



Reanimation Research Institute



The Insomnia Project

Insomnia

Prototype for acoustic animation as self-therapy

Preface

Subject suffers from insomnia, on an almost daily basis, in a regular time period approximately 3.30-05.00 a.m. Self-evaluation has resulted in a vast amount of observations and categorizations that the subject has presented to RRI as initial material to investigating possibilities of creating a therapeutic experiment integrating methods from RRI. A prototype model has been developed of physically manifesting subject condition into a group of 3 interactive sculptures, named by the subject as: **Arguments**, **Association Shells** and **Revenge Tower**. Experiments with self therapeutic interaction and adjustment of RRI methods are to be conducted based upon this prototype model.

A methodology from RRI has been proposed below, named **Schematical Score for Therapeutic Animation**. It is based on assumptions that giving a sensation of life to the sculptural representations of self-taught categories of the subjects condition, will help the subject to make therapeutic interactions and experiments, with a goal of enhancing the subjects capabilities to deal with its condition.

The all encompassing principle is that of resonance, understood as the phenomenon one can experience from a defined mass and material being injected with a specific amount and character of sonic energy, to make it give an acoustic footprint that can be clearly distinguished from the sonic energy in itself. It is assumed that this phenomenon gives an animated sensation of the material mass or object in question. The usage of acoustic feedback is in this case believed to hold both a powerful and clean method, and due to the feedbacks responsiveness to external influence, it is also assumed that feedback can enhance a sensation of an equally animated and responsive environment.

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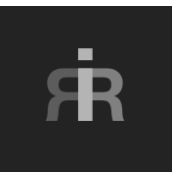
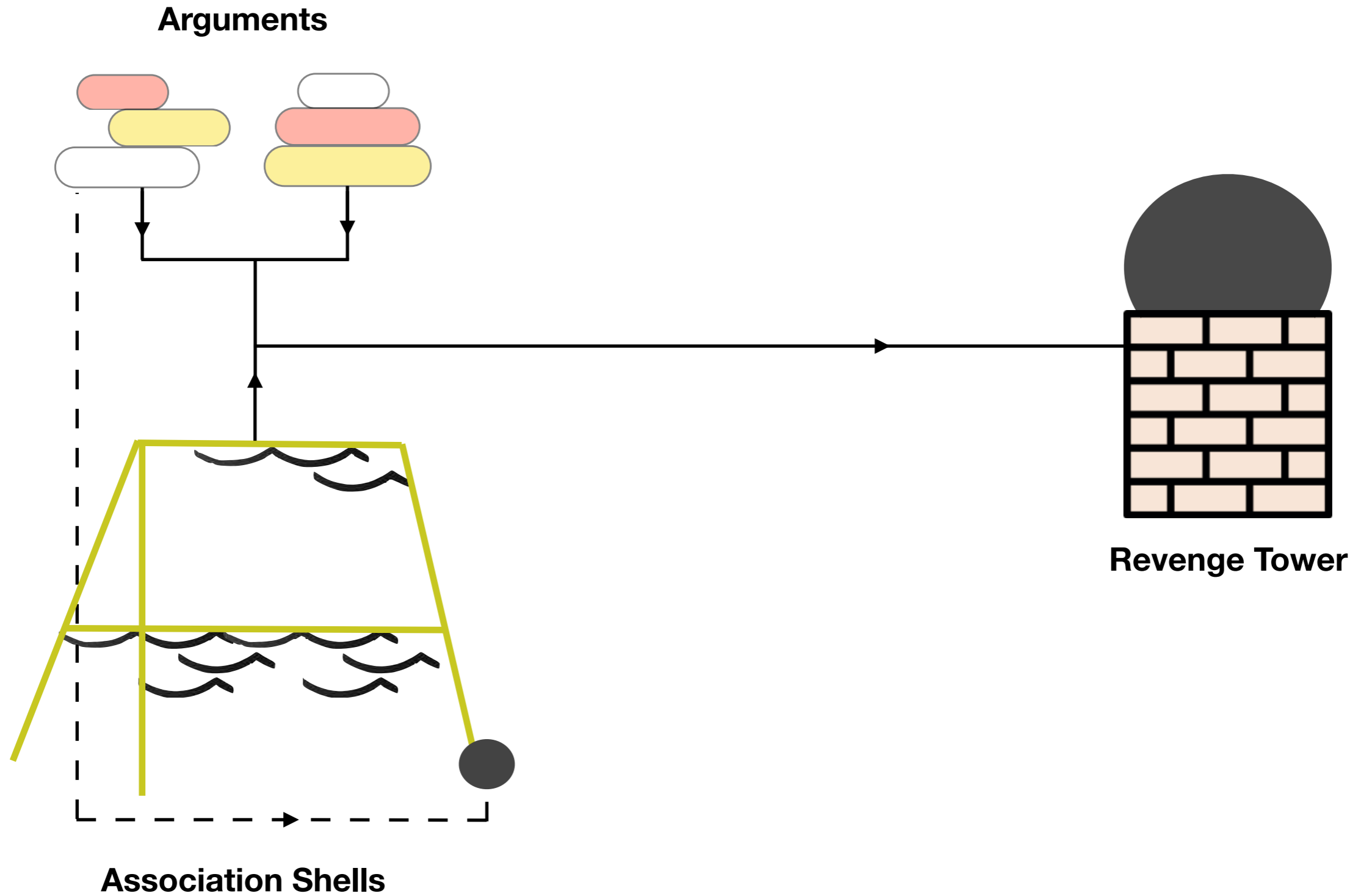
Presentational video of first lab-results

