Provability and the Continuum Hypothesis. A Letter.

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Abstract

A recent development in the theory of $\mathcal{M}$-sets has paved a new means of an approach to CH. Here we further clarify the theory and form part two of our previous paper[P].

Notation

Object o_i, B_i
$\mathcal{M}-$set A set of Mechanisms.
Object sets $\mathcal{O}_i, \mathcal{B}_i$
Information sets $\mathcal{I}$
The set $\mathcal{B}_i$ will be used to represent binary numbers.
A set of positions associated with a one symbol we will denote by pos
Elements of pos we will denote by $p(1)_j$.
Sets of transformations T_i.
A knowable set H is denoted by $K(H)$
A Predictably knowable set H is denoted by $PK(H)$
A Writable set H is denoted by $W(H)$
$Pow(n)$ $n|x^n$ for a free variable x.
RX Reasons for statement X.
$Arith(S)$ a statement made in arithmetic.

1.1 M-sets.

Definition 1.1.1.1. Object-Representation $\mathcal{R}_o$.
An entity that makes use of symbols and spatial positions as parameters for use in distinguishing one object from another within an object set $\mathcal{O}$. In addition, the mapping between $\mathcal{O} :\to \mathcal{I}$ the object set to the set of information that we wish to map each object to, is implicitly established with the entity.

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Definition 1.1.1.2. $\mathcal{I}$-Representation $\mathcal{R}$.
A representation that conjuncts symbols and placements for these referred to as spatial positions for use in structuring the mapping $T(\mathcal{R}_i) \mapsto j_i\{j \in \mathcal{I}\}$.

Definition 1.1.2. ϕ-operation.
Given an ordered set $\mathcal{S} := \{o_i\}$ of objects o_i, the ϕ-operation is the most fundamental of operations, that transforms one object of $\{\mathcal{S}\}$ to the next.

Definition 1.1.3. Mechanism $\mathcal{M}$.
A transformation resulting in a single change in symbol or spatial ordering of a representation, is known as the Mechanism responsible .

1.1.2 Multiplicative M-sets.

With the aim of forming a more complete understanding of arithmetic operations, we consider the $\mathcal{M}-$sets associated with natural numbers raised to a specific power.
An extremely beautiful observation we discovered, that when used in combination with the multinomial theorem aides us greatly in our undertaking of this task.

Observation 1.1.2.1.
B_i is simply a summation of the form : $\Sigma 10^{j_i} | j \in N$. B_i^n can be expressed via the use of the multinomial expression as : $\Sigma C_i (10)^{k_i}$.

$$(1010)^n = \left(\quad . \quad |C_i^1 \times (1000)^{k_1} \times (10)^{k_2} \; \Big| \; . \quad |C_i^2 \times (1000)^{k_3} \times (10)^{k_4} \; \Big| \; . \quad . \right)$$

Figure 1.

1.2 Heritability, predictability and comparability.

Definition 1.2.1. Formal Writable Statements.
If a mapping $R \to \mathcal{I}$ is formed, then $\mathcal{I}$ is writable. Written $W(\mathcal{I})$
Such statements are representable or $\mathcal{R}$-writable with respect to elements of $\mathcal{I}$.

Definition 1.2.2. Formal Comparability.
If a language $\mathcal{L}$ can be established that enables the transcribing of the differences or equality between $\{I_j \in \mathcal{I} | \forall j\}$, the sets being compared, then the

set $\mathcal{I}$ is said to be comparable, written $comp(\mathcal{I})$.

Definition 1.2.3.1 Formal Predictability.
Given a functional $\mathcal{F}$, the mapping $m_i \mapsto T(O_i)|\{o_i \forall i \in K\}$, is predictable writable if $\forall m_j \in T_F \mapsto F(S)$, is knowable $\forall o_i$. Such functionals are predictable, or predictable writable, written $PW(\mathcal{R})$.

