Interactions with a Non-Human User: Horse

A speculative interaction design project exploring empathy beyond human-centred design

What if horses could express their emotional states in ways humans can understand?

Non-human user

Empathy

Speculative interaction

Non-human User Profile

Characteristics

Prey animal

Highly sensitive

Non-verbal communication

Pain Points

Emotional signals ignored

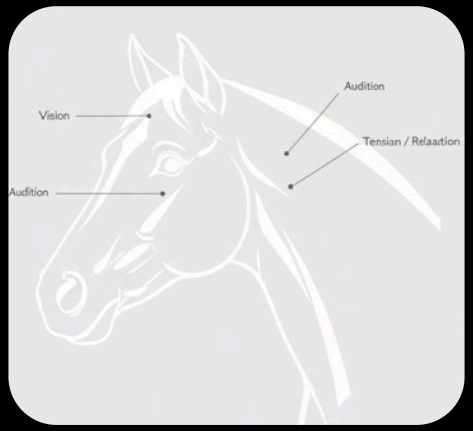
Stress misread as disobedience

Needs

Calm environment

Emotional stability

Safety



People

- Horse (non-human user)
- Trainer
- Rider
- Stable staff
- Activities

Activities

- Training
- Reacting to stimuli
- Resting
- Being handledt

PACT

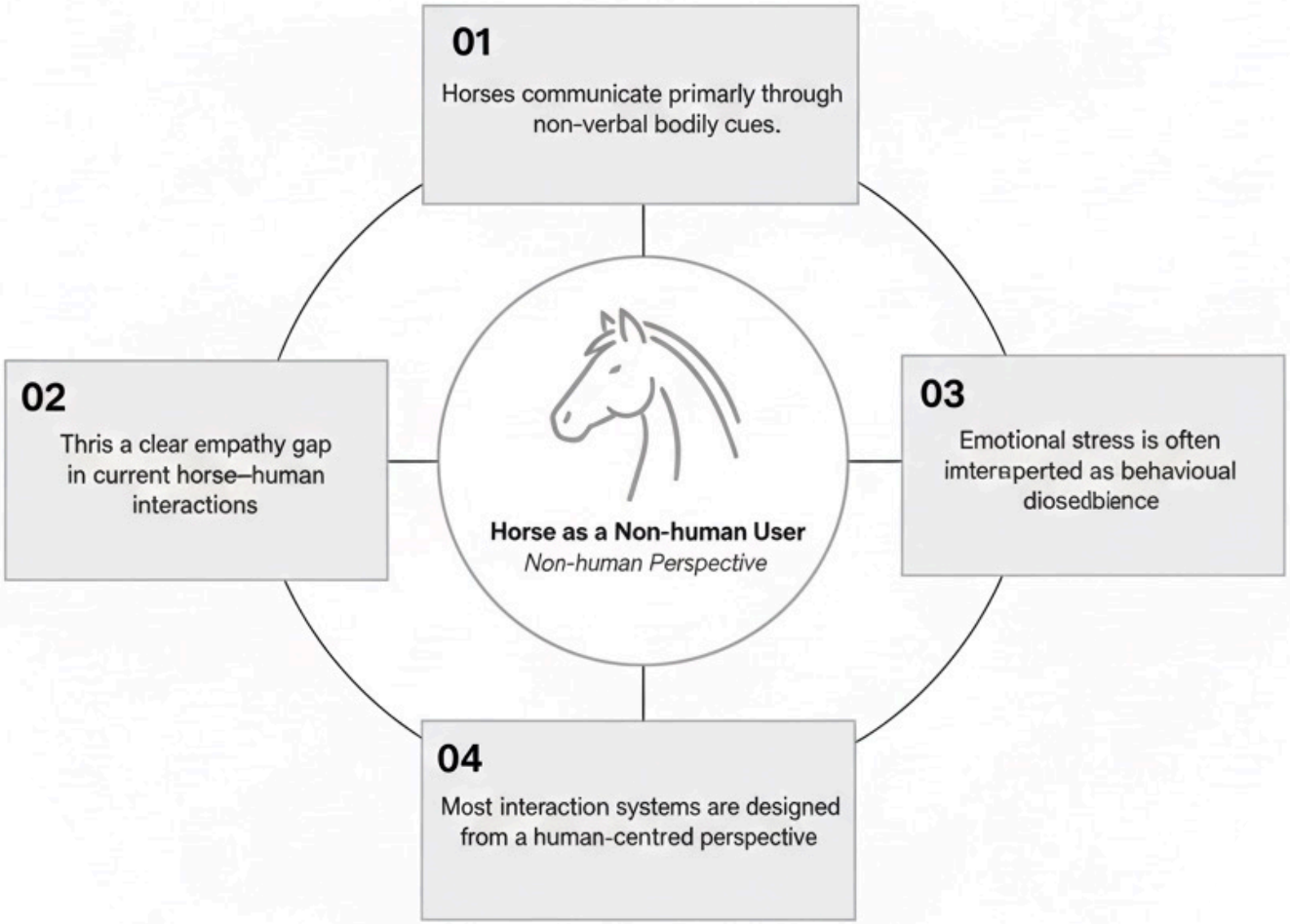
Context

- Stable
- Training arena
- Noise & unfamiliar stimuli
- Human-controlled environment

Technology

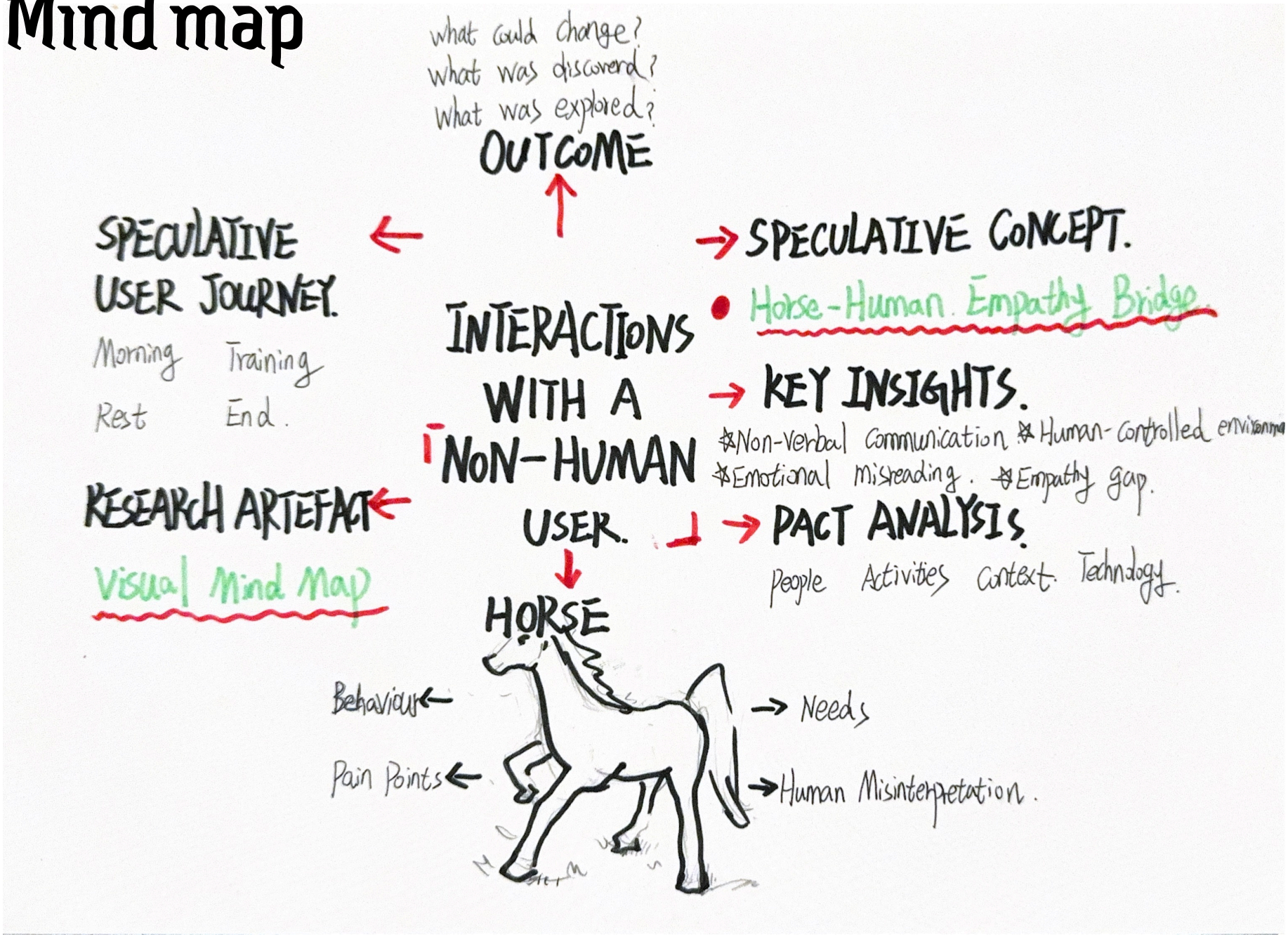
- Existing: heart-rate monitors, tracking devices
- Speculative: emotional sensing system
- Data visualisation feedback

