BevCYC

GIST

BehavioralCycle / CYC /

" from epigenetic-sequence / epigenetic-cycle" transcribed onto ROS-like / gymnasium like

Nodes-of-action-sequence; but in actual essence; is just an empty node-scaffold

To fill with action-context-pairs that is designed so that they are decomposable

Onto the lowest level (which is muscle tension %) "

BevCYC is a framework that implements a

decomposable Chain of Node (N – N – N)

Representing an Action Sequence / Concept Sequence

That is based on the Epigenetic Cycle ideations. (#p , #p)

(commonly known changing / semi temporary / semi permanent ; biological instruction set)

While currently structured in such way

(empty nodes for pairs) (in a 3-3-3 minimum or more)

, each sequence can be otherwise interpreted as a "state" – "action" – "state" triplet

(more commonly known nomenclature seem to imply a distinction)

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In the mind of the cat; (in this framework)

"state" – "action" –"state" is actually a "state" – "state" – "state"

(hunger.) – (eating. / hunting. / eat-ate-ing) – (ate.)

The distinction between the states and the action is deliberately blurred

Because they are prepped in such way where

They (hopefully) eventually just represent nearest node-of-activation

That can be both represent the action and the condition.

(or mayhaps more easily both referred to as “concepts”)

Through hierarchal decomposition; these ultimately resolve onto a muscle Tension %

On practice; these nodes are usually taken (copied)

Onto a learning template; for a adjacent Agent / LLM to then work on;

To update and then re-copy / re transcribe

On differing time spans; / intended time-length

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As in; this implies that in biology; the same molecule is “copied”

For base reference when practicing the action for the first time;

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Also such is kept; as a “human-sense” initial copy of what that action should be compared-to

(imagine instinctively know what is

“that is very primitive / very human”)

Or otherwise (“this is CRANE KUNGFU, embody CRANE! O_O >:OO”)

(unclear instructions that in the chemical level; is actually faster to transcribe)

(due to the same-ness of both the CYC / learned CYC / state & action)

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Also such is parsed / edited onto a learned context-specific version (copy)

With its own % tension range (of the muscles)

We will try to describe how a typical chain is copied and liberally modified

For % application and etc

(these are probably done in such way in biology for ease/recoverability)

Unfurling

On practice

Upon unfurling; they become

3 different (shortening) node of interjection / injection of decision / decomposition;

As in;

Usually these are unfurled (executed) in real time;

So upon [N1] -> [N2] -> [N3]

Is most often interrupted [N1] doesn't become [N2] if it doesn't satisfy

[N2] doesn't end in [N3] if the action isn't verified

Verification can happen upon multiple unfurling

And multiple confirmation of such unfurling

In this current iteration;

We are experimenting with a scaffold length that looks like this

$$$] $$] $]

(for N1. N2. And N3)

for reference (we are currently experimenting with this scaffold type)

$$$]	LLLA	LLLA	LLLA	each L is a slot for interruption / call
$$]	LLA	LLA	LLA	(refer to Demo0.01 doc for this)
$]	LA	LA	LA	

Where the earlier the sequence is; the more Nodes there is to fill with

Vision / Theme (refer to Demo0.01 entire agent build) injection nodes

Whilst the closer it is to completion; the less space it is to inject /interfere

In biology (and in subsequent update)

This may well be false / not exactly; (or may be exactly; should find out soon)

But we presume that there [SHOULD] be a execution length variance

Advanages may include

.

In order to both:

- Later be easier to compress and detect on which completion
- Later be easier to search and inject for specific "exact moment of Feel”
- (mimicking biology in terms of motor execution)

- i.e. (do it right after you see the guy twitches)
- i.e. (do it right after the guy twitch; and you start charging)
- i.e. (do it right after you almost connect the punch)

if every thing is transcribed onto the $$$] $$] $]

framework; everything is (likely) to be easy to detect on which

sentence concept the nuance is referring to

(and easily decomposed and injected between the communicating agents too)