Observation 1.2.3.2 Predictable Information.
Given that the mapping $T\mathcal{R} \mapsto \mathcal{I}$ is onto. In addition if the series of mechanisms by which the transformation operates is also 'finite-knowable' , then $\mathcal{I}$ is predictable-knowable.

$PW(\mathcal{R})$ requires that the set $\mathcal{I}$ associated is knowable, by this we mean that elements of $\mathcal{I}$ associated with the transformation $\mathcal{I} \mapsto (X)$ is ascertainable with no restriction or ambiguity and is available for the mapping $T(\mathcal{R}) :\rightarrow \mathcal{I}$. If this is the case, then we say that $\mathcal{I}$ is knowable, written : $K(\mathcal{I})$.

In addition to the above definition, if information is predictably knowable, we write $PK(\mathcal{I})$.

Definition 1.2.5.
An arithmetic theory is a set $(\mathcal{R}, \mathcal{L})$ of representations and a language $\mathcal{L}$ where $\mathcal{L} \mapsto T$.

Definition 1.2.6.
The $\mathcal{L}$ on a theory $\mathcal{T}$ is a set of transformations $T(\mathcal{R}) :\rightarrow \mathcal{I}$ along with the representations $\mathcal{R}_l \mapsto T$, that are used to describe the transformations T.

2.1 Arithmetic Language.

Observation 2.2.1.1.
Let A_i be a set of C_i elements. We have from our previous observations that, $PK(\forall p_j(1) \in A_i)$ which enables us to construct a set $C_Y = \Sigma|p_j(1)|$ for all combinations of C_i occupying positions such that $\cap\{p_j(1) \in C_i|Pos_s\} \neq 0$ for some set of positions occupied by C_i. This set can be used for structuring mappings of the form $\cap|p_j(1)| \in A_i \mapsto u \in U_Y$. In cases where subsequent to the initial such mappings, there are again overlapping positions so much so that $\cap|p_j(1)| \in A'_i$ for the now transformed A_i denoted by A'_i, exceeds in magnitude, values available for the mapping $\cap|p_j(1)| \in$

$A_i' \mapsto u \in U_Y$, then we transform A_i' at each such junction where overlapping positions present by combining only magnitudes available for mapping $\cap|p_j(1)| \in A_i' \mapsto u \in U_Y$ and subsequently follow the process on $\cap|p_j(1)| \in A_i'' \mapsto u \in U_Y$. As these can be built up alongside S so as to be able to call upon these on demand for deductive purposes, we can conclude that if $PK(|\cap p_j \in A_i|)$, then $PK(|\cap p_j \in A_i|) \mapsto U_Y \Rightarrow PK(R_Y(U_Y))$ where $R_Y(U_Y)$ is the set of recursive or follow up uses required of U_Y. Importantly also $PK(Pos(A_i)) \Rightarrow PK(Pos(u) \cap Pos(A_i))|u \in U_Y$. This implies a chain on knowledge from only the initial knowledge $Pos(A_i)$.To elaborate on the previous mapping $K(\cap Pos(A_i)) \Rightarrow K(\overset{\forall p_j \in Pos(A_i)}{\cap} p_j \mapsto U_Y, (Consequent(Pos))) \Rightarrow K(\overset{\forall p_j \in Pos}{\cap} p_j \mapsto U_{Y'}, (Consequent(Pos')))$, so on. As such, the knowledge of the mapping to U_Y implies the knowledge (with no calculation) to its consequent mapping to U_Y. This process is denoted by R_U. The above arguments amount to one thing, which is that, predictably knowing the distribution of (1) will result in predictably knowing where the transformation will result. As such, all associated information is available for mapping with a language, also, the information being predictable ensures the finiteness of the associated language.

