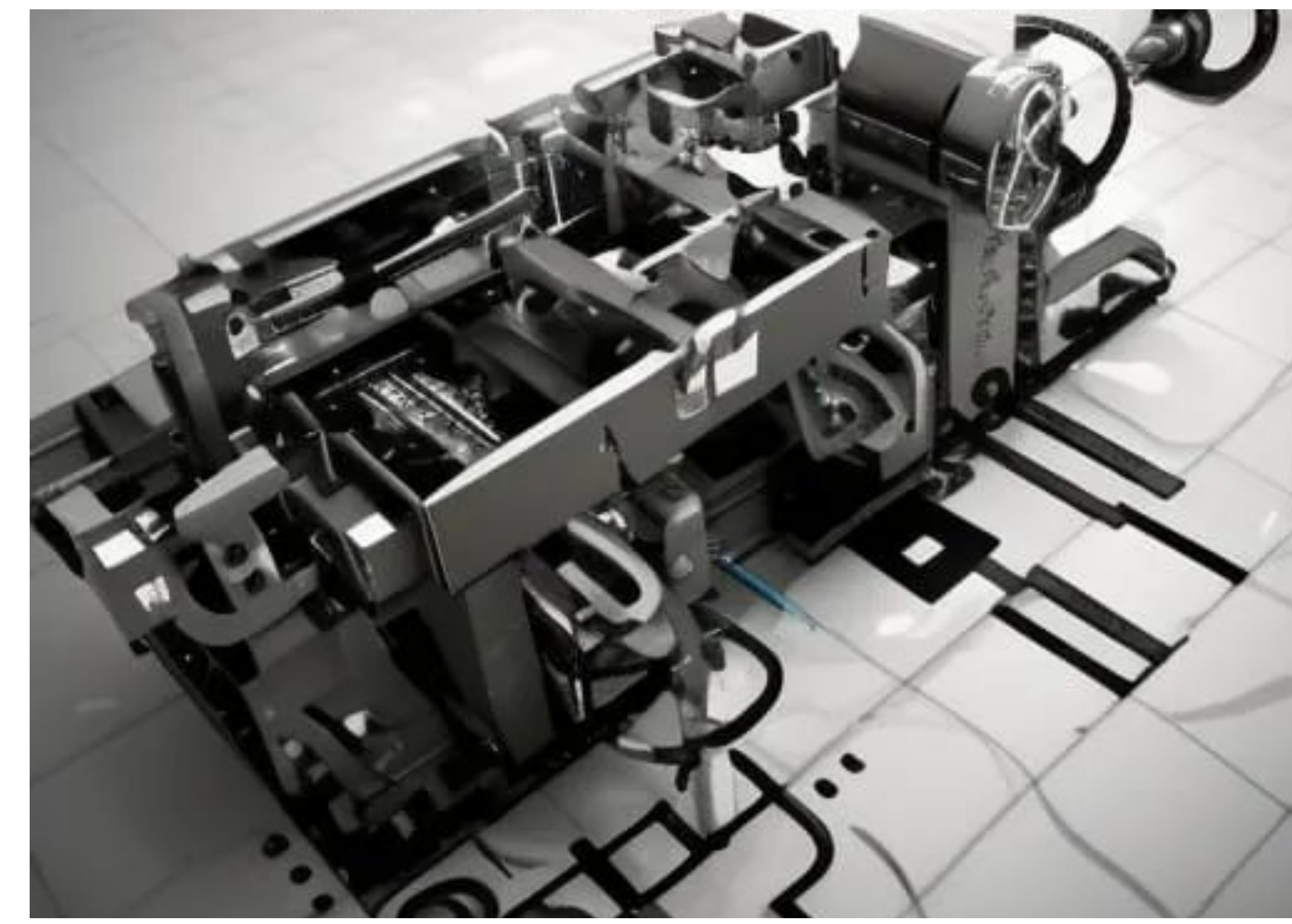*Kaya kung may pumapasok na bagong salita, yun ay aparatong daan na aktibo at bahay ang wika*

— *Virgilio Almario*

the 'Learn-It-All' does better than the 'Know-It-All'

- Satya Nadella

Itaguyod ang diwa ng pagsisikap
- *Okinawan Dojo-Kun #3*

Learn like a machine!

