

Simulation, Recruitment, and Cooperation

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Plan

- 1: Recruitment as a Form of Simulation
- 2: Features of Recruitment-Heavy Simulations
- 3: Recruitment-Unsupportive Settings
- 4: Cooperation as Engineering Simulation

1. Recruitment as a Form of Simulation

The Recruitment Question:

Does ‘simulation’ include, or contrast with, ‘recruitment’?

Simulation: representing another mind using an internal model that resembles it.

Recruitment: representing another mind by projecting your pre-existing mental states onto them.

Recreation: representing another mind by forming imaginative/offline/pretended/simulated counterparts of their mental states.

1. Recruitment as a Form of Simulation

Why does this matter?

For understanding theories which assign 'simulation' a central role in social cognition:

Simulation Theory (ST): Social cognition always involves simulation.

By extension, for understanding the following thesis:

Empathy-as-Simulation (ES): Empathy always involves simulation.

I will assume ES, and ask what it would imply if combined with a recruitment-inclusive definition of simulation.

1. Recruitment as a Form of Simulation

Classic statements of ST suggest a recruitment-inclusive sense of simulation:

“...it seems far-fetched to suppose that my ability to gauge what will amuse you is based on a theory of humor (of what amuses people). I do not possess any general theory of this sort. More plausibly, I gauge your probable reaction to a joke by projecting my own.” (Goldman 1995 p.172)

Seems like recruitment: my amusement is perfectly real.

- Not merely imagined
- Not essentially dependent on intending to simulate you

1. Recruitment as a Form of Simulation

“Consider, for example, the case where I try to predict someone else’s belief about the total of some numbers by doing the sum myself or the case where I try to anticipate an opponent’s chess move by considering the position from her point of view” (Heal 1994, p.51)

These examples are on different sides of the recruitment-recreation contrast:

- Doing the sum, projecting my answer: recruitment
- Considering the chess board: recreation

1. Recruitment as a Form of Simulation

“You and a friend are hiking up a mountain trail, talking. Suddenly, in mid-sentence, your friend stops in his tracks, blurts out, ‘Go back!’ then turns and walks quietly and quickly back down the trail. You are puzzled... You look for salient features in the middle distance, particularly for menacing, frightening things further up the trail, of a sort that might show up on mountain trails in the region...

Then you spot it: a large bear! ...In searching the environment for an explanation of your friend’s action, you are projecting your own beliefs about the environment onto your friend...” (Gordon 1992, pp.13-14)

Suggests recruitment of perceptual processing *as a whole* to simulate the friend.

1. Recruitment as a Form of Simulation

Opponents accuse the inclusive definition of being too inclusive:

“It begins to look like it's no easy thing to elaborate a theory about the mechanisms underlying the prediction of other people's thoughts and actions that does not include some kind of simulation. ...Simulation is everywhere. What better indication could there be that simulation is a theoretically uninteresting category?”
(Stich and Nichols 1997, p.310)

The implication is that only by using an exclusive definition of simulation can ST (and presumably ES) be an interesting thesis.

The inclusive definition groups together things we should keep separate.

1. Recruitment as a Form of Simulation

Is recruitment-inclusive 'simulation' really theoretically uninteresting?

For some purposes the exclusive sense marks an important contrast:

- For studying psychological architecture, it might make sense to emphasise the recruitment-recreation contrast.
- Particular inabilities (e.g. aphantasia) might also highlight the recruitment-recreation contrast.
- Later in this talk I will suggest some practical ways that the distinction matters.

But there are also good reasons to group them together.

1. Recruitment as a Form of Simulation

Four reasons to like the inclusive definition:

1. Recruitment and recreation are routinely combined with one another
2. The norms governing them (e.g. accuracy) are common across both
3. The skills needed for simulating well are common across both
4. Both comport with the idea that what I can understand in others is intimately tied to what I can have in my own mind

1. Recruitment as a Form of Simulation

Upshot: there are two contrasts worth marking:

- Between recruitment and recreation
- Between both and purely theoretical reasoning

The exclusive sense of 'simulation' marks the first.

The inclusive sense of 'simulation' marks the second.

1. Recruitment as a Form of Simulation

I've argued in favour of a recruitment-inclusive sense of 'simulation'.

Not just a terminological claim: attempt to 'carve at the psychological joints'.

There is a single mental process, with characteristic goals, norms, and constraints, which recruitment and recreation can both serve.

I will understand ES in terms of this definition:

Empathy-as-Simulation: Empathy always involves (inclusive) simulation.

2. Features of Recruitment-Heavy Simulations

P1: It takes fewer mental resources to use something already there than to create something new.

C1: *Ceteris paribus*, more recruitment-based simulations will take fewer mental resources.

P2: Efficiency in one part of a flexible, skillful, integrated, process, frees up resources to do the other parts better.