Observation 2.1.1.2
For growing n, C_i vary in accordance with the combinatorial expression:

$$J_k := \begin{pmatrix} m \\ m - x_i \end{pmatrix}$$

In general, the $|C_i|$ terms follow the schematic $\{p(p-1)(p-2)..\}$ in magnitudes. The associated magnitudes are thus knowable for growing $Pow(n)$. Given any $p \in H := \{h, h-1, h-2..\}$ in $L-$form, that is, of the form $\Sigma 2^r$, for arbitrary r, the remainder of such forms can easily be 'known' from the recursive pattern :

$$\begin{vmatrix} 1 & 0 & 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 1 & 1 & 1 \\ 1 & 0 & 0 & 1 & 1 & 0 \\ 1 & 0 & 0 & 0 & 1 & 1 \\ 1 & 0 & 0 & 0 & 1 & 0 \end{vmatrix}$$

Here each subsequent row is one minus its previous. The proof of the pattern being recursive is trivially obtained via mathematical induction and will be omitted here.
Naturally each $C_j \in A_i$ is associated with set of the form $H := \{h, h-$

$1, h-2..\}$. If we assume the form of h of C_j which is the largest of all other h' of all other $c_j \in A_i$, then $K(L-form(C_j)\forall j)$ is established as the L-form of h is knowable along with the expansion of the product $\overset{\forall k \in H}{\Pi} L-form(\{k|H \mapsto C_j\})$, as the form of all elements of H are knowable along with the nature of the products of the form $\Sigma 2^r$.
The order of the elements of the set H are thus 'knowable' and 'predictable writable'. $\mathcal{I}$ here is associated with the set $(L-form(p_i))$ which the recursive pattern shows is $PK(\mathcal{I})$ thus $\mathcal{I} := (ord(A_i), L-form(C_i))$ and $PK(\mathcal{I})$, where A_i here denotes the positional distribution of all C_i.

We note further that there will be in amount, the number of terms as there are x_i in the combinatorial expression. These will have a maximum number less than or equal to n, the exponential power to which $\mathcal{B}_i$ is raised.
Thus 'knowing' the associated $L-$forms of the set $\{p,(p-1),(p-2),..\}$ allows us to 'know' the progression of C_i as n grows, from Observation 2.2.1. the step down process along with the R_U mappings being knowable for such systems as well. In summation, expressions involving growing n on $Pow(n)$ associated with terms of a statement, again have predictable information associated.In order to better see how one can build a rep around R_U, is by taking note of the type of groupings possible of $\cap pos$. For instance, take note of the number of ones along the columns of the above matrix, we can easily know what progression in number will appear along the columns (as these are inductive in nature) . A blueprint now exists of the number of ones that will appear along such columns starting from any one B_i, this enables us to 'know' what types of numbers are possible of B_i^n, in terms of ΣC_i thus enabling us to know this finally in terms of the representation : $\Sigma 2^p$-Rep. Note importantly that B_i^n will have utmost i in C_i overlapping positions. These along with overlapping positions of ΣB_i^n can be represented. Since the matrix is always of the same structure regardless of size and is additionally finite in nature, we can always 'know' the progression (what is possible of) of R_U thus making it representable. This exact same technique is possible of $\cap pos(C_i)$ as these are also predictably knowable. Predictably knowability of one thing implies PK of the same thing in a different representation.

Observation 2.1.1.3 (Relative Positions)
Given an initial set of positional values, the information of positions associated with $C_i \mapsto \mathcal{B}_i{}^n$ is 'knowable' via the multinomial distribution. Furthermore, the positions at which C_i appears are mapped to powers of $\{u^{t+p}|u \in \mathcal{B}_i, t \in Po(\mathcal{B}_i), t \in Pow\}$, where the set Pow is that of the powers

of terms appearing in the multinomial distribution. Since the distributional expansion is writable, we have: $PK(\mathcal{I} := \{Pow(\mathcal{B}_i)\})$.

$$\begin{array}{l}\{X^n | B_i \in B, n \in N\} \mapsto \\ \dfrac{C_i^1 \quad - \quad C_i^2 \quad - \quad - \quad C_i^3 \quad - \quad C_i^4 \quad C_i^5}{P_o^1 \quad - \quad P_o^2 \quad - \quad - \quad P_o^3 \quad - \quad P_o^4 \quad P_o^5}\end{array}$$

Figure 4.