Moloch whose mind is pure machinery!
Moloch whose blood is running money!
Moloch whose fingers are ten armies!
Moloch whose breast is a cannibal dynamo!
Moloch whose ear is a smoking tomb!

Howl, Allen Ginsberg, 1955

Language

"the expression of ideas by means of speech-sounds combined into words. Words are combined into sentences, this combination answering to that of ideas into thoughts."
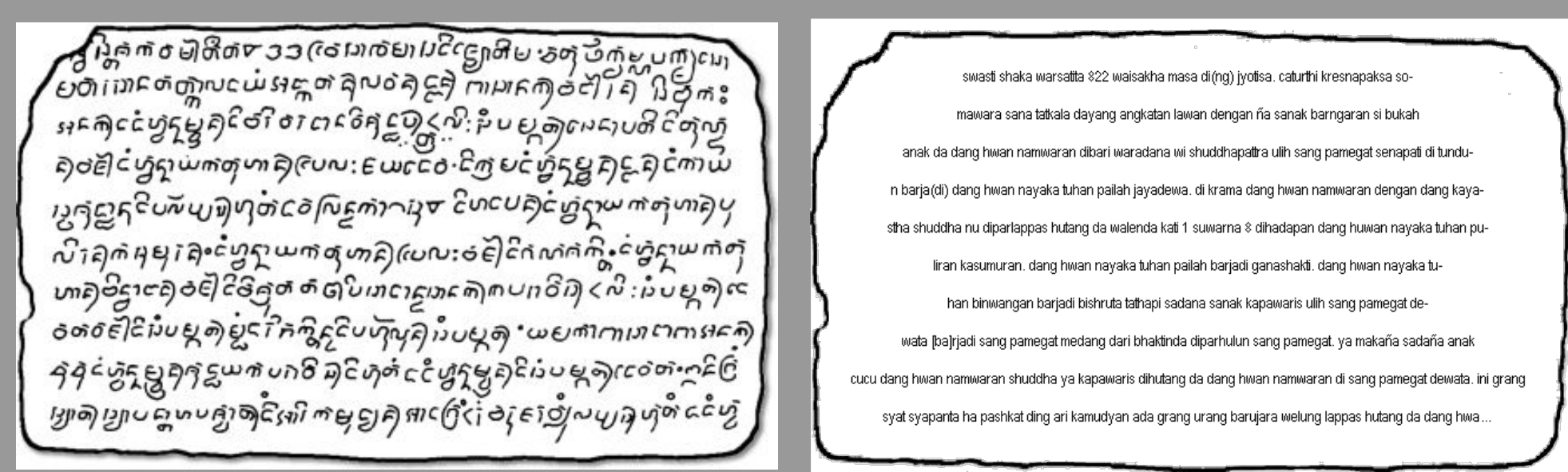
'Colorless green ideas sleep FURIOUSLY'

- *Syntactically valid nonsense*

Noam Chomsky, Syntactical Structures 1957

Writing

"**writing**, form of human communication by means of a set of visible marks that are related, by convention, to some particular structural level of language.."

Long Live! Year of Siyaka 822, month of Waisaka, according to astronomy. The fourth day of the waning moon, Monday. On this occasion, Lady Angkatan, and her brother whose name is Buka, the children of the Honourable Namwaran, were awarded a document of complete pardon from the Commander in Chief of Tundun, represented by the Lord Minister of Pailah, Jayadewa.