[Press link](#)



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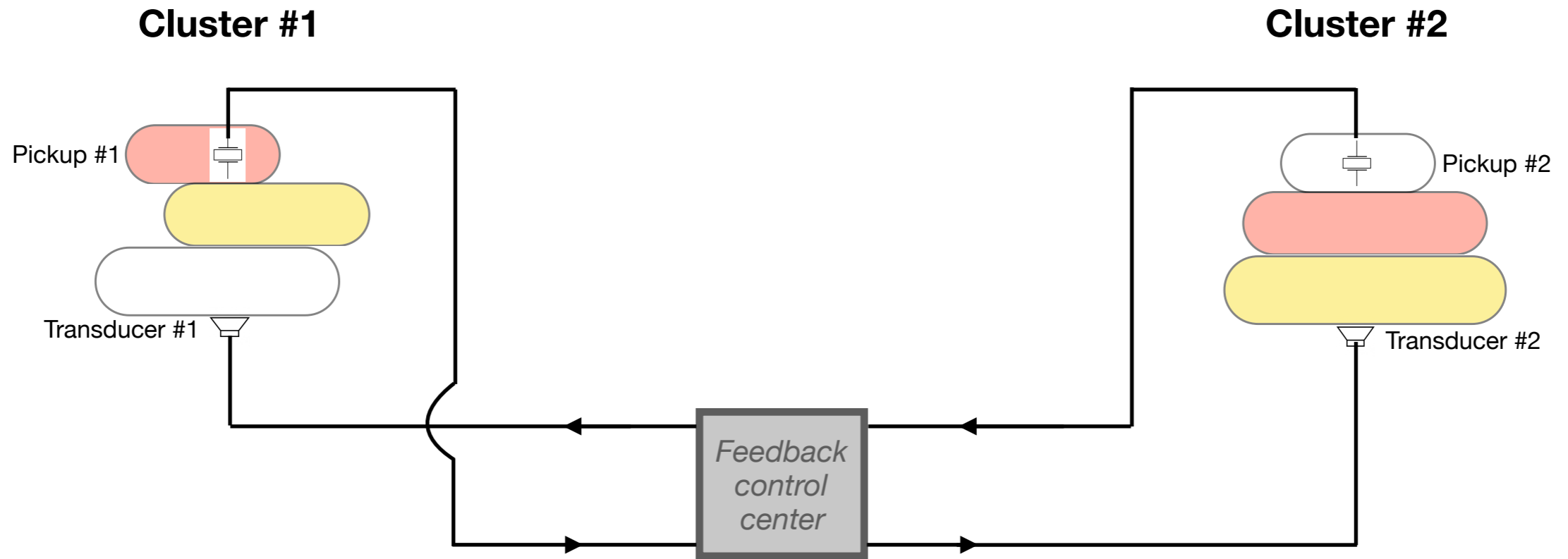
Graphic/schematic score