Observation 2.1.1.4
An entire side of a statement is a summation of the form : $\Sigma C_i(P_o)$. Their relative positions is what is altered by a change in variable values. A convenient aspect of this representation that enables comparability is that both $\{S_L, S_R\}$ of the statement $Arith(S)$ can be written in terms of $L-form(base(2^r))$. In addition, $Pos(C_i)$ associated with variables of the form xy is simply their dot product : $(Pos(C_i))_x \odot (Pos(C_i))_y$. This follows simply from the rules associated with the expansion of products of the form $(\Sigma A)(\Sigma B)$. Their relative position constraints are in fact also their dot product respectively, thus $PK(\mathcal{I} \mapsto \{Pos(xy)\})$. This gives indication that the an entire side of a statement is predictably writable with respect to some r in 2^r as a base, which is what we aimed to establish.

From the observations made, one thing seems clear, any arithmetic equation can be broken into a series of transformations on O_i that are knowable and predictable. Specifically we have shown that the mechanisms by which the transformations operate for any statement are finite in measure and additionally, these are predictable on O_i, meaning that an onto mapping of these to O_i exists. This enables one the opportunity to ascertain whether, for any O'_i a corresponding exists for this result, and additionally one could also ascertain whether . This is because we can know the mechanisms by which T's form O'_i, and knowing $PK(Form(output))$ means that one can know all types of outputs possible, which enables one to form a generic type of predictable condition/s c_k that need to be met in order for $pos(LHS) = pos(RHS)$. This we call the generic conditioning property. This again follows from the logic that knowing form output is possible in a finite descriptive manner as the transformations associated thereof are finite in nature. Using this, and the fact again that transformations of the other side of the equation is also finite. one can use the finite nature of the structure associated to see whether o_i can be constructed that results in the finite generic needs of C_k. This can be seen more clearly in the following way. Let

$[m_{T(n)}]$ denote the mechanism of appropriating positional distributions to every one symbol associated with B_i raised to the power n. The finite nature of this mechanism derives from the simple fact that $Rec([m_{T(n)}])|\forall 1(p) \in B_i$. I.e the mechanism is recursive for each one symbol associated with a position in B_i. Now for each grouping of positionally intersecting one symbols that we can know to occur, $[M(R_U)]$ (the mechanism associated with the R_U process) allows to know the out come of such an occurrance. The nature of such mechanisms highlights to us that, knowing such nature associated with one side of an equation allows us to ask whether $[m_{T(n)}], [M(R_u)]$ can reproduce such a mechanical outcome over any one interval, as the recursion is merely continuous and delays over inteval the outcome of its input object o_i.

Additionally much like the representation $[m_{T(n)}]$, $[M(R_u)]$ is also finite informative. This can be seen by considering $\bigcup \cup pos(B)$ as elements of some set Y upon which the representation $[M(R_u)]$ is built. And R_u acts finite mechanistically on each element of Y which is also recursive in nature. As was shown, we can know the exact nature of the progression of what appears in Y and these can be represented as a pogression of R_U mechanisms that are knowable. By this we mean that all progressive mechanisms can be re described in terms of another set of mechanicms whos outcome is known. An understanding can thus be built upon progressions of R_U mechanisms, which are directly associated with the set Y. Thus $K(Prog(Y)) \mapsto K(prog(R_U))$ and the representation is built around $[M(R_u)](Prog(R_U), m_i)$ for some mechanistic set by which R_U transforms. additionally knowing what breaks in $prog(R_U)$ need to be introduced into the progression that results in a particular manner is also knowable from the understanding of the transformations that progressions produce, this establishes comparability.

