

Sentient companions predicted and modeled into existence: explaining the tulpa phenomenon

Kaj Sotala

Structure of talk

- What's the tulpa phenomenon?
- Do we have reason to believe they actually exist?
 - Children's imaginary friends
 - Illusion of Independent Agency
- Explaining the phenomenon

What's the tulpa phenomenon?

”A tulpa is an entity created in the mind, acting independently of, and parallel to your own consciousness. They are able to think, and have their own free will, emotions, and memories. In short, a tulpa is like a sentient person living in your head, separate from you.” (tulpa.info)

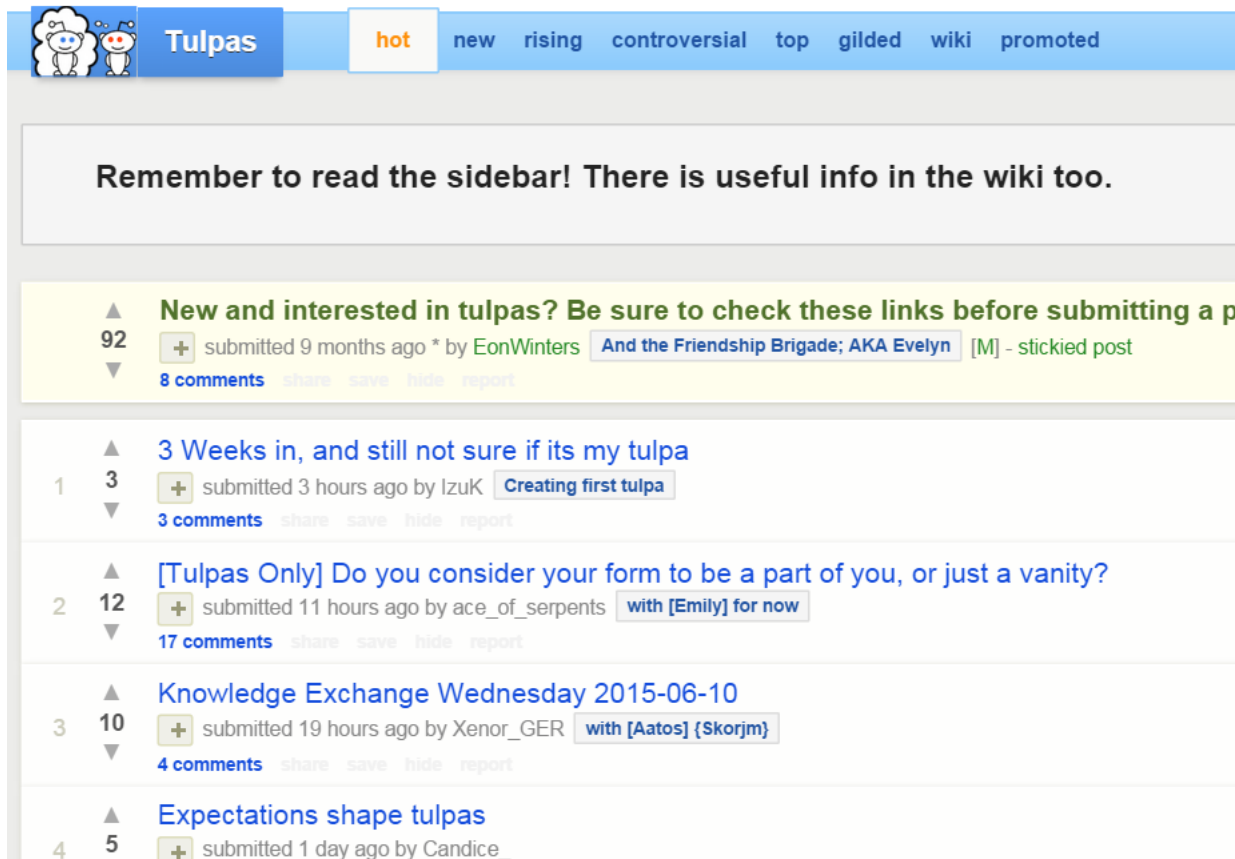
What is a tulpa?

