The Dynamics of Chaos and its Impact on Digital Collaborative Infinite Writing

Dr. Koel Mitra

Assistant Professor,
Department of English,
The Neotia University, Kolkata, India.

Abstract : This paper aims to focus on the non deterministic overlap that creates a kind of a differential estimate of possibilities, in digital collaborative infinite writing. The structure of progression in such kinds of writing moves in infinite circles, though mathematically, to give birth to newer possibilities in "writing", which technically speaking follows the same mathematical logic of progression, as it does, in this system of writing. In this system, one point is already embedded in a previous another; which cannot be specifically located, because it exists in an aggregate. It is there but in no specific location. This paper tries to understand an aggregate estimate of the theoretical nuances of such writing.

Index Terms – digital collaboration, infinite writing, writing theory, philosophy of writing.

That chaos may be a part of elementary politics of "writing" can be understood by profoundly exploring the works in the fields of electoral behaviour, game theory, axiomatic choice theory, authorial discourses and conflict analyses. The social dynamical procedures that may instigate chaos, techniques for examining vast scale aggregate conduct, and ramifications for political theory research are summarily and particularly illustrated in this section. With the advent of the new century, Poincare, and later Birkoff, noticed that completely deterministic elements don't really give expressions to the pre-set expectations on the development of a dynamical framework (Poincare 1892; Birkhoff 1927). The nuance of their perceptions was not completely understood until some time later (Cartwright and Littlewood 1945; Levinson 1949; Smale 1967; Ruelle and Takens 1971). Today, chaos is a segment in understanding unique macrobehavior in numerous sciences; including the humanities. Chaos exists when the long haul of expectation of a framework is incomprehensible in light of the fact that vulnerability in a framework's underlying state develops exponentially quick after it gains an initial momentum. Chaos fits the rule that the auto-correlation capacity of the time flag goes to zero within limited and finite time. Since directions are insecure, blunders of estimation of introductory conditions or parameters, however little, can later gather into considerable proportions of mistakes. This infers conjectures of future conduct in light of the past and ends up hazardous as present "memory" of the past falls flat. Non-linearity is a fundamental however not adequate condition for the age of chaotic movement. Obviously this suggests that some input system exists. The watched chaotic conduct is expected neither to outside clamour nor to an endless number of degrees of opportunity. The wellspring of abnormality is the nonlinear framework's property of isolating close directions exponentially quick. Since the time advancement is self-independent from its own previous history, foreseeing the long haul conduct of clamorous frameworks is an intriguing activity.

The procedure does not stop in a steady balance but rather comes to possess substantial patches of state space. Investigation is troublesome in light of the fact that steady and flimsy states are strewn together in to a great degree of entangled ways. The basic input process fundamental to the elements under scrutiny subsequently can be mild or boisterous, depending exclusively on the tuning parameter estimations of the equation(s) of movement. To be sure, for every commonsense reason, the qualification of differentiation among determinism and non-determinism vanishes. That is, even conditions those are exclusively deterministic moves towards becoming nondeterministic in their long term realizations. One may expect it to be difficult to foresee the long term conduct of political frameworks that are conceivably chaotic in light of the fact that their underlying conditions can be settled just with limited exactness and therefore possibilities of consequent mistakes increasing exponentially quick.

For the political understanding of it all, this implies that the political actors inside a chaotic domain who are represented by similar laws and are indistinguishable in each quantifiable way may develop diversely over significant time. Once more, this would happen regardless of indistinguishable introductory arrangements. Yet, this flightiness of the long-term conduct exists just at the level of individual directions. At the level of factual properties of the time development (arrived at the midpoint of over various directions, say as they advance from various adjacent starting conditions), extremely distinct expectations are conceivable. Directions will in the long run move just on a little sub-manifold (chaotic or strange attractor) of the whole state space, with predictable occurrence frequencies of the changed parts of the attractor. It might be conceivable to assess the time up to a disorderly occasion, offering a fleeting anticipation of a political position's direction. Politics, regardless of whether it originates at the relational, state, national, or global level, results from the collaborations of people. These people are individuals from separate political groups; while some might be outfitted with more power and achieve a higher status; even they are associated in the consolidated network of relations. Political pioneers construct their choices in light of connections with their consultants; they frame impressions of their guides, who shape impressions of them. Connections change as these impressions and encounters advise resulting co-operations.