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Graphic/schematic score

Arguments



Therapeutic interaction processes:

#1: Changing gravitational balancepoint of argument layers



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Graphic/schematic score

Notational remarks

Arguments:

Two clusters of gipsum based layers, Arguments. *Cluster #1* is layers of loosely stabled arguments that are fast responsive to feedback, thus making them 'wobbly' in their physical and sounding appearance. *Cluster #2* is layers of arguments that are taking in and adopting feedback but due to their grounded and massive physical nature, the responsiveness is of a stable nature. If too much potential energy is build up, there's a chance of overload resulting in a massive feedback burst.

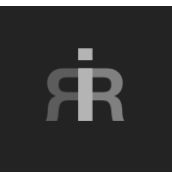
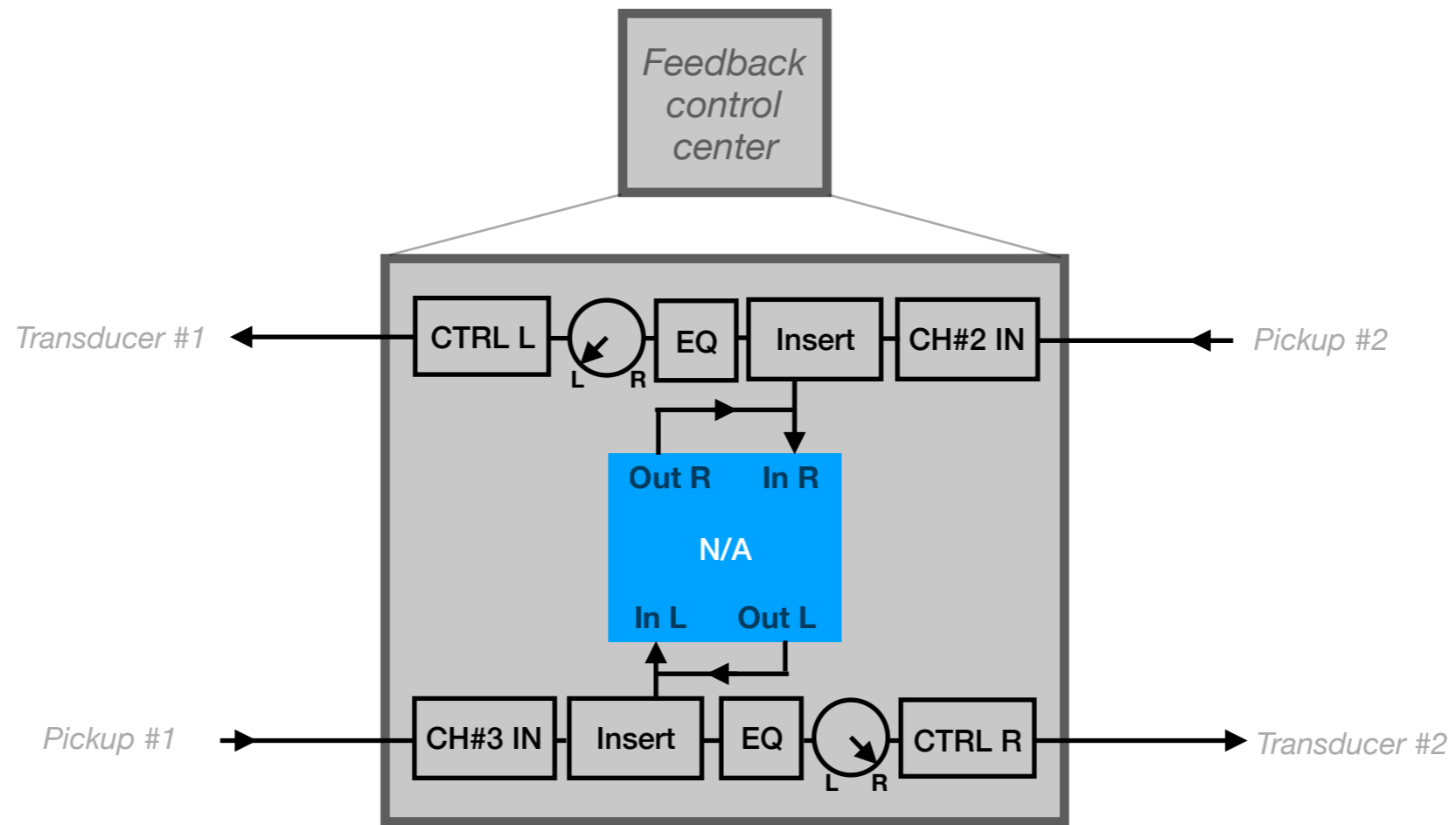
Arguments is characterized by a balance act between kinetic and potential energy that is connected in a simple 8-shaped feedback system. Balance between 1 & 2 is mandatory. 1 needs special attention to physical adjustment of layers, in order to give wobbling/ oscillation to feedback signal. 2 needs a feedback control setting that is especially focused on continuity + keeping a sharp limitation envelope, that responds quickly in case of overload of potential energy.