A Note. The predictible knowability of $\Sigma(B_i)^n$ has been established. The implication is that we can know the progression as n increases. How this ties in with knowing the progression of R_U associated is that since the form at any one future point in the progression of the power series can be known, we need to need not to know the nature of the outcome of such a series at some arbitrary point with no foreknowledge. We have foreknowledge of how the intersecting ones will be distributed, we also know the form of how it will continue to do so, this tells us with every new increment, how new R_U forms will come to frm and with each increment we can know the effect that a new R_U will have on the system. This entirely allows us to know the R_U's that will come into play and how they will behave as the distribution progresses. These are the necessary tools that allow us to have a sence of the outcome along with a platform for comparability. The structure of knowing need only be form of $\cap pos(1)$ at t and what R_U will do at $t+n$. Knowing what R_U did on the previous progression will enable us to extend it inductively. The $t \rightarrow t+n$ arguement is to be intepreted as follows.: The first set of intersecting positions of one symbols will yield an R_U structure. This will tell us also of its interactions with surrounding symbols after transformation. This together forms the R_U structure. The next set of symbols that come into being after these in the progression of n, tells us of the additional R_U structure that comes into play. The comparisons made here are not of the form where we reduce to a common base 2^r, here we can clearly see the number of intersections and from then on we can see clearly what will become of the progression of the R_U transformations, progressing forward. We must see these together, thetransformed object along with the next set of intersections that will come into being. Thus we see the transformed object and how an introduction will affect it with each new step, and representations that can be built (because these are informative) will aid us in seeing each progressive step. The representation is not so much what is of importance, it is more that we can predict the progression of the transformation, forming an informative platform for comparison. Also as each increment of intersecting positions are finite constant in nature, this is finite and predictable allowing for a complete understanding of ramifications. Whats interestingg here is that under this approach, the platform for comparability must be similar, specifically both sides of an equation must be compared on the progressions of each sides C_i as transcribed above, and furthermore as their positions can vary, the maximum in number of intersections of one elements associated with these is n. A progressive knowledge of a natural number n will also be possible. Due to the foreknowledge of $prog(C_i)$ one can also know the types of their interactions possible. How n and number of C_i terms to choose with each progression can come from the mechanisms associated with the other side of the equation, as only for specific values will the transformed number of ones be close to each other. This is however only a start ans the number of n's associated with variables of any one side also vary. However such a progression can be estimated via a mode of D-Geom. If the n's were fixed, the solution depends solely on the progression of C_i's. Using the DG method, one can gain insight into the mappings $N \mapsto numberOf(C_i) \& n_t \mapsto n_j | \forall n_t, n_j \in N$. As for each set $\{N | n_t \in N\}$ the $numberOf(C_i), C_i$ can be predictably known, one need only consider the progression along the set N. From the mapping $n_t \mapsto n_j | \forall n_t, n_j \in N$ we know that for each one n_t there is only one associated n_j and we need only follow mechanisms along such N. A additional and important note to know with the set N is that a statement is of the form : for n_t of type $2n, 3n..$(for example). For which $n_t \in N$ is the equation satisfied , is not a ststement, thus the establishment of $numberOf(C_i) \mapsto N$ is easier to establish. However one can still form a statement for no set N is some statement possible, n such cases the mappings $N \mapsto numberOf(C_i) \& n_t \mapsto n_j | \forall n_t, n_j \in N$ will be necessary in its entirety. This DG-Mapping property will enable us to form boundaries to all $n_t \in N$ w.r.t any one single element of N.

