The Demise of Formalism I

The Rise of E M E R G E N C E

Formal Logic

When we think about a problem, we usually leap into the fray, tied hand and foot by the usual, universally accepted methods of reasoning. By this I mean primarily that we depend greatly on Formal Logic, and its wide hinterland of methods and rules. Now such a way of putting it may seem surprising, as Logic is supposed to equip us for such tasks, but its contribution can also be restrictive.

Now, a logical approach is understandable and usually quite sufficient, but there are areas where it is utterly useless. I don't feel that I have to put the full case for the evident strengths of this kind of reasoning, for I believe that they are both universally understood and everywhere applauded. But any ideas about the weaknesses of the Method are not normally entertained, for Formal Logic is seen as the implicit "banker" method. Yet the flaws in the approach are NOT trivial and ignorable, and not being aware of them can inevitably lead to significant error and even, on occasion, to conscious and intended dishonesty. Let us investigate the weaknesses.

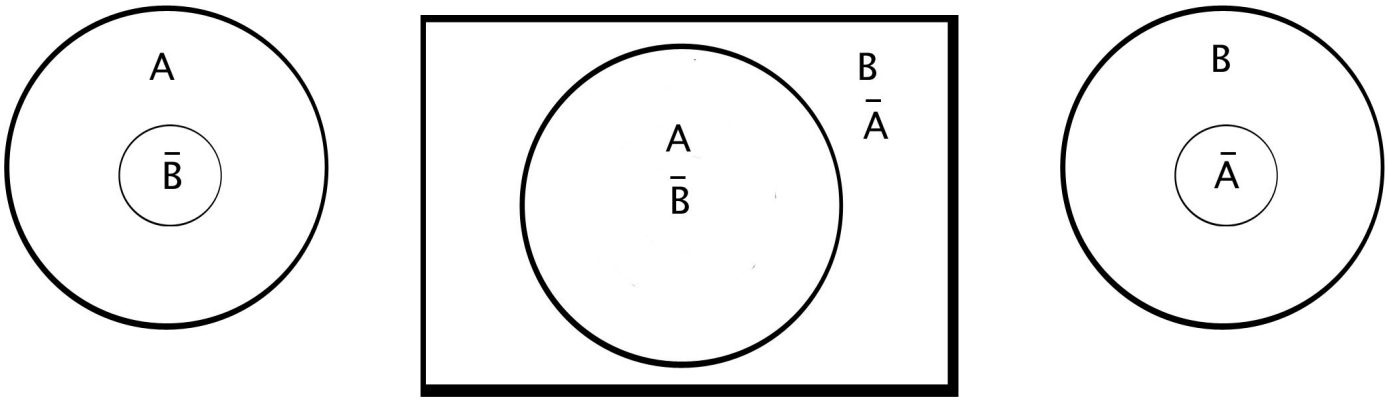
Formal Logic assumes **immutable** elements. A equals A, will always equal A, and can never change into something that could be categorized as NOT A. Without this premise there would be NO Formal Logic. So the system is one that deals exclusively in entities which **do not change**.

Now, as I have indicated, I feel that it is unnecessary to debate the strengths of Formal Logic, and neither do I want to discuss all possible uses for its basic elements, but let us agree that they can represent everything from individual objects, through sets or categories of almost anything, right on to statements of supposed fact. Indeed, Formal Logic is also the basis for the methodology of Mathematics, and certainly for the imposing edifice of Euclidean Geometry, originally developed by the Ancient Greeks. But, this paper is not a book, and therefore I will be addressing a narrow yet crucial area, and feel that I cannot afford to be deflected by detours, especially if we are all likely to agree upon them.

If we have a complex situation composed entirely of such immutables, Formal Logic can effectively allow the exposure of the full penumbra of possibilities possible within the system. All contradictions are exposed and removed, and consistency is always achievable. But, as soon as the elements involved show any sign of Change the system begins to fail, and soon collapses utterly.

A consequence of its insistence on Immutability is that "a contradiction infers error".

If **A infers NOT B,** and **B infers NOT A**, then what conclusions can we draw?



