## Introduction to an excerpt of the chapter "The SignalGlyph Project \& Prime Numbers" from the book The Image of Language

If the inherent relations of numbers are conceptualized as being non-dimensional, rather than being limited to formulations within the dimensionally bound language of mathematics; interdependent processes within a rigorous system can exist that are not related temporally or spatially. Proof of such an interrelationship rests solely on the predictability of a consistent interaction of mutual content. Although counting is a temporal process, numbers themselves are non-dimensional. All 'Natural' numbers and their relationships existed before names, symbols, and associations to axioms were attached to them (they are applicable even to nonmaterial phenomena moving at the speed of light). Numbers can be used to describe time and space, but they are not bound to their dimensional limitations; they are the purely relational features of Nature's design.

If the numbers 2, 3, and 5 are treated as a separate class of 'Elemental Numbers,' the distribution of all other prime numbers to infinity is rigorous and predictable based on two temporally and spatially separate processes that have an observable interaction that is $100 \%$ consistent. Number theorists are aware of the two processes involved in the system of prime distributionthey describe them as a reduced residue class and a sieving routine. But they can't describe the interaction of the processes because the accepted language of mathematics has a uniform dimensionality, and the interaction of the processes needs to be non-dimensional to fulfill its purpose-although prime distribution is an entirely rigorous system, the system's purpose is to generate an infinitely varying pattern of reference markers that Nature uses to keep her constantly progressing cycles in sync (that's why primes relate to things like wave properties). To a mathematician, the distribution of prime numbers, as described in the chapter, looks like a multiplicative operation is factoring the previous members of a separately occurring additive cycle, and those products only mirror future members of that separate cycle, and don't functionally influence their role. But actually, there is no previous or future context or space/time separation in a non-dimensional context of relationship.

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I can't remember what initially got me thinking about the claim that mathematics is a universal language, but I remember seeing an algebraic formula and realizing that if aliens from another planet saw it, it would be meaningless. The concept of numbers is universal, but the way we describe their relationships is not. And it's not just the symbols we use in mathematical formulas that are not connected to the universal features of numbers. Algebraic language is based on axioms of human reasoning. These axioms of logic are not, strictly speaking, inherent aspects of numbers. Algebraic logic is based entirely on progressively ordered formulations. The relation of numbers is viewed differently when it's seen from the perspective of natural phenomena. Nature routinely organizes an interplay of rigorously convergent constructions composed of two or more independent chains of progressively ordered formulations. For example, all events in the universe arise from an interaction of both Time and Space. Each of those dimensions has a rigorously progressive logic which seems unrelated to the other. The logic of their interaction only becomes apparent when the overall phenomenon of their relationship is observed.

This also happens in the inherent relationships of numbers. An example is the patterning of the distribution of prime numbers (numbers equally divisible only by 1 and themselves). We're taught there is no patterning in the distribution of primes (no patterning which predicts the places where primes will emerge within the natural sequence of the counting of numbers). But when I looked at where the primes were emerging, I discovered empiri-
cal evidence that two separate processes were interacting to create a system which produces endless, but predictable, variations. We can see how the system of prime distribution works by making a chart.

If we write the numbers $o$ through 29 in a horizontal line, then write 30 through 59 under those numbers, then write 60 through 89 on the next line, and so on-until we've written every number to infinity; all prime numbers in existence (except for 2, 3, and 5) will be found in eight rows lined up under the prime numbers $1,7,11,13,17,19$, 23, and 29. No primes will ever emerge in the other twenty-two rows except for the numbers 2, 3, and 5 (see the chart on the next page).

But this continuous cycle is only part of the system of prime distribution. When a prime appears in the cycle, it's involved in another rigorously interacting process. After a prime emerges, products based on that prime's sequential multiplication by powers of itself and every emerged prime will appear in future progressions of the eight-position cycle. Here's how it works. The first prime to appear is 7 . When 7 is multiplied by itself, the product is 49 ; so the composite 49 appears in one of the eight locations in the next rotation of the cycle. Then 7 is multiplied by the second prime to appear, 11 ; so 77 is the next composite to appear. Then 7 is multiplied by the third prime, 13 which results in including the composite, 91. And this continues, 7 is infinitely multiplied by powers of itself and every higher prime. This same process occurs for every prime number after it emerges in the cycle.




All these composite-products of previously emerging primes appear in future cyclic progressions of the primes. The appearance of every prime number spawns an endless string of composites which will occupy places in future manifestations of their own cycle. These composite products are factored from the unevenly spaced originating cycle, but the patterning of their factorization is independent of the patterning of the additive formulation of the originating cycle. The system's overall regularity isn't superficially apparent. Rigorous interaction of the indepen-
dent processes creates a system which generates infinite variation. The space between the emerging primes has a continual tendency to increase-because primes in future cycles are being displaced by more and more compositeproducts of the previously emerging primes. It's a beautiful system. The variation in the initial appearance of the primes causes a variation in the amount of composites included in future cycles, which then causes further variation in the emergence of primes. It's a process of variations in cause creating new variations in effect which create new variations in cause-and it continues infinitely!

The entire system is completely rigorous, and the appearance of every prime number and every composite can be predicted in advance (see the chart). However, the observably rigorous interaction between the two processes cannot be expressed algebraically. Number theorists are aware of both processes involved, but they identify them as separate features of prime distribution (as a reduced residue class and a sieving routine) rather than as the components of a single phenomenon. Lack of recognition of the system as a whole has led to the false impression that the future emergence of prime numbers is not known to be infinite. The Electronic Frontier Foundation has been awarding prizes for finding larger and larger prime numbers. However, when we look at the process of prime distribution, it's obvious that new primes will always emerge.

Primeness is used by Nature to create a system of markers which uniquely identify specific locations along the landscape of infinite progression. All of Nature's forces have to be kept in sync or the fabric of the universe would fall apart, but Time is an ever-evolving continuum. Locations on the landscape of its infinite continuum have to be uniquely identifiable-Nature's forces need reference points to maintain the alignment of their synchronization (that is why prime numbers relate to things like wave properties).

Since 2,3 , and, 5 are the only prime numbers within the infinite set which are not included in the system, logic dictates they must be special numbers that are not part of the other class of numbers divisible only by 1 and themselves (I refer to them as elemental numbers). Three exceptions to a predictable set of all other numbers in an infinite class cannot logically be cited as disproving the existence of a rigorous system. The inherent weakness of algebra's limitation of incremental structure obscures our view of the patterning underlying the process of the distribution of primes.

The fact that the two processes involved in prime distribution are not structurally attached in conceptual space is not a reason to dismiss the existence of their empirically observable relationship. An observable interaction having no apparent incremental structure exists in Quantum Mechanics, most strikingly in the theory of Quantum Entanglement.

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