A tulpa is an entity created in the mind, acting independently of, and parallel to your own consciousness. They are able to think, and have their own free will, emotions, and memories. In short, a tulpa is like a sentient person living in your head, separate from you. It's currently unproven whether or not tulpas are truly sentient, but in this community, we treat them as such. It takes time for a tulpa to develop a convincing and complex personality; as they grow older, your attention and their life experiences will shape them into a person with their own hopes, dreams and beliefs.

The purpose of this site is to provide information about tulpas, to guide tulpa creation, and to host a community for discussion and research of the phenomenon.

[What is a tulpa?](#)

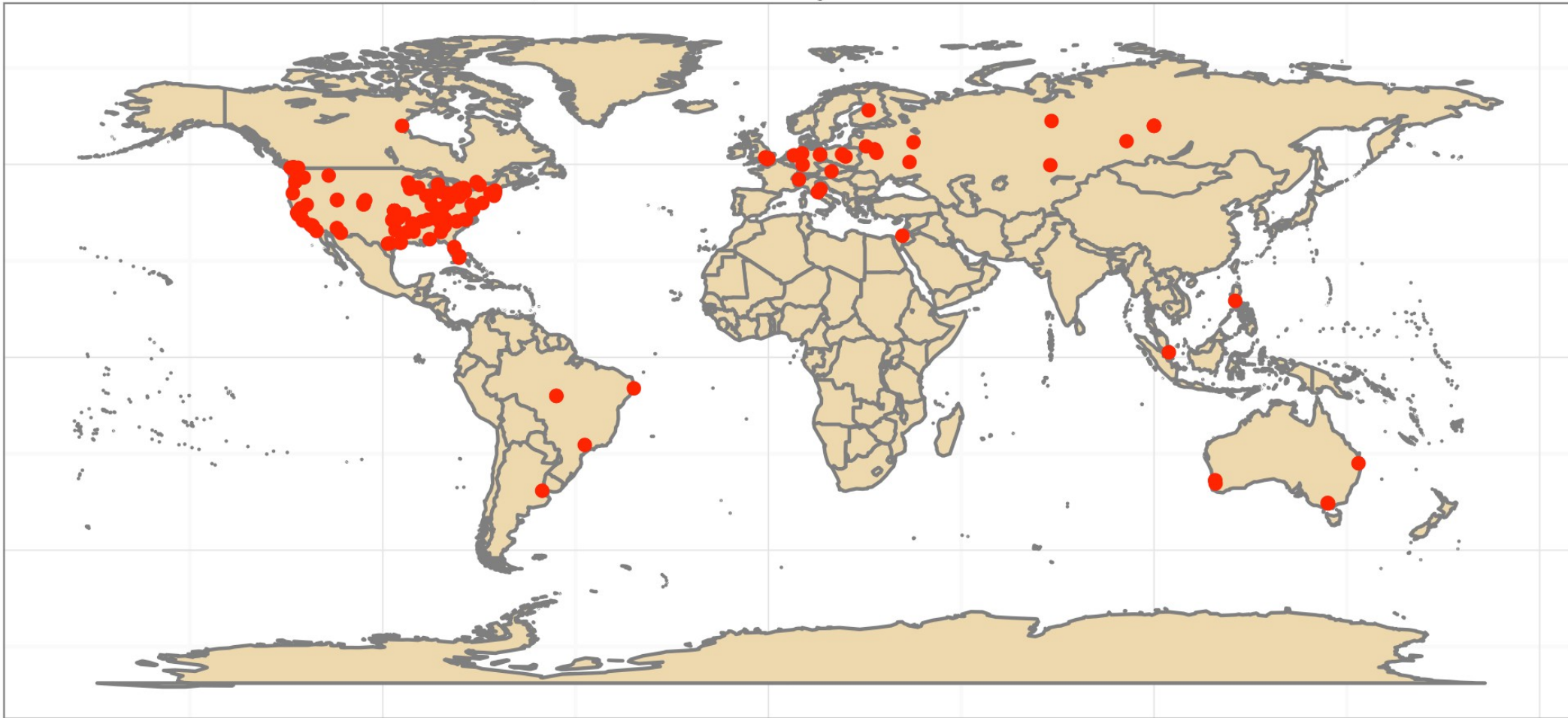
[Frequently Asked Questions](#)



