cause by which to rewrite the FC. It did used to make no sense to redo the FC, indeed it used to be exactly destructive to even tamper with it. Further, by the agent's own FC the agent also took on individual, personal, definition that was such life. But now a new thing is unfolding to the agent, right before the agent's own eyes. To the full extent of the kings' ability to carry forth the life that also is the life of the agent, they are doing so INDIGENOUSLY and with a voracious hunger of so doing.

So the agent looks at them, and with the full authority that is the life of the agent, WILLS the very life, that ever-hungering living concourse, that the kings now so enthusiastically and personally are. The agent's FC is thus completely rewritten with no possible surcease: the kings are willed forth rather than commanded forth, and the agent's vitality through them is unquenchably glorified - yes, by them - to an all of others about, all and any where.

Every such single episode of Assertion is the single drop of water that makes not only the whole ocean, but all time itself, fresh.

Because, we remember, in Actual, availing is Vectored.