By this order, through the scribe, the Honourable Namwaran has been forgiven of all and is released from his debts and arrears of 1 katî and 8 suwarna before the Honourable Lord Minister of Puliran, Ka Sumuran by the authority of the Lord Minister of Medang.
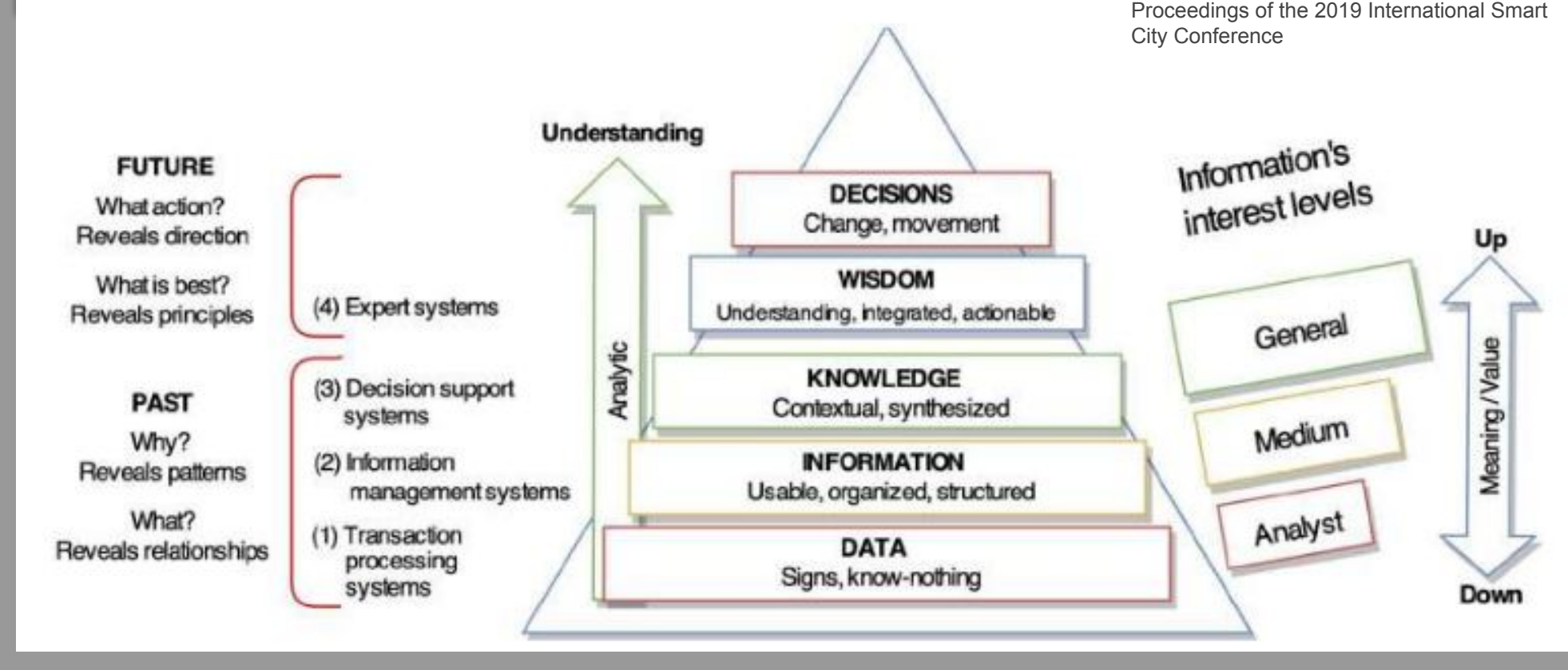
Because of his faithful service as a subject of the Chief, the Honourable and widely renowned Lord Minister of Binwangan recognized all the living relatives of Namwaran who were claimed by the Chief of Dewata, represented by the Chief of Medang.

Yes, therefore the living descendants of the Honourable Namwaran are forgiven, indeed, of any and all debts of the Honourable Namwaran to the Chief of Dewata.

