

An Inspiration & Suggestion to Probe "Minsky Machines" in the Context of DNA based Informatics towards better Anticipation of "Developmental Biology".

Nirmal Tej Kumar
Independent consultant : Informatics/Photonics/Nanotechnology
Current Member : ante Inst,UTD,Dallas,TX,USA.
email id : hmf2014@gmail.com

[I] Introduction & Our Inspiration :

"Every system that we build will surprise us with new kinds of flaws until those machines become clever enough to conceal their faults from us." - Marvin Minsky.

Source : { <https://bigthink.com/words-of-wisdom/marvin-minsky-machines-will-one-day-be-clever-enough-to-conceal-their-flaws> }

Minsky, Marvin L. (1968). Matter, minds, models. In *Semantic Information Processing*. MIT Press.

Minsky machines and algorithmic problems by Mark Sapir .

Source : { <https://arxiv.org/pdf/1504.07736.pdf> }

https://link.springer.com/chapter/10.1007%2F978-3-319-23534-9_17

https://hal.archives-ouvertes.fr/hal-00577926/file/larchey_final.pdf

<https://ubiquity.acm.org/article.cfm?id=1046683> - MIHAI NADIN ON ANTICIPATORY SYSTEMS, Ubiquity, Volume 2005 Issue January BY UBIQUITY STAFF.

<https://dblp.uni-trier.de/pers/hd/n/Nadin:Mihai>

<https://www.nadin.ws/> - THE END IS WHERE WE START FROM.....

<https://www.springer.com/us/book/9783319451404> - Anticipation and Medicine

Editors : Nadin, Mihai (Ed.).- Presents recent research in Anticipation Science.

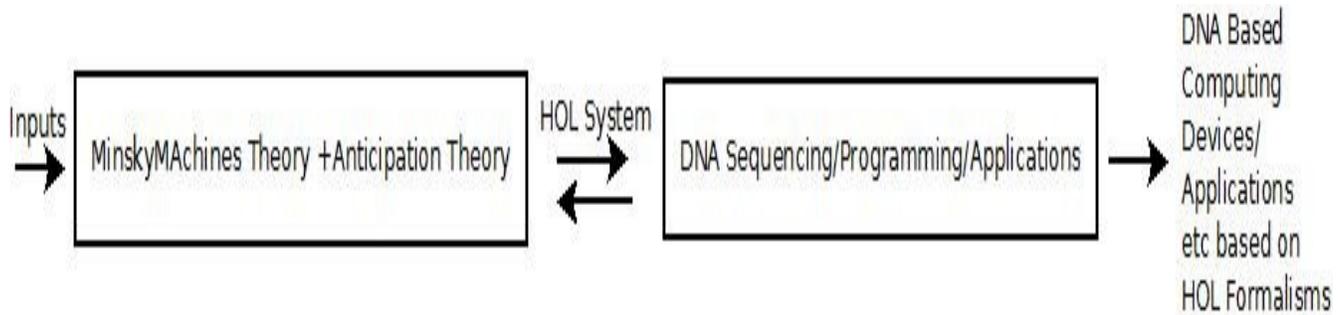
{ "In this book, practicing physicians and experts in anticipation present arguments for a new understanding of medicine. Their contributions make it clear that medicine is the decisive test for anticipation. The reader is presented with a **provocative hypothesis**" }

"Provocative Hypothesis" is what triggers us to write our present short technical communication.

We are presenting this to inspire others in these domains using a novel design approach.

Just Think

[II] Our Suggested HOL based Informatics Framework :



Approximate Idea & Suggestion Only. Simple Informatics Framework
Testing in Progress at the time of Submission

**Figure I – Our Idea & Approximate Informatics Framework Based on Our Suggestion.
Lot of Fine tuning & Understanding is required especially the HOL/Theorem Prover Systems
Testing in Progress. Worth giving a try to probe Bio-informatics.**

Please Note : Readers are requested to read obtain and satisfy themselves about our suggestion.

[III] Information on Mathematics & Software :

“Isabelle is a generic proof assistant. It allows mathematical formulas to be expressed in a formal language and provides tools for proving those formulas in a logical calculus. The main application is the formalization of mathematical proofs and in particular *formal verification*, which includes proving the correctness of computer hardware or software and proving properties of computer languages and protocols. “

[a] Source/s :<https://isabelle.in.tum.de/>

https://www.isa-afp.org/entries/Minsky_Machines.html

<https://isabelle.in.tum.de/documentation.html>

<https://isabelle.in.tum.de/overview.html>

<https://isabelle.in.tum.de/dist/doc/jedit.pdf>

<https://isabelle.in.tum.de/installation.html>

[b] <https://www.jikesrvm.org/> && <https://www.java.com/en/download/>

[c] <https://www.haskell.org/>

[d] <https://www.scala-lang.org/>

[e] Fields of Logic and Computation II:Essays Dedicated to Yuri Gurevich on the Occasion of His 75th Birthday/Lev D. Beklemishev,Andreas Blass,Nachum Dershowitz,Bernd Finkbeiner,Wolfram Schulte Springer,05-Sep-2015-Computers-319 pages.

[f] <https://lists.cam.ac.uk/pipermail/cl-isabelle-users/2018-August/msg00190.html>

[g] <https://arxiv.org/pdf/1504.07736.pdf>

[h] <http://cl-informatik.uibk.ac.at/software/ceta/>

[i] https://esolangs.org/wiki/Minsky_machine

[IV] Conclusion/s With Future Perspectives :

"Every system that we build will surprise us with new kinds of flaws until those machines become clever enough to conceal their faults from us."

{ Minsky Machines Theory + Anticipation Theory → Better Bio-informatics Applications }

To the best of our knowledge this presentation is one of the pioneering efforts.

[V] Acknowledgment :

Special Thanks to all who made this happen in my life. Non-Profit Academic R&D.
Interested in inspiring others.

[VI] References :

[a] https://en.wikipedia.org/wiki/Marvin_Minsky

[b] <https://ieeexplore.ieee.org/abstract/document/4066245>

[c] <http://papers.cumincad.org/cgi-bin/works/Show?0c01>

[d] The Emotion Machine: Commonsense Thinking, Artificial Intelligence, and the ... By Marvin Minsky Simon and Schuster, 13-Nov-2007-[Psychology](#)-400 pages. [The Emotion Machine is an intriguing look into a future where more powerful artificial intelligences await.]

[e] https://www.jstor.org/stable/pdf/1970290.pdf?seq=1#page_scan_tab_contents

[f] <http://vision.eecs.ucf.edu/news/Minski.pdf>

[g] <https://www.aaai.org/ojs/index.php/aimagazine/article/view/894>

[h] <https://dl.acm.org/citation.cfm?id=1283924>

[i] http://www.universelle-automation.de/1991_Boston.pdf

[j] <https://ieeexplore.ieee.org/abstract/document/1245119> - An architecture for combining ways to think.

[k] <https://apps.dtic.mil/docs/citations/ADA200313> - Society of Mind Project .

[l] <https://www.aaai.org/ojs/index.php/aimagazine/article/view/376>

THANK YOU FOR READING OUR SHORT TECHNICAL NOTES

THE END.