

## Project Documentation

First iteration

### - **Made a 2d world of cat associating bush with color with hunt**

(woop; we handwaved away the openCV part or any sort of colorlogging )

(this is only a depiction of what a barebone loop looks like)

::

(rat secretly has a favorite bush where it spawns twice as likely)

(cat just tries to prefer guesses as he knew)

To depict a simple loop of

Action Plan -> ROAM -> HEADBUSH -> ROAM

Headbush is a decomposable (also ROAM for that matter); but for this example

.

-HEADBUSH- is decomposable to contain choosing components to source

(this is supposedly epigen hardcoded

in creatures as part of FoodPlausibility / anysuch similar biological concerns regarding what is associated with food + activity to food)

.

A clump of ActionPlans that contain:

“Which bush was the one most associated with success?” / “which color was?” |

-> food

- Is hardcodedly summoned during modRoam (roam is a hardcoded too!)

Second iteration

## Introduced a SLEEP TRACKER . EPIGENETIC STRESS & NOVEL^

STRESS EPIGENETIC -

>> ( as a bio analogy)

This should be at the point where the Cat sleeps / has the chance to recall

The success of its recent hunt; it evaluates the selection of

Action Plan -> ROAM -> HEADBUSH -> ROAM

Under the parent of modRoam

Or modRoam / decomposed onto / p\_initial and p\_scout

(we could easily introduce p\_foodplausibility or p\_retract

And then decompose those too)

>>

In the case of

STRESS^^ and NOVEL^ token which as the paper suggest

Would be at the Chempool of modRoam

(under p\_initial or whatever parent node we want to encompass an ActionPlan)

/

(this would be recorded as the topmost THEME in the AC Depiction of the paper)

## Stress & Novel:

- Which plays when two initial guesses either results in a zonk (stress); then tries something else as a initial guess

Or two initial guess results in a instant-catch; then opts something novel next run (as initial guess); a demonstration of further possibility of nesting parts of the agent later with a Epigenetic rule

Stress: two same deliberate choices that didn't lead to much (color association -> choice of color)

Novel: two same deliberate choices that did lead to instant much (color association -> choice of color)

Both is demonstrated in this demo

To plausibly cause the cat to shake-up its choice-list next time;

Of course this is absurdly simplified; in the real world; this choice bracket would be composed of

(N number : who knows ; dozens? Hundreds? Thousands?

As much as a Breath x Focus x Tempo x Theme under another Epigenetic Bucket?)

We are trying to demonstrate how to implement a small part of epigenetic choicemaking

And how it can be deliberately nested (the whole thing could be)

To exactly the same choice structure; only enveloping this one; depending on which

Level of theme / AC that we want to zoom in on; (or formulaicly solved if decidedly repetitive\*)

.

## **We also applied this on a SLEEP & TEMPMEMORY system;**

Where the cat logs a barebone memory (IB – RB – HN – CR)

(initial bush - rat caught in which bush - hunting duration - rat caught or not)

And these patterns become

The repeated / determinant of whether Epigenetic trigger occurs in that node

As to link to the paper;

This is basically trying to isolate a small part of the computation chain;

Where the cat already:

(we only try to depict some parts!)

- Logs objects that It sees from its template lists (understands bush n rat)
- Logs the color of that object to that template; and make a recognition of that object; in that color

- Logs the behavior of that object
  - Procurs an action plan from the template (ROAM-HEADBUSH-ROAM) as a sample; which is a epigenetically
  - In the future; this could be edited also / introduce an evaluation function within sleep; and we can make a longer chain with optional or editable parts; or breakable
  - After procuring ; it logs what happens during that action chain;
  - And thus logs it in the aforementioned (mock term) (just a pictogram)
- IB-RB-HN -CR

## Overall we try to:

Iteration 1:                    show    roam -> headbush -> roam -> headbush -> roam

As a sample of actionplan chain that can be decomposable to other smaller parts

As a sample of actionplan with components that can source inferences from

Epigenetic hardcode to improve / learnable inference or other

(trying to depict simple game loop) (to add to the agent on)

Iteration 2 :                    this time we introduce how a Epigenetic (STRESS & NOVEL)

Might be introduced; in this case we introduce them as a Hook tracker

Operating upon pattern-based memory ; that gets compared during Sleep period

We try to..

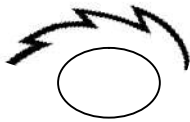
Highlight parts to improve; chempool n such should be a container with its own tally (chemical representation with their own function); in this case; we could only emulate persisting Stress<sup>++</sup>(binded on a bush); or Novel<sup>++</sup>(binded on a bush) instead of the container which can contain any arbitrary chemical type and rules

Iteration 3 :                    meanwhile for iteration 3.. we try to expand further..

As an example of the benefit of doing it this way

# We Introduced SANIC

---



Thas right

This is a LIGHTBLUE MOUSE

That LOOKS LIKE A MOUSE

But IS PROBABLY NOT A MOUSE

Cat catches it; logs the color (lightblue)

AND WE CAN INTRODUCE GENERATIONAL TRAUMA!!!

WATCH SIMULATION 3

As CAT LEARNS NEVER TO MESS WITH SANIC!!

(we demonstrate a longtail demonstration of Sleep-recall increasing Trauma vs Lightblue)

...

(syke)

Its not that hype .\_.)

We try to: (current color mechanisms are.. not yet :p)

- Show how Color Impressions could be recorded in a cluster of its own future source of inference
- On different levels of association; be it with objects or not;
- Or be it when the cat tries to generate an impression over a object if only initially by its color
- In this case we try to
- Integrate the idea of color LIGHTBLUE
- As a tally for increasing trauma;
- And how we might eventually program a hardcode to slip in any actionplan / node / epigenetic uplayer of the actionplan / a independent module
- A hardcode that perhaps makes a consideration weight with lingering chemical
- To RUN or try to treat a certain color with certain threat
- (biologically; this is usually due to THREAT-SAMPLER that is a form of ensemble level topdown check; that occurs more; or gets highlighted more; depending on
- The entity's confidence / trust over its environment / current safety zone / sphere.

(a prior to sleep checker)

We could improve on future by:

- Using actual color logging
- Using actual object / concept templates to improve
- Using actual plan templates that is explained starts at which level of ensemble
- Or what module as origin
- Using actual modstream FE dynamics to quickly determine a threshold of
- Either LEARNING / put onto FOCUS / put onto FORMULAIC (quick dismissal / quick resolution)
- Using actual FE discrepancy and gradients for learning methods

Much thanks!