C2: *Ceteris paribus*, more recruitment-based simulations will tend to be epistemically better.

(Some key *ceteris*: total resources spent, whether recruitable mental states are misleading)

P3: More recruitment-based simulations will be less readily identifiable as being simulations.

C3: The best simulations may feel the least like simulations.

2. Features of Recruitment-Heavy Simulations

These claims about recruitment-density are importantly different from similar-sounding claims about automatic/‘low-level’ simulation.

When you become adept at simulating something, it becomes habitual and/or automatic.

➤ Hence the best simulations may feel the least like simulations.

Key Difference: automatisisation tends to reduce phenomenological ‘intensity’.

(If we’re interested in the motivational or affective side of empathy, this is significant.)

2. Features of Recruitment-Heavy Simulations

How does recruitment-density affect phenomenological intensity?

- Depends on the intensity of the recruited states
 - Recruiting high-intensity states may make the simulation more intense
 - This is compatible with making its status as a simulation less salient
- More recruitment-based simulations will, *ceteris paribus*, tend to be *both* more accurate/informative and more intense.

3. Recruitment-Unsupportive Settings

Recruitment-heavy simulations will be stronger both epistemically and affectively.

- In settings where there's less to recruit, simulations will tend to be weaker in both respects.

I think this can illuminate circumstances where empathy seems especially difficult.

3. Recruitment-Unsupportive Settings

First: online interactions (e.g. Zoom).

- No shared perceptual space, hence can't recruit perceptual states
 - The box that shows your own video feed is the exception, but imposes constant self-consciousness...
- Little scope for mirroring or synchronising movements, hence can't recruit motor/somatosensory states
- Nevertheless, key verbal information gets across fine

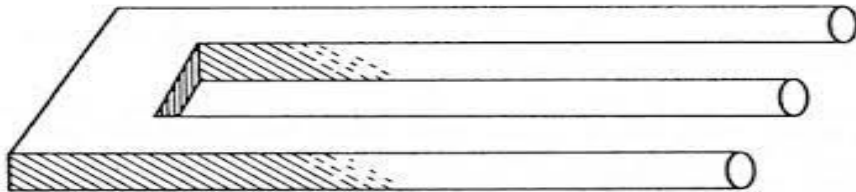
Prediction: Interactions will tend to be broadly successful but more effortful and less rewarding.

3. Recruitment-Unsupportive Settings

Second, consider others who seem particularly bad or vicious.

- Sensorimotor states may be available for rich recruitment
- But simulating the goals or values that organise their perspective runs out of recruitable material, and has to be wholly recreative.
- The effort to recreate the vicious perspective may be possible/impossible/wise/misguided. But it takes an effort.

Prediction: an unsettling sense of the uncanny, a perspective simulable in detail but not as a whole.



3. Recruitment-Unsupportive Settings

Third, consider people whose experiential background is very different from ours.

- The difficulty can't be as clearly segmented: differences likely to be holistic and subtle.
- Many of our mental states may be recruitable with only subtle inaccuracies.
- This subtle error may be easier to miss: epistemic laziness or arrogance may lead us to ignore the problem and assume commonality.

Prediction: Unstable balance between

- An easy recruitment-heavy simulation (lots of inaccuracies)
- A difficult recreation-heavy simulation (less inaccurate, maybe less informative).

4. Cooperation as Engineering Simulation

Our interactions can actively facilitate recruitment, and thus simulation.

Anything we do to increase the overlap of our salient mental states will make us more readily simulable to each other.

This includes:

- Persuading and being persuaded
- Jointly attending
- Spending time in the same environment
- Acting cooperatively

4. Cooperation as Engineering Simulation

“Seeing you struggling to get your twin pram onto a bus and noticing you have the haggard look of a new parent, a passing stranger grabs the front wheels and makes eye contact with you, raising her eyebrows and smiling. (The noise of the street rules out talking.)

In this way she signals that she is about to act jointly with you. Since you are fully committed to getting your pram onto the bus, you know what the sole goal of your own actions will be. But you also know that the stranger will engage in joint action with you, which means that, taken together, her actions and your actions will have a distributive goal. This may enable you to infer the goal of the stranger’s imminent actions: her goal is your goal, to get the pram onto the bus.” (Butterfill, 2013, p.852)

4. Cooperation as Engineering Simulation

Butterfill doesn't describe this 'inference' as simulating, or as recruiting, but the case is grist to my mill.

What haggard new parent wouldn't appreciate the cognitive efficiency of re-using an existing mental state instead of recreating a new one?

The passing stranger acts to make themselves easier to simulate by that specific parent.

(But they did so based on first grasping the parent's intentions, which may have been facilitated by shared experiential background.)

Cooperative activity and mutual empathy can sometimes be reciprocally enabling.