This, in any case, shall declare to whomever henceforth that on some future day should there be a man who claims that no release from the debt of the Honourable...
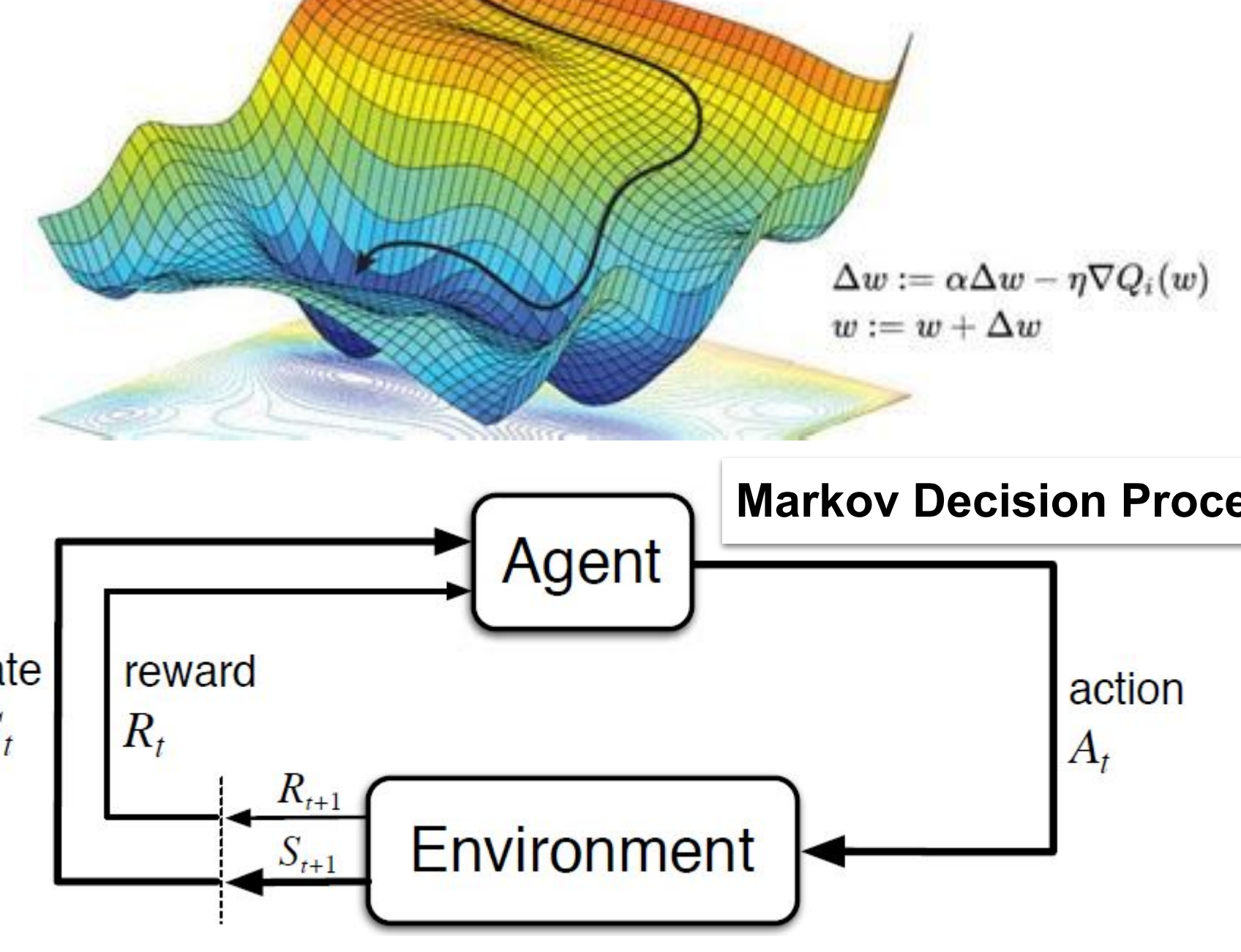
http://paulmorrow.ca/lcitrans.htm

Cognition & Synthesis

Limon-Ruiz et al, 2019 - User-oriented representation of Smart Cities indicators to support citizens & governments decision-making processes Proceedings of the 2019 International Smart City Conference

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Machine Learning (ML) & Natural Language Processing (NLP) Tactics & Techniques

PRP | **VBZ** | **NNS** | **IN** | **DT** | **NN**

She | sells | seashells | on | the | seashore

Part Of Speech Tagging

NLTK

Monte Carlo
Tree Search

SGD + MOMENTUM

$$\Delta w := \alpha \Delta w - \eta \nabla Q_i(w)$$
$$w := w + \Delta w$$

Markov Decision Process

state S_t | reward R_t | → Agent → | action A_t
R_{t+1}
S_{t+1} → Environment

---

2 Translations

NOLI ME TANGERE
HUAG ACONG SALANGIN NINO MAN
Novelang wicang Castila na tinagalog
NI
PASCUAL H. POBLETE