The screenshot shows a forum interface for 'Tulpas'. At the top, there is a navigation bar with icons for a tulpa and a robot, and tabs for 'hot', 'new', 'rising', 'controversial', 'top', 'gilded', 'wiki', and 'promoted'. Below the navigation bar is a grey box with the text: "Remember to read the sidebar! There is useful info in the wiki too." The main content area displays a list of forum posts. Each post includes an upvote/downvote arrow, a score, the post title, the author, the submission time, and a list of tags. The posts are as follows:

- Post 1:** Score 92. Title: "New and interested in tulpas? Be sure to check these links before submitting a post". Submitted 9 months ago by EonWinters. Tags: "And the Friendship Brigade; AKA Evelyn", "[M] - stickied post". 8 comments.
- Post 2:** Score 3. Title: "3 Weeks in, and still not sure if its my tulpa". Submitted 3 hours ago by IzuK. Tag: "Creating first tulpa". 3 comments.
- Post 3:** Score 12. Title: "[Tulpas Only] Do you consider your form to be a part of you, or just a vanity?". Submitted 11 hours ago by ace_of_serpents. Tag: "with [Emily] for now". 17 comments.
- Post 4:** Score 10. Title: "Knowledge Exchange Wednesday 2015-06-10". Submitted 19 hours ago by Xenor_GER. Tag: "with [Aatos] {Skorjm}". 4 comments.
- Post 5:** Score 5. Title: "Expectations shape tulpas". Submitted 1 day ago by Candice_.

Tulpamancers by Geolocation



(Veissière, 2015)

Reported properties:

- Sentience

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- Sentience
- Appearance as mental speech, hallucinations, tangible entities

Reported properties: mental speech

▲ Is my tulpa actually talking to me?

8

submitted 1 year ago by Maximillion856 [Et Lucrezia](#)

▼

I will ask her questions and before I even finish the second word I hear an answer in my own voice and I assumed this was me parroting.

[10 comments](#) [share](#) [save](#) [hide](#) [give gold](#) [report](#)

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▲ [-] MrTelecaster [\[Khoja\]{Roland}](#) 3 points 1 year ago

▼ [I used to do that. I thought it was stupid to wait for him to finish speaking when I could feel his thoughts and knew what he was asking.]

[permalink](#) [save](#) [give gold](#)

Reported properties:

- Sentience
- Appearance as mental speech, hallucinations, tangible entities
- "Possession"

Reported properties:

- Sentience
- Appearance as mental speech, hallucinations, tangible entities
- "Possession"
- "Switching"

Do they actually exist?

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Children's imaginary friends

- First known study in 1893
- Comprehensive psychological literature
- Common in the West (claimed 65% of children), less so in more traditional cultures



Do they actually exist?

Children's imaginary friends

- Nobby is an invisible 160-year-old business man who talks to the child in between trips to Portland and Seattle. (Taylor 2003)



Do they actually exist?

Children's imaginary friends

- "Dipper" is an invisible flying dolphin who lives on a star, never sleeps and is "very very very very fast." He is "about the size of a regular dolphin, but covered with stars and all kinds of shiny stuff." (Taylor 2003)



Do they actually exist?

Children's imaginary friends

- "Pepper, Crayon, and Golliwod" are three invisible "sheas," a type of invisible flea. Pepper is pink with pink hair, Crayon is plaid, and Golliwod is black with black hair. The child carried them around and protected them from the evil planet aliens who were looking for them. (Taylor 2003)



Do they actually exist?