Due to the wobbling unstableness of cluster 1, a signal leakage from here must be fed into the second sculpture: Association Shells, namely the foot basis of the sculpture. In order to enhance a sensation of this signal as a more subliminal signal, a certain amount of echoing may be beneficial.
Remark on the limitations of categorization and how this can be viewed in a constructive manner.

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Graphic/schematic score

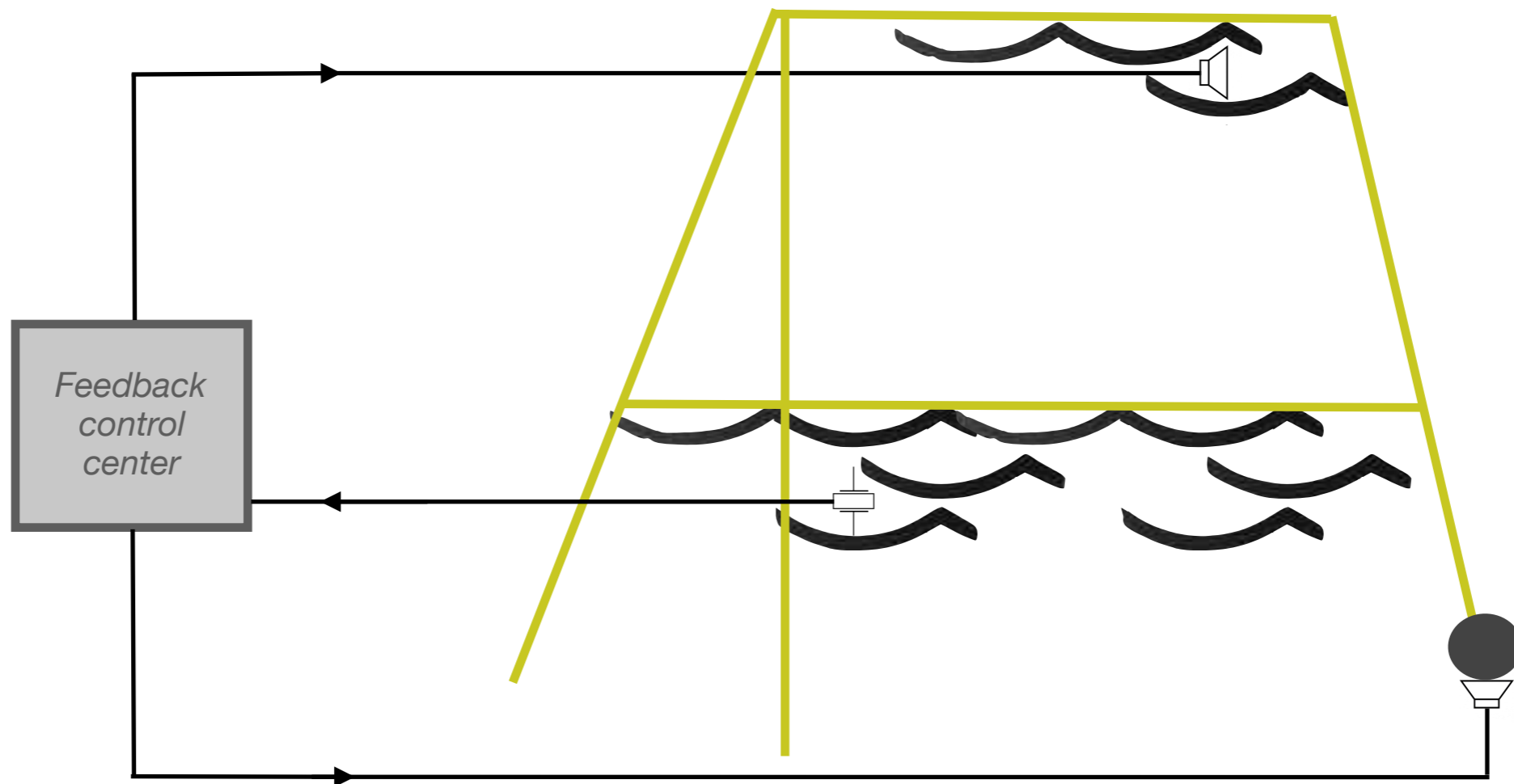
FCC descriptive example



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Graphic/schematic score

Association shells



Therapeutic interaction processes:

- #1: Bending shells changes resonance frequency
- #2: Dampening shells changes responsivity