Dr. José Rizal

gutenberg.org

JOSE RIZAL
NOLI ME TANGERE
Salin ni VIRGILIO S. ALMARIO
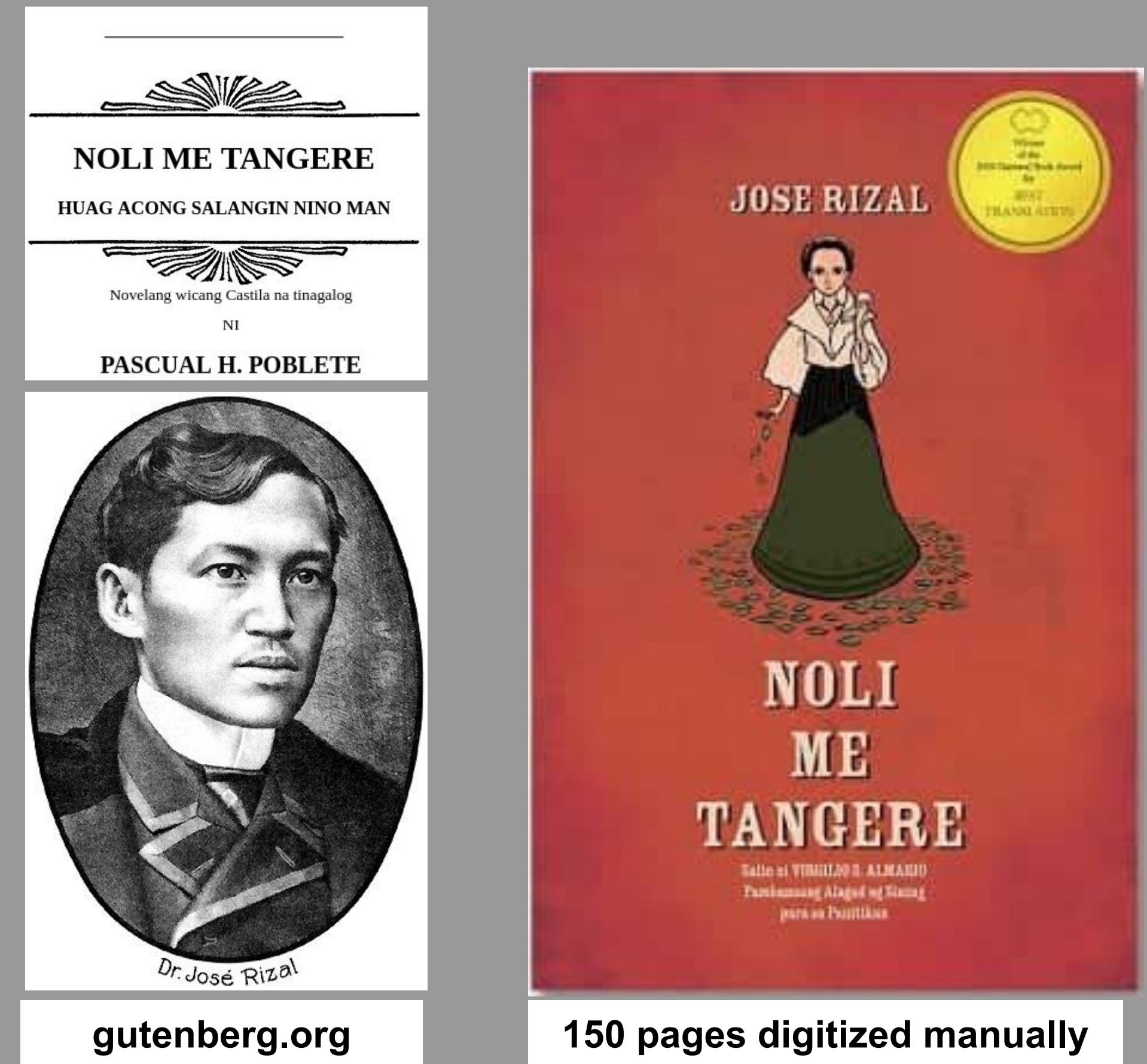Pambansang Alagad ng Sining
para sa Panitikan

150 pages digitized manually

Pause Giant AI Experiments: An Open Letter

- Pause Giant AI Experiments: An Open Letter - Future of Life Institute
- Max Tegmark: The Case for Halting AI Development | Lex Fridman Podcast
- Meditations On Moloch

'This isn't an arms race, it's a suicide race if anybody's AI goes out of control'

What a lot of safety researchers have been saying for many years is that the most dangerous things you can do with an AI are:
1. Teach it to write code
2. Connect it to the internet, allow it to:
   a. download stuff on its own
   b. talk to people
3. Learn about humans, and how they can manipulate people