Key Research Insights



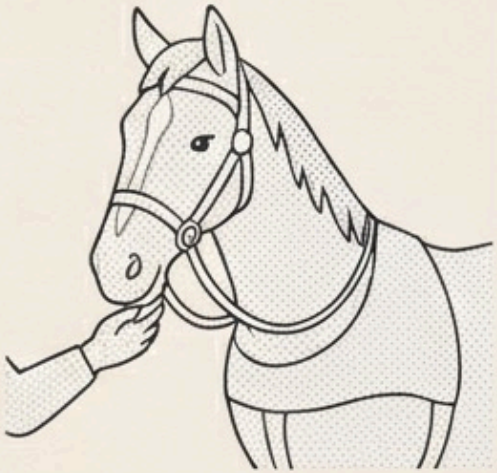
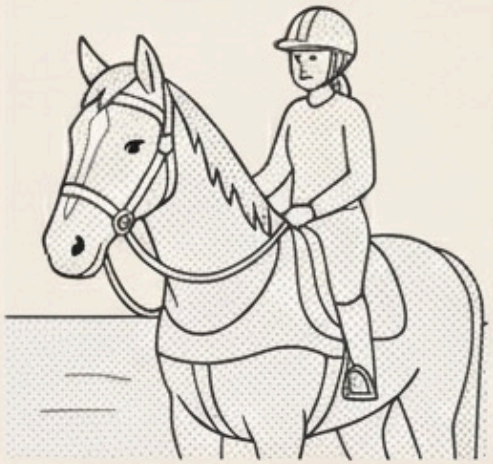
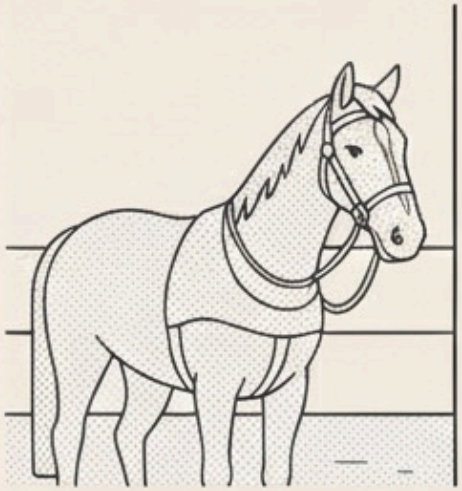
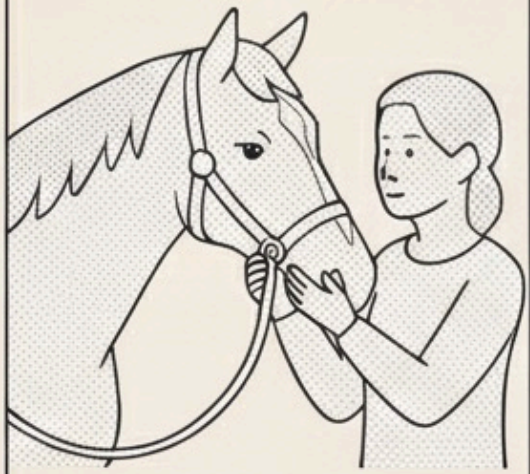
These insights reveal the need for need for interaction design approaches that prioorisite empathy over control.