What lawmakers say and do impacts the remaining sets in a geo-political gathering and in their regions. Their remains mutually impact one another. The procedure is reflected down to the level of the common voter who chooses, say, to help a Republican or a Democratic competitor in a decision, in light of connections with companions, family, or colleagues in her neighbourhood. Indeed, even the individual voter's musings and activities might be simply the result of inconspicuous collaborations, which are visible only when they surface as a significant point in the ambiguous pool of the continuum.

For considerable decades, we have seen insights of the perplexing individual-group nexus that characterize politics. For example, we know that political convictions are frequently founded on socially signalled philosophies as a substitute. That is, people may steadfastly reflect and take time to acknowledge the convictions of other people who have created abstract ideas of politics (Campbell et al., 1960; Converse 1964) simply because they do not agree to the belief set of the other group.

That most voters need much valuable mathematical statistics or neglect to act objectively is only once in a while discussed as part of political theories in itself (Ferejohn & Kuklinski 1990). Yet, the finish of such discussions doesn't mean we truly comprehend the system that prompts even the most fundamental types of such political conduct. Turnout is one such model. Many rational scholars still can't comprehend why anybody would vote, given the costs in respect to corresponding impact. Exact discretionary scholars can't make sense as to why definitely total voting rates seem, by all accounts, to be going down in cases where apprehensions were different (say). One must take note that voting concerns only a small aspect of political preferences; as much as it deals with many other things. This whole system of flux always already existed; it was only a matter of choice that scholars cared to look at mathematical points instead of the whole infinite movement in order to make their readings easy, which has nothing specific to do with the system. Formally treating intuitive political conduct inside hugely various groups is precarious. Intelligent conduct is impossible to miss in that it can neither be anticipated nor dissected by watching sets of people cross-sectionally, or indeed, even the time arrangement from a given individual or gathering cannot be ascertained.

Social elements and the attending social conduct can't be diminished to singular conduct as much as separated people can't prompt the assortment and wealth of worldwide aggregate conduct predominant in any political framework. Social and political conduct is by definition all encompassing and synergetic (Haken 1978, 1983) and must be the result of associating people who can convey and change their conduct as an outcome of their collaborations. That is exactly the point where I have tried to locate and read the nuances of digital, collaborative, infinite writing, as part of this hypothesis in general and this paper in particular.

The usage of this (chaos) 'theory' originates from the idea that, however it is genealogically independent to the group of Marxist Political Economy, it has numerous things in common and numerous ways of seeing that are totally of its own and common too. It will barely get the job done just to state that this 'theory' has a considerable amount of "postmodern and postcolonial" positions intertwined into it. This entire paper is, really, an elaboration of a portion of the particular components that have a place with this kind of 'theory'. Also, that as well, in a route as straightforward as would be prudent: I have attempted to set up the readerly participants, those who are not already initiated to interlinked theories of Mathematics, Software Studies and Humanities, in accessing this proposal. Having said that, here comes the essential point – it is so hard to be 'straightforward' for a theme that is so interlinked; therefore the only choice this position has, is to be convoluted. This inquiry comes up commonly in numerous guises all through this hypothesis: how to characterize 'straightforwardness' or coherence, especially with regards to an interlinked position like the one in question, that has no hidden control of its own. This hypothesis expects to develop in the plain interstice of three intense controls of human idea, writing, political economy and computing; broadly seen as composing, generating and processing.

In the process of writing this paper, the definition of simplicity that was settled upon, was just another name of an 'interdisciplinary system of networked historiographies'. When a thread was taken up, it was assigned a kind of trajectory or developmental shape in this whole hypothesis-assumption and argument, which could seem often incoherent or disparate in discipline, space and time, even inside and within the bounds of this hypothesis. This is done, so that, any reader, who continues reading the argument, in any event till this point, can get all the reasonable devices explained in one or the other segments of the paper, experiencing how disparate points reach an aggregate infinitude. This paper explains the likelihood of a completely new sort of politics of resistance embedded inside FLOSS, Free-Libré-Open Source-Software. Also, it illustrates, how FLOSS opens up a totally new skyline of political economy of opposition that is even outside the cognizance of commonly practiced Marxist political economy. In this section, we will utilize these terms interchangeably (even though they may not be necessarily synonymous in effect), 'FLOSS', 'Linux' and 'GNU-Linux': markers that are intended to mean, for the time being, programming sets authorized under GPL or GPL-like licenses, licenses that flourish to ensure human freedom in the fields of software programming. The political issues of obstruction, that I am alluding to, are the opposition towards the authority of capital. As many already know, the word 'hegemony' comes from the Greek root 'hêgemon' or pioneer, that is, it flags a sort of ideological initiative of the decision-making class. This authority of capital or private enterprise, that practicing standards use in a market society, undermines to take away human freedom in infinite number of ways. Computing is only one of such domains. Furthermore, here, GPL, together with other GPL-like licenses, made a sort of resistance towards this form of authority by designing strategies for sparing this notion of (new found?) freedom.