Children's imaginary friends

Types of Invisible Imaginary Companions (N=236)

Type of Invisible IC	Child Report	Parent report	Retro Report	Total	Percentage
Ordinary Child	35	10	18	63	27%
Magical Child	21	6	13	40	17%
Baby	5	2	4	11	5%
Older Person	23	4	2	29	12%
Animal	23	9	12	44	19%
Superhero	2	0	5	7	3%
Enemy	4	1	2	7	3%
Ghost, Angel Presence	4	0	9	13	5%
Invisible Self	2	0	2	4	2%
Other	6	0	12	18	9%

Are these evidence for tulpas?

”Many a time I have interviewed a child about an IC - the child observes as I listen carefully and write down whatever is said. Then at some point in the interview, the child is very likely to pause, look me in the eyes and say "You know, it's just pretend." (Taylor, 2003)

On the other hand...

- Sometimes partially autonomous
- E.g. Hood and Bing, Bing would often go missing
- Children sometimes complain of their behavior



Illusion of Independent Agency

”The illusion of independent agency (IIA) occurs when a fictional character is experienced by the person who created it as having independent thoughts, words, and/or actions.”
(Taylor, Hodges & Kohányi 2003)

IIA in fiction authors

- Observing events or having them described by the characters
 - "I see my characters like actors in a movie. I just write down what they say."

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IIA in fiction authors

- Observing events or having them described by the characters
 - "I see my characters like actors in a movie. I just write down what they say."
- Characters having their own identity
- Having to argue with the characters
- In one study of self-identified writers (n = 50), 92% reported at least some level of IIA

IIA in fiction authors

I live with all of them every day. Dealing with different events during the day, different ones kind of speak. They say, "Hmm, this is my opinion. Are you going to listen to me?"

IIA in fiction authors

I was out for a walk and on my way to the grocery store. I wasn't really thinking all that deliberately about the novel, but suddenly, I felt the presence of two of the novel's more unusual characters behind me. I had the sense that if I turned around they would actually be there on the sidewalk behind me.

Explaining the phenomenon

It's probably not schizophrenia

- Taylor, Hodges & Kohányi (2003): writer mean score on Dissociative Experience Scale 19, general population sample has mean of 8 (significant at $p < .001$)

It's probably not schizophrenia

- Taylor, Hodges & Kohányi (2003): writer mean score on Dissociative Experience Scale 19, general population sample has mean of 8 (significant at $p < .001$)
- Schizophrenic mean 18; however, writers had low scores on the *amnestic experiences* and *derealization and depersonalization* subscales, high on *absorption and changeability*

It's probably not schizophrenia

Only about 24 of 141 (17%) tulpamancers self-reported being diagnosed with mental illness (Veissière 2015), including:

Asperger's syndrome 25% (4% of total)

Attention Deficit Disorders 21% (4% of total)

General anxiety 18% (3% of total)

Depression 14% (2% of total)

Obsessive Compulsive Disorder 11% (2% of total)