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Graphic/schematic score

Notational remarks

Association shells

A scaffolding-based structure with large, thick membranes stretched out and connected to the structural form at various neural nodal points. Vast number of internal feedback channels in the structure, most clearly resonating in the membrane parts. One leakage chamber in foot of scaffolding, echoing the fluctuations from *Arguments: Cluster #1*.

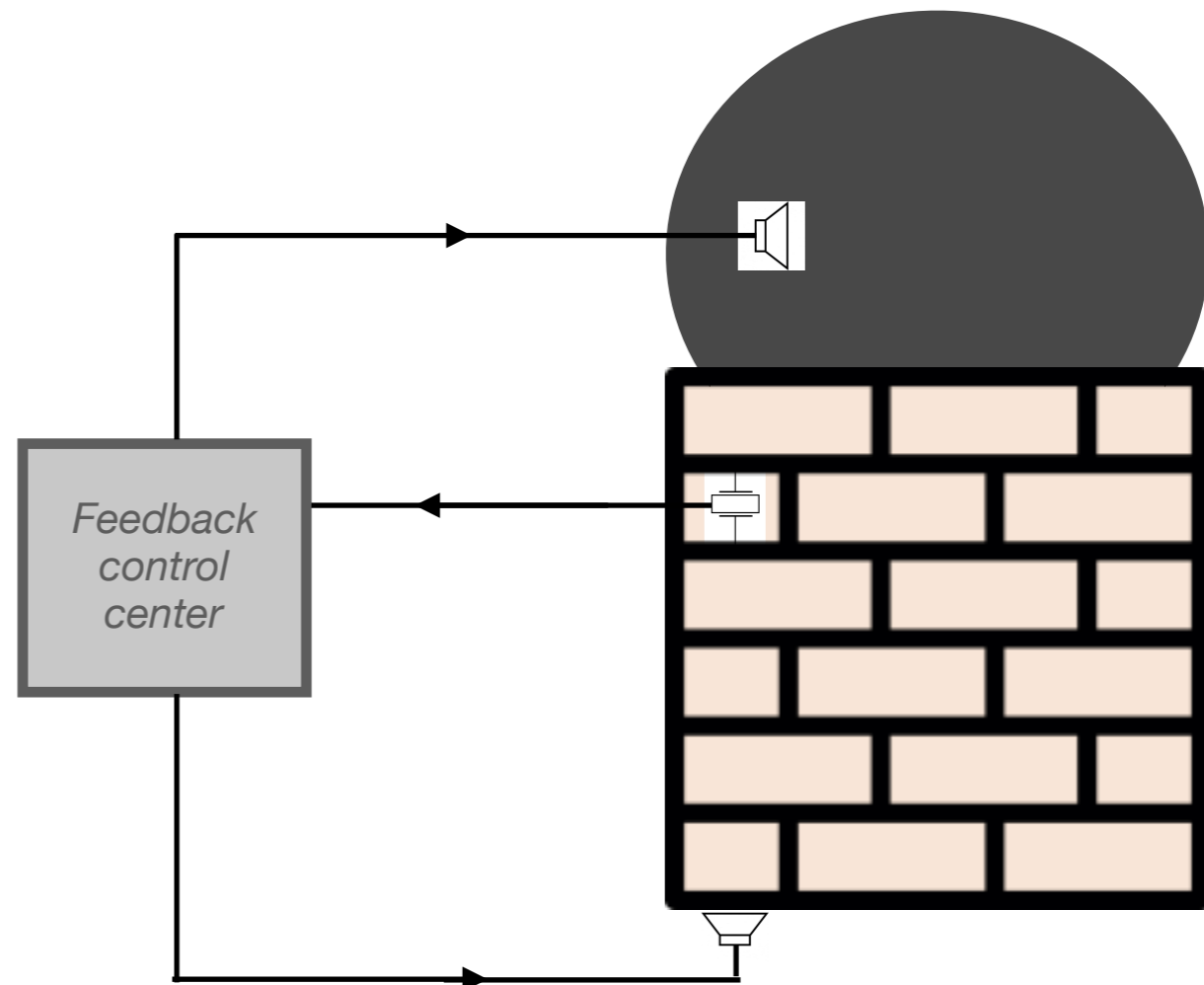
Due to the complex nature of the internal structural feedback, Association Shells demands a rather fluctuating soundscape. It is also recommended that a sense of increase in pulse, an excitement, to the many fluctuating impressions can be derived from the interaction between sculpture and subject.