The GPT Architecture

Hyperparams

```
batch_size: how many independent sequences
will we process in parallel?
block_size: what is the maximum context length
for predictions?
```

Common params

```
max_iters = 5000
eval_interval = 500
eval_iters = 200
n_head = 6
n_layer = 6
dropout = 0.2
```

Models for Comparison

```
Dictionary: Almario
batch_size = 32
block_size = 8
learning_rate = 1e-3
eval_iters = 200
```
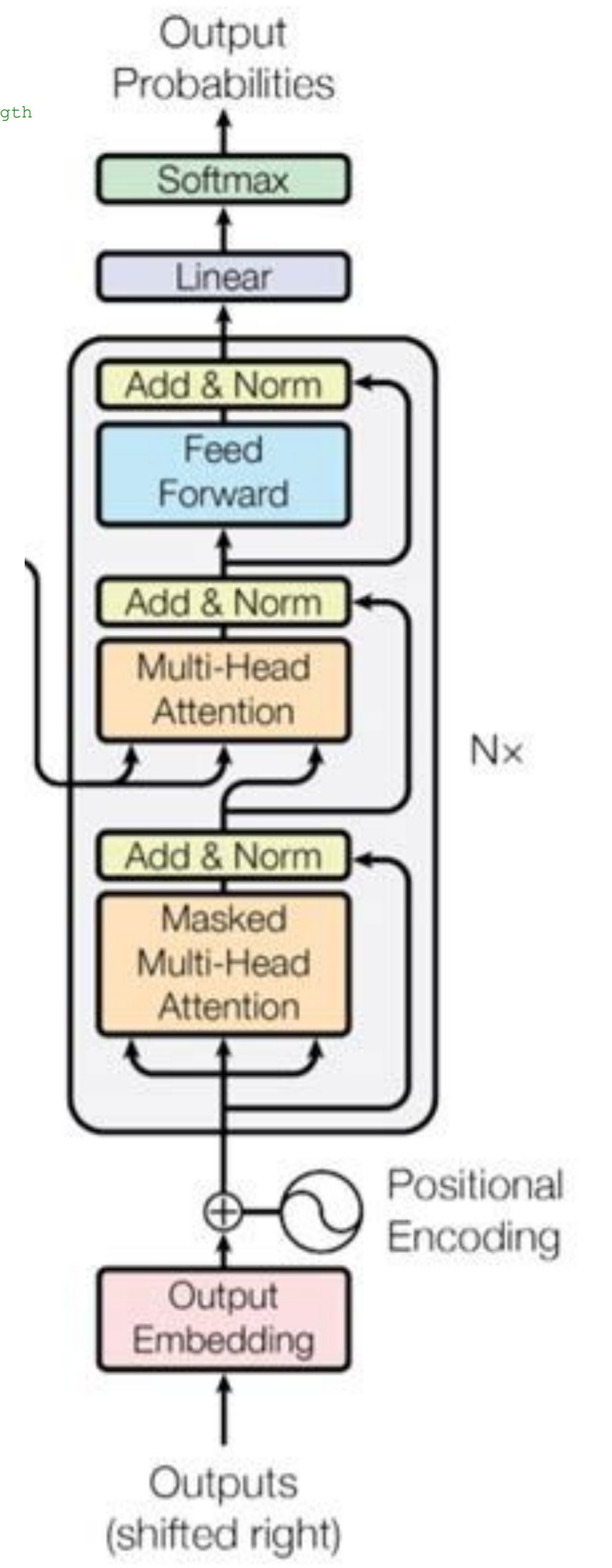
```
Dictionary: Almario
batch_size = 64
block_size = 256
learning_rate = 3e-4
n_embd = 384
```

```
Dictionary: Poblete
batch_size = 32
block_size = 8
learning_rate = 1e-3
eval_iters = 200
```

```
Dictionary: Poblete
batch_size = 64
block_size = 256
learning_rate = 3e-4
n_embd = 384
```

Let's build GPT: from scratch, in code, spelled out.

- Andrej Karpathy

Output Probabilities
Softmax
Linear
Add & Norm
Feed Forward
Add & Norm
Multi-Head Attention
Add & Norm
Masked Multi-Head Attention
Nx
Positional Encoding
Output Embedding
Outputs (shifted right)

Additional links and references

PAGLALAYAG