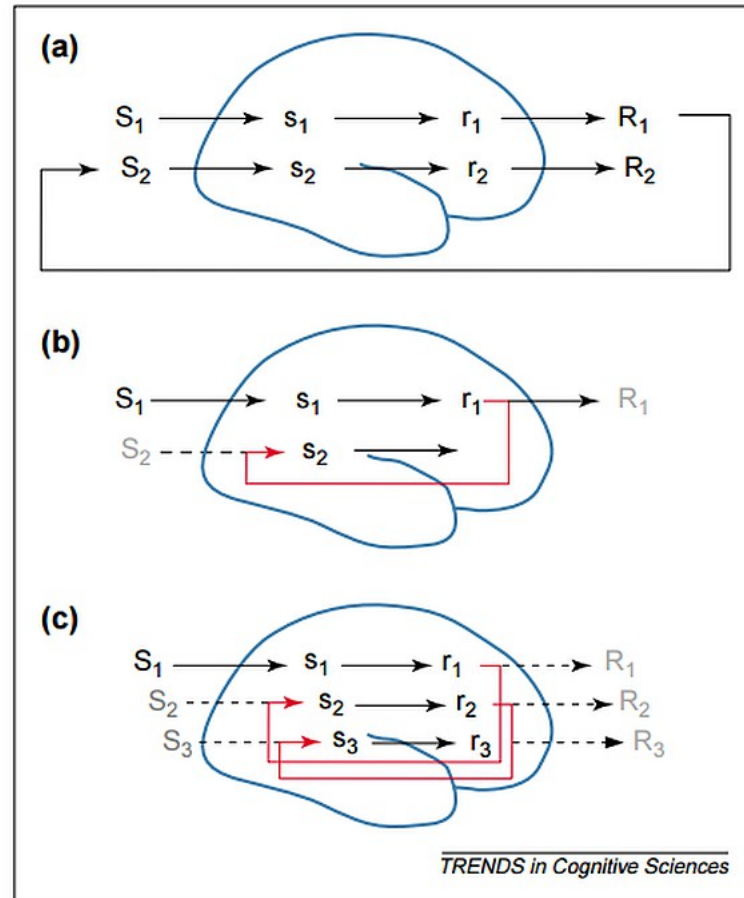
A possible hypothesis

- Imagining something is similar to perceiving it
- We have evolved to model and predict other people
- Action and inference deeply linked

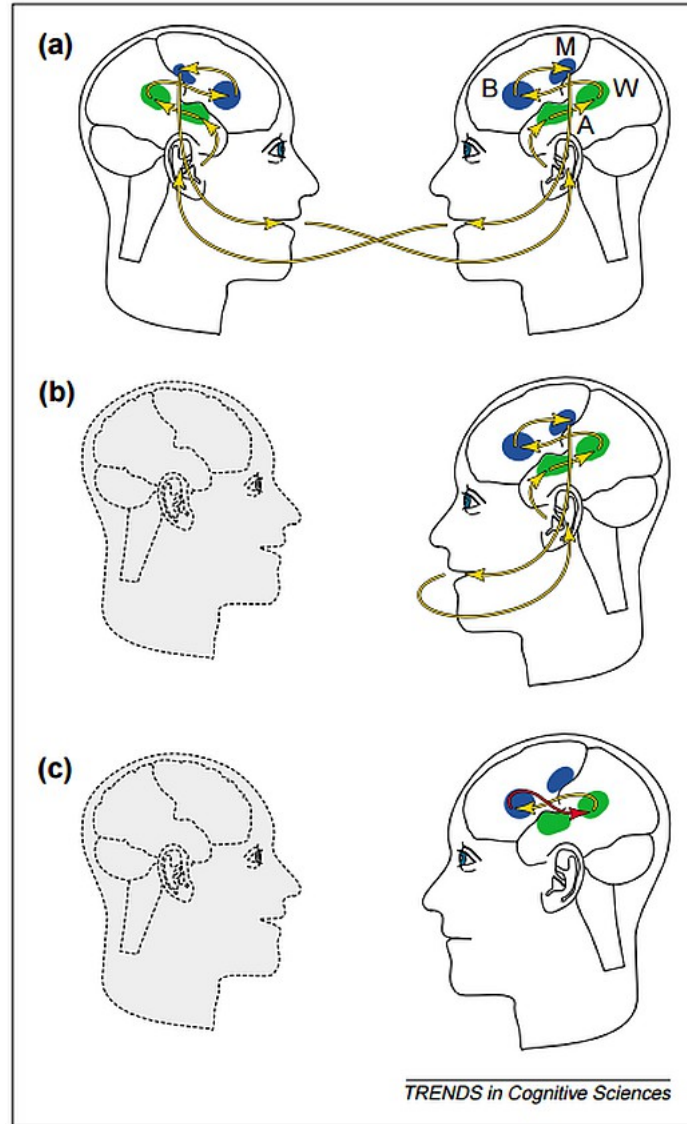
Simulation hypothesis

- Simulation hypothesis: "imagining perceiving something is essentially the same as actually perceiving it, only the perceptual activity is generated by the brain itself rather than external stimuli". (Hesslow, 2002)