This paper notes and acknowledges the obstruction given by GPL, from different perspectives – historical, economic, social and many others, and finds in GPL a completely new hypothetical plausibility of opposition. Furthermore, this revelation turns out to be urgently imperative, in light of the fact that, as this paper aims to appear, the simple but pertinent sort of opposition that surfaced through the authority of GPL, was something very different and innovative from outside the extent of the history of human ideas, till date. This one of a kind obstruction brought forth some totally new economic and social classes, classifications that were never there in mankind's history before this point; that of the anonymous mass in a defined class. Such curious difference turns out to be exceptionally articulated, when we see that, the entire order of Marxist political economy, up to this point, cannot comprehend this GPL marvel in lieu of the existing Marxist rationale; as it is. This opens up some phenomenal vistas of political economy of resistance and opposition, the comprehension of which requests a radical new theoretical basis.

Once in a while, we name this plane as phenomenology of friendship, and call this system of opposition as the politics of subversion. The distinction of this idea, within and from the Marxist corpus, that puts surplus in a reversal of capital's authority by making a counter-authority, is very evident in the term 'subversion'. The political basis of such subversion goes past all authorities, and goes past the possibility of a reversal of the same authority. One should take note of the distinction between "the opposition that surfaced through GPL", that we composed, and what one could compose, similar to "the obstruction that GPL (intentionally) made". Every one of the general population and endeavours that went into the making of the procedure that created

GPL and FLOSS, did not know the hypothetical ramifications of the activities involved in the same. In this paper, we will once again, utilize the idea of the 'differend' from the speculations and theorizations of Lyotard to check the initiation of the procedure. Where the creators of GPL and FLOSS were seeing lawlessness, were, in each sense, totally advocated in the feeling of legitimacy by the state, under the hegemony of capital. This precisely requires the introduction of 'differend'. 'Differend' dwells in a circumstance, which, by definition, cannot be settled, on the grounds that there is no uniform government of judgment material to the two gatherings in a common debate.

The tendency of the market was bringing this aspect of human freedom under the category of theft, as was universally accepted in the earlier phases in the history of computing. Yet, these market moves were accepted as totally legitimized and lawful. For this reason, the initial section of this paper, has tried to be foundational in developing the argument of why one needs to profoundly look into the instrument of state machinery and the lawful classifications of 'contract' and 'property' to demonstrate the inward workings of the lead of the capital, to get a genuine view of such moves, historically.

The point here is the exceptional nature of reconciliation of connections between the equity expected by the computing market and the equity of the market with the state. Through GPL, this differend was really settled by a deconstruction of the entire instrument of state and market. After this, at least it was no more imperative to understand that the "market of computing" was necessarily the "state law of computing" as well. This paper aims to see the state-market nexus as merely "a choice" instead of "the only (legal) possibility". The 'differend' between the two independent disciplines and readings of equity, between the domain of the software designers and the law of the market, began to create a great deal of enhancement as scattered, disconnected and microscopic snapshots of opposition. These supplements continued expanding in form, whereby lastly this entire procedure prompted the introduction of GPL. The introduction of GPL then initiated the vast universe of FLOSS. Also, through GPL and FLOSS, developed some (till then) obscure types of the classifications of property, capital and state. These changed classifications also managed to affect the oppositional characteristic in GPL.