With the aim of formalizing this in a set theoretic manner, let us intepret mechanisms as an eventual rule that maps $o_i \mapsto O_i$ for a transformed element O_i. We say that the rules are finitely knowable for the simple reason that the knowability of the progression of $\cap pos$ ultimately tells us the the types of (in number) possible groupings of $\cap pos(p_i)$ for any one p_i. This includes both the progression of $\cap pos$ with regard to C_i (which can be formulated either as in our previous paragraph (as knowing the distribution of even and odd vertical groupings will tell us at the first level of the transfrmation what will be, subsequently we can know of the resulting intersections and so on (R_U). A theory can easily be built here as the progression of the terms of C_i is steady and follows a single progression that never changes)): or alternately because the progression of C_i is fixed, one can make use of the fact that because the nature of how such C_i are formed along with the ability to know because of $PK(\cap pos)$ and $PK(dist(C_i))$, this tells us that the distribution $dist(\cap pos(LHS, RHS))$ must be very close to each other in order for equlity to be possible, thus we can take advantage of being able to know the mechanistic differences that will arise of each side which is PK, and by keeping the mechanistic differences within some range, we can know if, via R_U principles, one can transform into the other finitistically.) along with that which is possible of incersecting that is formed upon varying positions of C_i (Known). Thus for these parameters of n and $pos(C_i)$, the rules of association are predictably knowable.

Our global arguement can thus be reduced as follows; given $S := \{K(1) \mapsto O_i(1), K(2) \mapsto O_i(2), K(3) \mapsto O_i(3), ...,\}$ and for finite R such that $R := \{r_1, .., r_(n)\}$ and $A(O)$ a pointer that tells us of the rule applicable.

Sufficiency Theorem 2.1.1.1
All statements that can arithmetically be made in terms of $\mathcal{F}^{-1}$ can be rewritten in terms of $\mathcal{F}$.
Proof
This follows from the nature of the formation of the Fundamental Theorem

of Algebra.

Theorem 2.1.1.2
Statements $\mathcal{S}$ made with arithmetic entities are predictably knowable and thus have associated theories capable of proving them.

Proof
From observations (2.1.1.1) to (2.1.1.4) generic conditioning property, and the DG mappings property associated with the note, we have that $\forall m_i \in T(S)$, $K(m_i \mapsto T)$. Thus $K(\mathcal{I}_T(m_i \mapsto T))$ as we may simply associate the $\mathcal{M}$-sets associated with the transformation to elements of $\mathcal{I}_T$. Furthermore, the sum total of all our observations establish $PK(\mathcal{I}_P \mapsto \{T(S)|o_i \in \mathcal{O}\})$. The nature and finiteness of the information set $\mathcal{I}_P$, as we can note from its definition contains only the knowable information surrounding $(Pos(in), Pos(out))$ via the knowledge of $K(m_j \mapsto T(S))$, and additionally the fact that these are finite and knowable from the onset of S, exposes a set of conditions c_j; which are knowable in terms of its associated $\mathcal{M}-$set required of the statement. Representations $\mathcal{R}_I$ can be associated with all $\mathcal{I}_j \in Arith(S)$, as we showed that $PK(\mathcal{I}_j)$ on the associated conditions, which makes
$comp(\mathcal{I}(PK(Pos(S_L))), \mathcal{I}(PK(Pos(S_R), Eq)))$ possible.
Finally since the existence of $\mathcal{R}_{\mathcal{I}}$ was established associated languages are eminent, which establishes $\mathcal{T}(\cup\mathcal{R}_{\mathcal{I}}, \mathcal{L})$.

Theorem 2.2.3.
If theories $\cup\mathcal{T} := (\mathcal{R}, \mathcal{L}, \mathcal{M})$ are established, where $\cup\mathcal{L}$ are capable of transcribing $s \in Arith(S)$, and $s \mapsto \{True\}$ then the expression $X(\cup\mathcal{L}) \mapsto \{True\}$ where $X(\cup\mathcal{L}) := \{X_i, X_{i-1}, ..\}$, if and only if $s \mapsto \{True\}$.