Mind map


what could change?
what was discoverd?
what was explored?
OUTCOME
SPECULATIVE USER JOURNEY.
Morning
Training
Rest
End.
SPECULATIVE CONCEPT.
Horse-Human Empathy Bridge.
INTERACTIONS WITH A NON-HUMAN USER.
KEY INSIGHTS.
*Non-verbal communication *Human-controlled environme
*Emotional misreading. *Empathy gap.
PACT ANALYSIS.
People Activities Context Technology.
RESEARCH ARTEFACT
Visual Mind Map
HORSE
Behaviour
Pain Points
Needs
Human Misinterpetation.

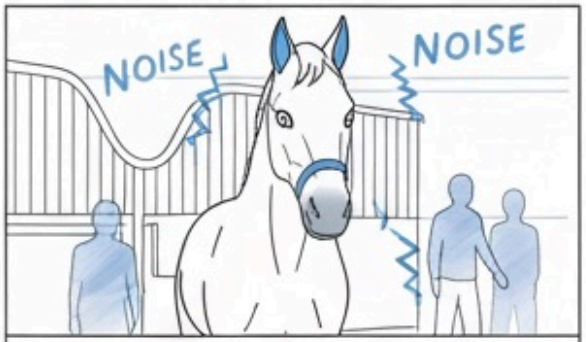
Speculative User Journey

Horse–Human Empathy Bridge

MORNING	TRAINING	REST	END OF TRAINING
			
Horse equipped with empathy hamess • Sensors activated • Mood state recorded	**Horse in training** • Physiological changes detected • AI interprets as “mild anxiety”	**Horse at rest** • Relaxed state • Environment preferences noted	**Emotional report generated** • Horse habits • Human–horse interaction quality

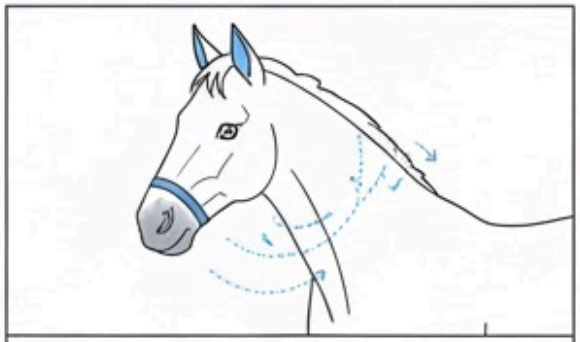
Storyboard

Environment Awareness



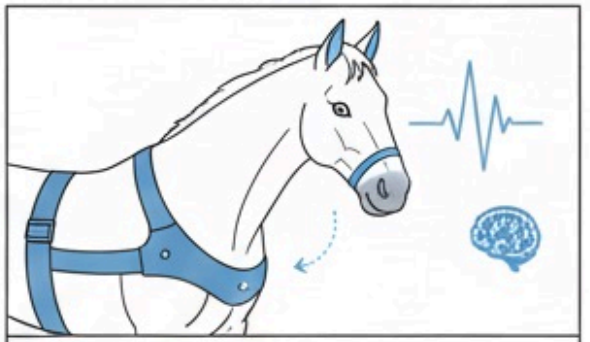
Horse experiinces a human-environment with constant senstant sensory stiuilli.