Simulation hypothesis



Simulation hypothesis



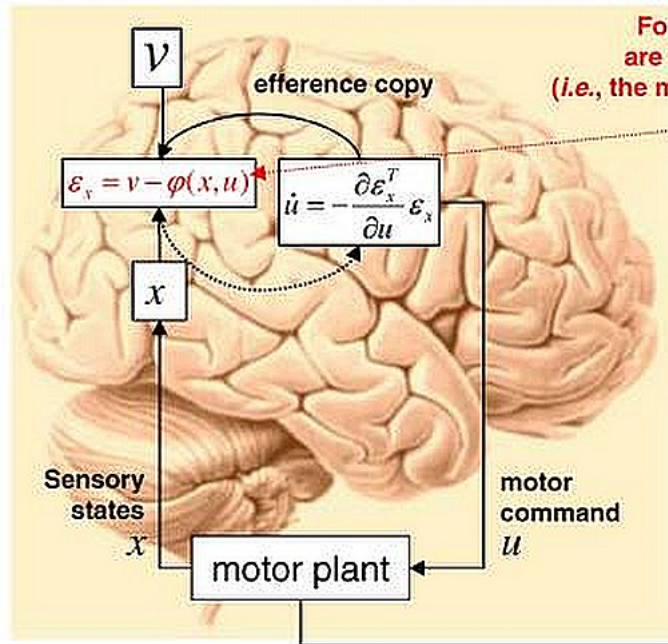
We are people-modelers



Simulation people requires models of them

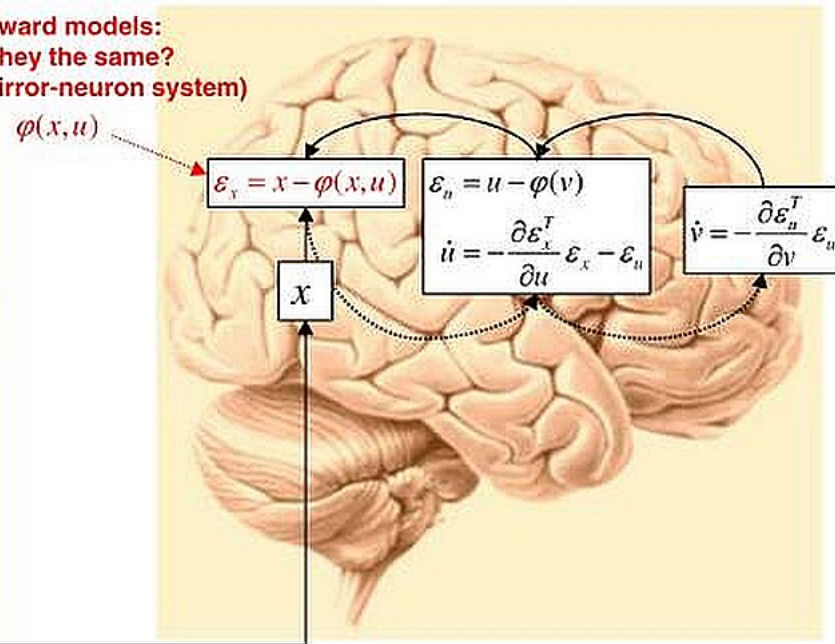


Optimising action



Simplified scheme for **motor control**: The motor plant receives commands (u) and changes the sensory input (x). These commands are constructed by a controller (inverse model) to minimise the difference between the desired trajectory of the states (v) and those predicted by the forward model. The forward (predictor) model is a function of the [efference] copy of the motor command. In this case, the goal is known and only u is optimised. The inverse model or controller is represented as a recognition function that minimises prediction error by gradient descent (the dot above a variable means rate of change).

Inferring goals from action observation



Simplified scheme for **action-perception**: A hierarchical generative or forward model of sensory states is inverted to infer their [unknown] causes. These causes include the motor commands (u) of the observed agent that are inferred by minimising the difference between the observed and predicted states (using a forward model of the motor plant). The agent's goals are inferred by minimising the error between the inferred commands (u) and those predicted by their forward model, which is a function of goals.