Proof (Assuming equality as the connective)
$s \mapsto \{True\} \Rightarrow \mathcal{M}_s \mapsto s|B_i$ for free variables B_i. Now if $s_L = s_R$ then $Pos_L = Pos_R|B_i$ for some $B_i \subseteq \mathcal{B}$. Furthermore if $Pos_L = Pos_R|B_i$ this implies that $\mathcal{M}_s \mapsto s_L(B_i) = \mathcal{M}_s \mapsto s_R(B_i)$. It is easy to see from the previously established that individual mechanisms are unambiguous, specifically they mean one single thing, additionally $\cap Pos(\mathcal{B}) = 0$ thus $\cap\{\mathcal{M} \mapsto \mathcal{B}\} = 0$. We have previously established that $R_U(W(Base(2^k), Pos_L)) \mapsto R_U(W(Base(2^k), Pos_R))$ is onto. Additionally $\mathcal{R}X$ merely derives from $\mathcal{I} \mapsto \mathcal{R}$ and in no way enforces structure on the mapping $\mathcal{M} \mapsto s$. $\mathcal{I}$ here, falls under the mapping $\mathcal{I}_{RIV} \mapsto \{PK(Pos_V), PK(Pos \mapsto (L-form))\}$ for $V := (L, R)$. Thus if $(L)_T \mapsto \mathcal{I}_{RI}$ then for $\mathcal{T}$ such that $(\mathcal{I}_{RI}, \mathcal{L}) \in \mathcal{T} := (\mathcal{R}, \mathcal{L}, \mathcal{M})$, $\mathcal{R}X(\mathcal{L}_{RI}) \mapsto \{True\}$ if and only if $Pos_L = Pos_R|B_i$. Since this

is also when $s \mapsto \{True\}$, $s \mapsto \{True\} \Rightarrow \mathcal{R}X(\mathcal{L}_{RI}) \mapsto \{True\}$. Furthermore, since $\bigcup_{\forall i} X_i \in \mathcal{R}X(\mathcal{L}_{RI})$, $s \mapsto \{True\} \Rightarrow X \mapsto \{True\}$. Here since $\forall x \in \bigcup_{\forall i} X_i$, $x \mapsto \mathcal{L}(\mathcal{I})$ where $\mathcal{L}(\mathcal{I})$ is the linguistic representation of $\mathcal{R} \mapsto \mathcal{I}$. This mapping $\mathcal{L}(\mathcal{I}) \mapsto \mathcal{I}$ is one to one since $\mathcal{L}$ expresses $\mathcal{R} \mapsto \mathcal{I}$. Thus the series $\bigcup_{\forall i} X_i$ makes true or false inferences from $\mathcal{L}(\mathcal{I})$, where, to restate, $\mathcal{L}(\mathcal{I})$ is associated with $\{PK(Pos_V), PK(Pos \mapsto (L - form))\}$. Information associated with the structure of $\bigcup_{\forall i} m_i \mapsto \{L - Form\}$ is derived from $PK(Pos \mapsto (L - form))$, thus a series of $L - statements$ forms a mapping of the form $\mathcal{L} \mapsto \{\mathcal{I} \mapsto PK(Pos \mapsto (L - form))\}$. $PK(Pos \mapsto (L - form))$ is derived from $\mathcal{I} \mapsto \{T(\mathcal{M})\}$. Thus since there exists an association between $\mathcal{L} \mapsto (I)$ and since $\mathcal{I}$ merely associates mechanism to information, if the mechanism can only under certain $\mathcal{M}-$sets map $s \mapsto \{True\}$, then $\mathcal{L}$ can only transcribe the circumstances under which this is so.

We conclude our ideas on $\mathcal{M}$-sets by concluding the proof of Theorem 2.1 of [p]. To recap, we managed to show that between any pair of C_{inf}-type elements exists another infinumerous set of C_{inf}-type elements.
A simple attempt in enumerating these shows us that a consequence of the proof of Theorem 2.1[p], is that between any two such C_{inf}-type elements, exists other infinumerously many C_{inf}-type elements of the same class. Thus any attempts at enumerating these is also rendred impossible as Cantor's diagonalization argument can directly be extended to the aforementioned proof.

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Dedicated to my Sister, Uncle, Parents and Family in India