GPL is a sort of a permit, known as the General Public License. It accompanied an undertaking called GNU, with a self-recursive acronym: GNU's-Not-Unix, which on occasion, is often known as GNU GPL. We will know slightly later, this GNU venture was intended to be the developing life of what we call FLOSS today. The association with a similar GNU is communicated in the name 'GNU-Linux', by which we allude to Linux in the paper, a considerable number of times. There are numerous things related here, we will return to them later. Linux or GNU-Linux or FLOSS, whatever we call it, prominently comes to us as 'appropriation' or 'distribution' or 'distro'. Some well-known distro-s are the likes of 'Fedora', 'OpenSuSe' or 'Ubuntu'. Any bit of software programming incorporated into a FLOSS distro is authorized under GPL, or some GPL-like permit. As we are stating GPL-like, the 'resemblance' originates from the motivation behind securing human freedom, which is common to each one of them, for the reason that previously began to be realized through GPL. The human freedom, in this specific case, alludes to an opportunity of learning in the domain of computing. What we precisely mean by this 'freedom of information in the domain of computing' is excessively perplexing. One could begin to operate with a working definition of this freedom, that lets one know, that this 'freedom of learning in computing' implies the opportunity of utilization, the opportunity of modification, and the opportunity of dissemination of each bit of such computing. This paper, has specifically tried to look into this dynamics of information binaries. On the off chance that a bit of computing can be utilized and/or modified by whoever needs to utilize and/or modify it, as many number of times as of course one needs, one could consider it to be the freedom of modification. The freedom of change lives in the opportunity of changing a bit of software in the way one independently needs.

The opportunity of dissemination implies the opportunity of dispersion of both the first and the altered duplicates of that bit of programming. On the off chance that, for any bit of programming, if any one of these opportunities are in place, one could call it 'free software'. One can take note of a point here, and this will turn out to be massively essential point, that the idea of 'disseminating information in the manner in which one needs', as of now, incorporates both the potential outcomes of trade with cost and without cost; therefore with margin and without one. Along these lines, any bit of software being connected with a sticker price has inspired nothing to do with the opportunity or freedom of dissemination and of conveyance (of the soft content) engaged with it. This was the logic behind taking the argument through philosophical positions and dispositions, as is done in this section of the paper. With regards to understanding the legal issues of GPL, this point has turned out to be very critical. Also, in this section we can, in aggregate, try and cross examine the legal issues between the classes of 'text' and 'context', and after that the politics between 'context' and 'supplement', as propounded by Jacques Derrida's hypothesis of deconstruction specifically, and the Derridean rationale in a more general term.

In the next section we attempt to structure a hypothetical space that expects to rearrange and absolutely invert the hierarchy of the "context-text-supplement" as ascertained in Derrida's general theory of authorship. We can understand that such a reversal is extremely conceivable, yet confusing, and only as an instance of this probability, do we get GNU GPL. One could also allude back to this section and endeavour to attempt a rereading on how far this venture was satisfied; after locating the historiographic trajectories of the origin of authorship, property rights and intellectual property rights as explained in details in several separate sections of this paper. Together with Derrida's deconstruction, we get a few components from Jean-François Lyotard as well, especially the snapshot of 'differend' in the context of developing our theoretical premise. In this concluding section of the paper, I propose, that the uncertain differend continues creating supplements as "bastard contents" look for parent content in order to gain legitimacy of history and/or convention. These "bastard messages" at one point gather together to produce a parent content or envelope-content like GPL. This parent content then starts creating and recreating itself in its very own setting. What is more, this nascent produced setting presently turns into the setting of the constantly perusing parent content, made by the amassing of enhancements read together as collaborative infinite writing. Along these lines, the writing adventure, as navigated by GPL, moves towards becoming enhanced from an altered hierarchical practice of 'context-text-supplement' to 'supplement-text-context'. With almost negligible knowledge of programming and authorizing and authoring, that are important to comprehend this hypothetical develop, one can still actively depict counter-venture in this part by randomly, chaotically participating in it, by oneself. This was the line of argument in several sections of this paper.

Thus, this (concluding) segment aims to act as a final flag-bearer of multi-disciplinary interconnections where Digital Collaboration, Infinite Writing and the Differend work hand-in-hand towards creating a different philosophy of writing altogether. This happens since 1983; the year in which both Richard Matthew Stallman, an American free software movement activist had launched the GNU project as well as when Jean Francois Lyotard had come up with his idea of the differend; both vitally important to understand Digital Collaboration, Infinite Writing and the Differend since 1983.

REFERENCES

[1] Arrow, Kenneth Joseph. Social Choice and Individual Values: Kenneth J. Arrow. Yale University Press, 1963. Print.

[2] Riker, William H. Liberalism against Populism: a Confrontation between the Theory of Democracy and the Theory of Social Choice. Waveland Press, 1982. Print.

[3] Saari, Carolyn. Clinical Social Work Treatment: How Does It Work? Gardner Press, 1985. Print.

[4] Schofield, Sandy. The Big Game. Pocket Books, 1993.Print.