For the same reasons, a careful attention in the Feedback Control Center (FCC) must be put on: **A:** limiting the deeper resonating thought streams and corresponding audio frequencies. **B:** using midrange frequencies to cross modulate internally in FCC. Otherwise, the delicacy and therapeutic enrichment of details and musicality is at risk of being overtaken by narrow-mindedness and corresponding stasis in audiosignals. A possible link between behavior patterns of The Revenge Tower and a pulsating sensation from Association Shells can be explored

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Graphic/schematic score

Revenge Tower



Therapeutic interaction processes:

- #1: Touching beacon changes resonance frequency
- #2: Static electric short circuit by touching bricks



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Graphic/schematic score

Notational remarks

Revenge Tower

A chimney-shaped structure build by bricklayers w/ a horizontally positioned glass dish/beacon loosely inserted in small grooves atop. The Revenge Towers internal feedback signal receives a significant amount of signal from both *Arguments* and *Association Shells*. The animation of the revenge tower is therefore equally dependent of its own feedback logic and the effects on this by the behaviour of the rest of the sculpture series.

The beacon functions as a ethereal, omnipresent signalizer, that can be manipulated by physical touch, adopting the mass and physical qualities of the hand into its soundstream. Emphasis in FCC should therefore be on keeping feedbacks with a soft character, slowly responsive/evolving etc. The bricklayers have a built-in sensor that responds to static electricity being conducted through bricks and mortar. Touching the tower gives a clear, sharp and fast acoustic response and emphasizes the dramatic character inherent in the symbolic meaning of this structure. FCC settings should be hereafter and also emphasizing aggressive equalization in harsh and sharp frequency areas.

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Implementation possibilities

Three, non-sequential development phases.

1: Iterative, incremental development: Private, experimental sessions. Possibilities to adjust and rethink ad hoc.

2: Performative development: Large scale display of live-session to a general audience.

Performance build-up pressure and instant reaction from audience can extract hidden potentials.

3: Dualistic development: Static, display oriented, exhibitional environment. Benefits from demands on fine tuning and stabilizing system and exhibiting content with mono-directional communication methods.

Remarks: Research on feedback analogies between human, object and system (internally and externally)



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