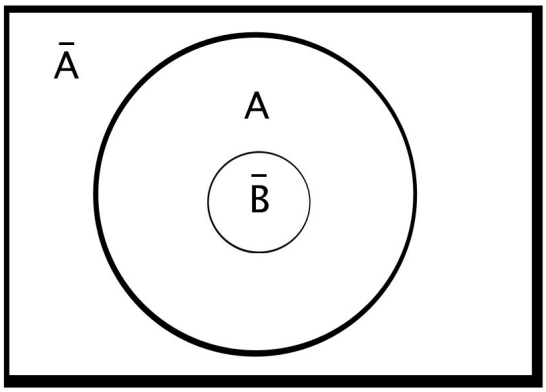
Let us consider the situations as illustrated. If **A** ⊃ **not B** and **B** ⊃ **not A**

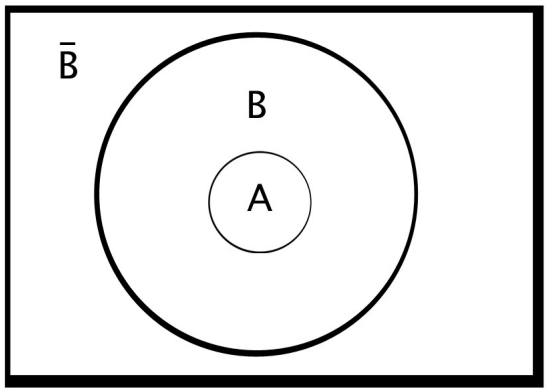
Then surely **A = not B** and **B = not A**

So in the above case considering A and B together, we seem to be covering everything there is. These two exhaust all possibilities: They are diametrical opposites. Yet in Reality such is NEVER True (or effectively meaningless), It is a supposed tenet of Formal Logic!

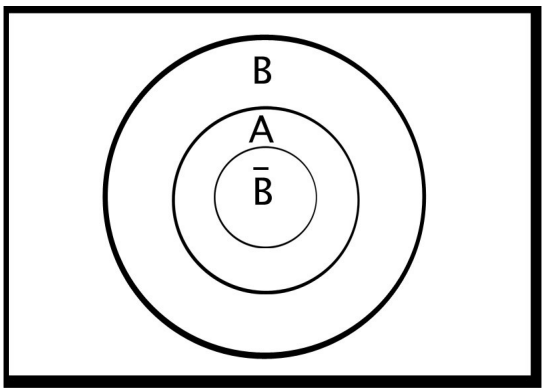
But let us consider another prime example.

A ⊃ not B along with **B ⊃ A**





result in the following:-



Which is surely
a total contradiction.

And Contradiction is yet
Another tent of Formal
Logic. It is NOT allowed.

But, if we consider separated localities with different and unrelated compositions, and with different histories, then quite opposite conditions **can** occur though ***separated*** in the two distinct areas.

So, **Formal Logic is therefore about local, internal consistencies ONLY!**

Then, we must ask, "Are all things immutable?" The answer is clearly, "No!". They may appear immutable, and the best assumption in many circumstances may well be that they are constant, but that can only be a short-term assumption, for, in time, ***all things change***.

Formal Logic is only for limited periods of stability ONLY!

Now, these seem to be very negative things to be said about the universally merited system, which every intelligent person is proud of their skill in using it to establish the TRUTH, but that surely is **just** the point.
Real Truth is not absolute – NOT eternal! Yet this is rarely admitted.
One reason that this is not universally accepted is that the Absolute Truth IS certainly achievable in suitably isolated, time–independent, and artificially constructed formal systems. The outstanding example is **Geometry**, with its Theorems and Proofs. Indeed, in the recent book ***A Certain Ambiguity*** by Suri & Bal

there is a strong argument throughout the book that such certainties ARE transferable from Mathematics to Reality in general, and even to how you live your life. (Imagine governing your life with the premise that all things are fixed and immutable!)

So, thinkers wedded unquestioningly to Formal Logic, are thus "walled off" from tackling any definitely **changing** and ***evolving*** system, and this includes Reality as a whole.

It is clear that I must prove this assertion! (840 words)

To be continued