Imagine formatting every action – nuance to the same format of unfurling

This will likely safe a lot of space / convention for multipurpose of the

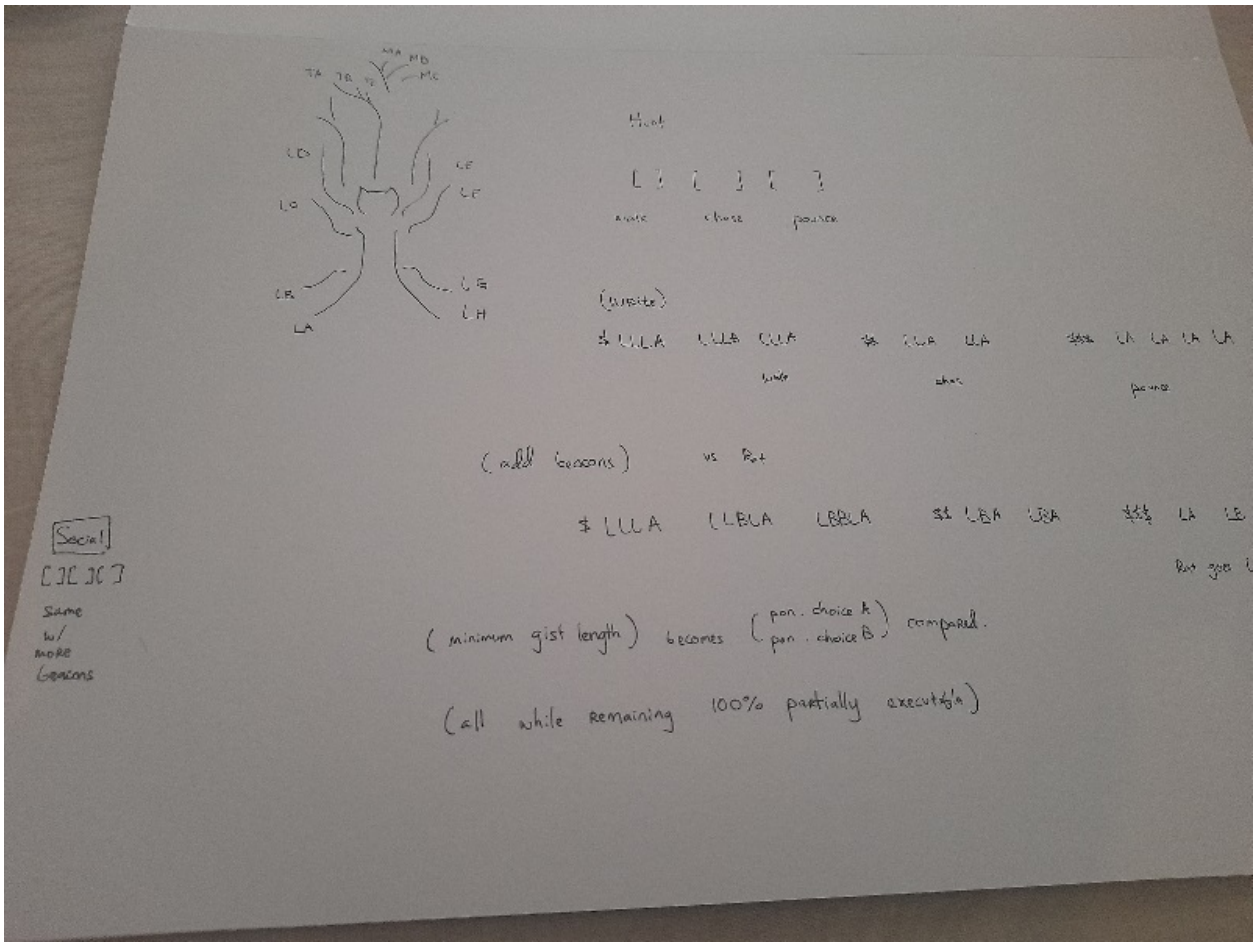
Same concept / reference (in the copy being used at the brain)

Some Example include

Note that this is currently under works

Decomposition picture

An earlier thinking on unfurling



Currently intended experiment

(on the prototype agent)

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A prior work describes it this way:

BevCYC labeled

EpiFoodPlau

“designed to keep occurring to make a cat’s morning routine

On scheduling and planning how to get food”

“ has downstream Epi’s to then keep occurring with their respective completion”

“ this is likely related to a Gene level in biology; first transcription becomes

This BevCyc equivalent; second and third and subsequent translations

Are also the same; either decomposed; copied; or learned and copied

.