Non-verbal Signals



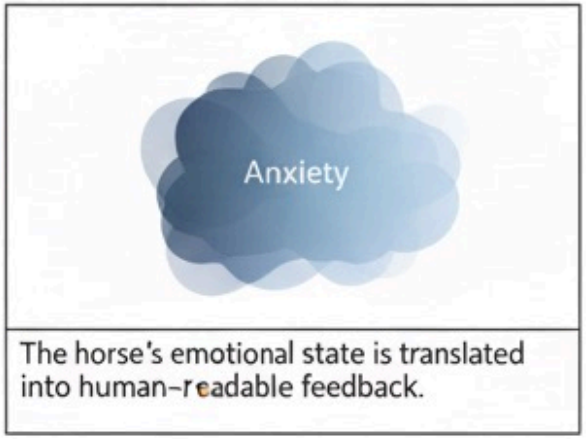
The horse expreses disconoft through subtle bodily cues, rather words.

Specuctative System Detection



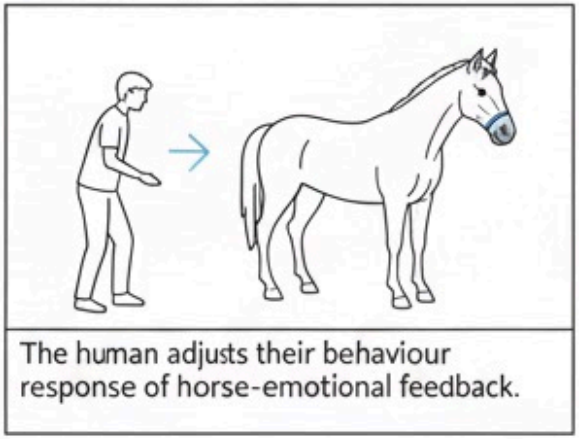
A speculative empahty system detects detects phossilcigical and behavioual changes.

Emotional Translation



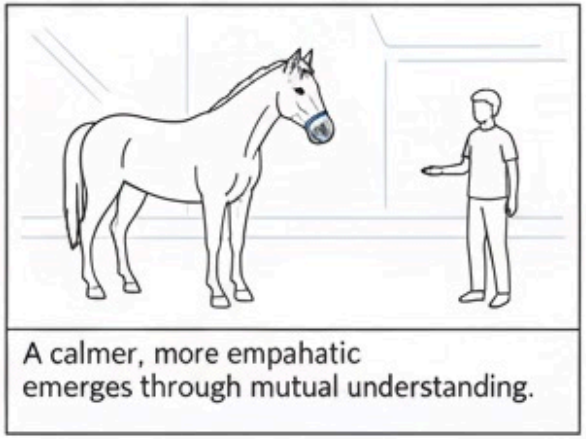
The horse's emotional state is translated into human-readable feedback.

Human Adjustrent



The human adjusts their behaviour response of horse-emotional feedback.

Shared Calm & Reflection



A calmer, more empahatic emerges through mutual understanding.

Outcome

Designing beyond human-centred interaction

1. What was explored

Horse as a non-human user
Emotional and bodily communication
Human-controlled interaction contexts

2. What was discovered

Emotional cues are often misinterpreted
Stress is mistaken for disobedience
Empathy gaps shape interaction failures

3. What was proposed

A speculative empathy bridge
Translation of emotions, not control
A shift in human responsibility

Reflection

This project demonstrates how interaction design can move beyond human-centred paradigms by foregrounding non-human perspectives. Rather than proposing a functional product, the speculative approach enables reflection on empathy, responsibility, and relational dynamics between species. By treating the horse as a legitimate user, the project reframes interaction as a shared emotional process and invites designers to reconsider who design is for and how design can listen rather than control.