(Kilner, Friston & Smith 2007)

Tulpa development loop

- Generative model of tulpa hypothesizes an action the tulpa might take given the model

Tulpa development loop

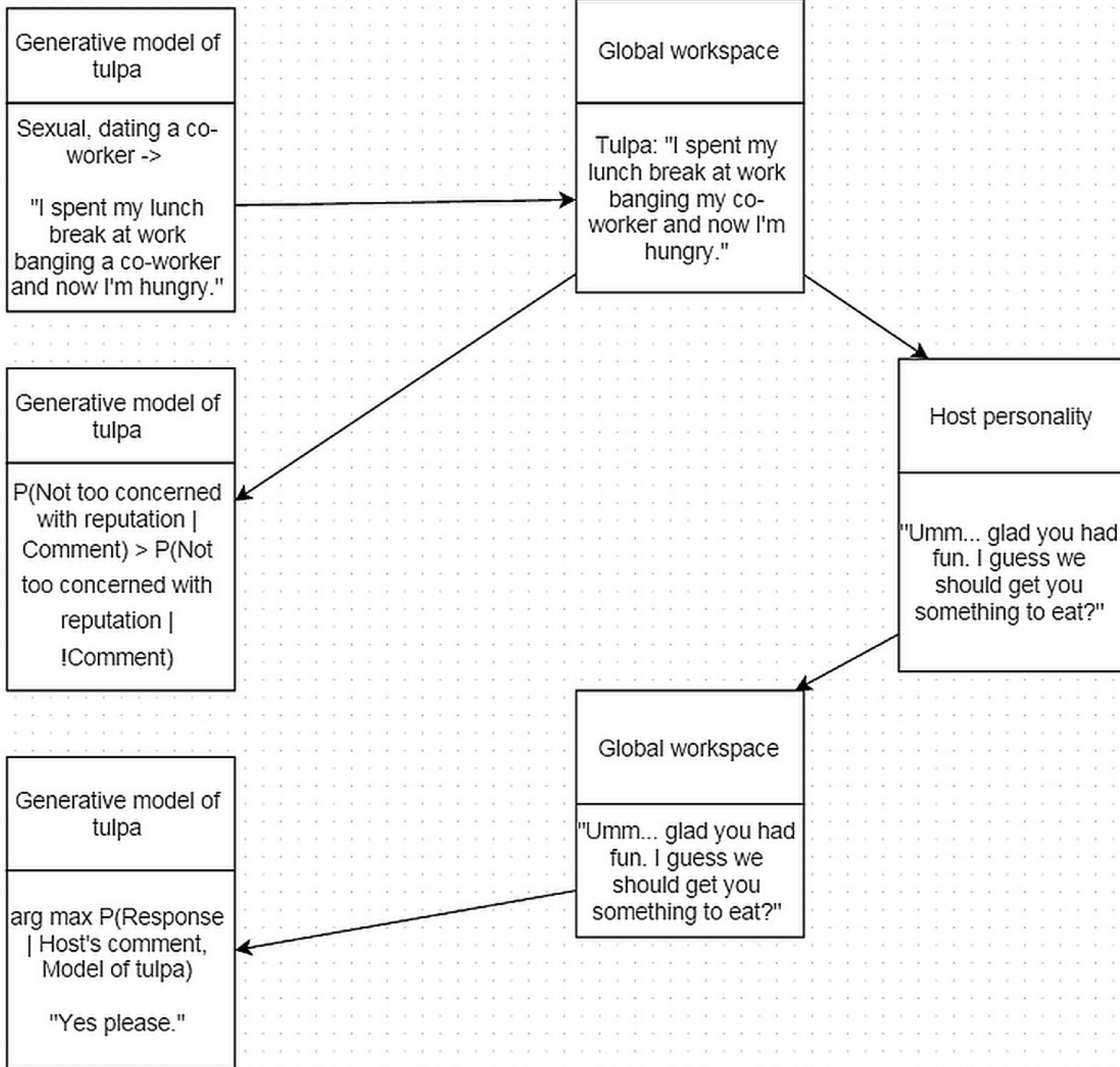
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- Generative model of tulpa hypothesizes an action the tulpa might take given the model
- Action gets broadcast into global workspace (Baars 2002, 2005) and fed back into model, updating it
- Host personality responds to action
- Model of tulpa infers most likely reply given host's response



References

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