“ food plau

“

“ (bring out the template)

“ (fill the template)

“ (run several sim of the template)

“ (put them on cycle* (refer to Page 12 For this)

- Wake – roam – sleep
- Roam – eat – roam v down (mechanism to breakdown / longer chain)
- Roam – hunt – roam v down
- Hunt – roam – ponder v down
- Hunt – roam – seek v down (repetition noted here; its deliberate)
- Roam – seek – ponder v down (functions as a data reconfirmation when rep)
- Roam – hunt – roam (repeats)
-

(IF)(hunt spots a prey)* (put hunting cycle below) (conclude both for reaching LIMB)

- Roam – *LIMB* (ABC) - roam (leads to limb query)
  - (limb specs & limb tactics)

other

(IF)(energy). (IF)(priority (danger)). (IF)(self) (beacons.pdf for later)

What is this cyle? these are ROS nodes (with their usual Checkpoint for completion)

with some steps getting repeated to indicate how

a typical chain must perform to make sure certain things

(usually these are like so because of stamina / limitations on biology)

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To just simplify it all

1. Make something really simple — Wake- Safe- Sleep
2. Make a completion goalROS style — (exactly like ROS action steps)
3. Decompose each node until it reaches muscle tension %
4. If a creature is only a — Single Cell + ProtoCilliate blob (feet)
5. Then — Wake = chem. (checkpoint completion)
   Safe = decompose to where1 – move –where2
   Move = is a muscle %

   . from that active decomposition
   Sleep = Move is accomplished
   Safe is accomplished.
   Sleep = trigger Chemical with Timer /
   Chemical completion token

   (somekind of mechanism for markers of well-rested)

How Complicated is this?

Depending on how silly we decide

Making a “Cat” with just tension globs

(its just a proto-bacteria with some direction and muscle to sludge around)

6 / 8 / 12 BevCycles with 6 Decompositions Each

(sounds like a 3 months project!)

Not sure!

I think that we don’t have to get it correctly though

I think currently I can cook up a really silly cat that only has a Demonstration

Of Social Cortex logging and applying

(just recognition of Prey / Benefactor / Locations / Terrains / Patterns / Updates)

This is probably achievable

Simply by having read-write nodes to the

Demo0.01.doc

(with an amateur team of 3/4/5)

We can then revamp this for

Proper Active inference modeling

Upon more technical help!

(note that these are described as “EXPERIMENTS”)

Thus we are being liberal in proposing and :D

Hypothesizing outcomes

Flexibility include

Method to convert to more commonly known

Frameworks of robotics

BehaviorTrees (BT) . Hierarchical Task Networks (HTN)

MotorPrimitives . STRIPS planning

Onto robotics action

- umm. This could be (hopefully) readily done
- simply by adding a conversion node
- and a conversion table
- (for state / action division onto just actions)

Meanwhile for the checkpoints we *might be

Able to emulate a different node

To forward the completion trigger

And that node could then be programmed / cached

Seperately; however. That might cost a lot of

Unoptimized process

Mayhap we do an experiment

Before moving on to

Combination / revamps

Summary

We intend to build the underlying framework

(with CYC –

Queue- Vision+Theme Decision Nodes

Containers (mem) - and lots of transcribing agents)

For a ROS-compatible cat

(demo 0.01 doc)

These are then a conceptually both the

Sequence-Set; State-Instruction;

and Action Instruction;

Or atleast the same primitive on which

They are all stored / re-copied for usage

References

“Along with advances and ideas posted around Youtube Documentaries and Interviews:

Such as: (on bio-inspired agents)

https://www.youtube.com/watch?v=8OhMmjlYvxU

https://www.youtube.com/watch?v=6DrCq8Ry2cw

https://www.youtube.com/watch?v=ZTE-JVd_QkA

https://www.youtube.com/watch?v=L5bQnyq4OtQ

https://www.youtube.com/watch?v=TXlfCY4m9jU

.. many more