

A Model for Sympoiesis in Improvisatory Musicking: Embodied and Movement-based Interactions in Instrument-Human Collaborations

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GEORGINA BORN

“A fully relational and reflexive, social and material conception of music; one that indicates the kinds of insight offered by empirical research, which takes listening-as-experience and the situated, relational analysis as musical subjects and objects as its focus.”
(Born, 2010)

Born, G. (2010). "For a Relational Musicology: Music and Interdisciplinarity, Beyond the Practice Turn." *Journal of the Royal Musical Association*, 135(2), 205-243.

INTRA-ACTION

Karen Barad (2003)

Interaction: Entities exist before they encounter one another.

Intra-action: Entities emerge from within their relationship.

Becoming starts from within relational movements and acts.
Entities come into existence through their ability to act.

Relation and action are entangled factors determining that
agencies are not fixed and separable ontologically.

Barad, K. (2003). Posthumanist Performativity: Towards an Understanding of How Matter Comes to Matter. University of Chicago Press, 28 (3), 801-831.

SYMPOIESIS

Donna Haraway

Sympoiesis: Making-with.

“Nothing makes itself; nothing is really autopoietic or self-organizing... That is the radical implication of sympoiesis. Sympoiesis is a word proper to complex, dynamic, responsive, situated systems. It is a word for worlding-with, in company. Sympoiesis enfolds autopoiesis and generatively unfurls and extends it.” (Haraway, 2016)

Haraway, D. (2016). *Staying with the Trouble: Making Kin in the Chthulucene*. Duke University Press, NC.

GOING VISITING

Hannah Arendt

Donna Haraway

“To think with an enlarged mentality means that one trains one’s imagination to go visiting.” (Arendt, 1982)

Arendt, H., & Beiner, R. (1982). Lectures on Kant’s political philosophy. University of Chicago Press.

“Hannah Arendt and Virginia Woolf both understood the high stakes of training the mind and imagination to go visiting, to venture off the beaten path to meet unexpected, non-natal kin, and to strike up conversations, to pose and respond to interesting questions, to propose together something unanticipated, to take up the unasked-for obligations of having met.” (Haraway, 2016)

Haraway, D. (2016). Staying with the Trouble: Making Kin in the Chthulucene. Duke University Press, NC.

POLITE INQUIRY

Donna Haraway

Epistemological posture:

- 1) Inviting levels of unknown into the relational process where one does not easily jump to simplistic definitions.
- 2) Attending to the other in a practice that is interested: to give, to bring forward, render capable, to let be.
- 3) Becoming a responder and facilitator for things to come up from within relations; to trace, open up to understand, respond to negotiate with them.

NEW MATERIALISM

New materialism is an evolving movement seeking to comprehend connections between humans and the material world.

New materialism suggests that material is not static and stationary; and it has emergent properties that carry the capacity to cause changes in our action and engagement with them. Therefore, it enables a dynamic relation between the object and subject rather than a prescribed understanding of material that is static and passive, therefore could only be controlled and manipulated in the engagement process.

INSTRUMENT-HUMAN CONTINGENCY

I explore a contingent system with the instrument. The main focus is not the techniques themselves but rather the sympoietic way that they're brought into relation with human improvisors as agents in their own right (though still subject to human agency).

The system could include:

- 1) New and unusual techniques of playing, working through un-mastery
- 2) Adding external physical objects, with non-controllable, non-predictable behaviors
- 3) Electronic processing that make the system unstable
- 4) Changing postures of play (through what-if, as-if experimentation) such as playing-on, playing-to, playing-in, playing-by, playing-nearby, being played by the instrument etc.

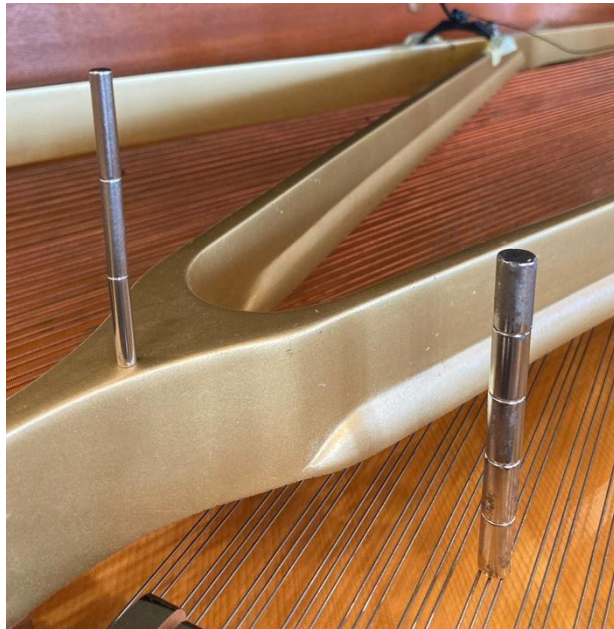
NEODYMIUM MAGNETS



WOODEN STICKS



MARBLE STONE, EGG SHAPED



PLAYING METHODS

- 1. Tapping/Releasing:** Produces sound through touching and releasing my finger or an object or the string
- 2. Plucking/Exciting** a string through grabbing under it with fingers or an object and releasing it in an upward motion
- 3. Bowing:** Producing a sustained sound through movement along the strings, or vertically along the sticks and fishing line attached to strings with fingers or objects, or using elbow.
- 4. Scraping/Rubbing:** Movement along the strings or soundboard with fingers or other objects, with pressure/force, containing noisy sound components
- 5. Striking/Hitting** the strings, metal frame, etc., in a downward and sideways motion with hands or objects
- 6. Sliding:** Movement along the string/metal frame with an object, with little amount of friction
- 7. Initiating:** Setting an object/the instrument in motion beyond further control of the sound's development
- 8. Strumming/Stroking:** Setting (several) strings in motion through horizontal movement across the strings

SOME ELECTROACOUSTIC PROCESSES

Delay: One example, is a single delay line that could reverse parts of audio, randomize the transposition interval and fold the delayed signal back into itself.

Granulation: One example is one that takes incoming audio and writes tiny grains to a buffer while simultaneously playing back a cloud of grains from the same buffer. Creating a "real-time" granularization effect using the last 1 second of collected fragments. The audio recorded to the buffer is decomposed into harmonic, percussive, and transient components.

Resonator: Resonance effect that is triggered with onset detection, detects pitch (partials). All of the partials are slightly randomized based on the envelope settings to create a more complex harmonic fadeout.

Etc.

Gesture & Motion Trajectory Tools

Musicking is not understood as the organization of “sound objects” or the “instrument”, but as the organization of “embodied-sonic situations” a composite entangled relationality of object, movement, sound, sensorial experience, electroacoustic processes and space.

Gesture and movement form a structural part of sound-producing processes and as such function as active agents in the extended understanding of relations.

1) Temporal Semiotic Units

2) Gesture Archetypes

Motion Trajectories “Temporal Semiotic Units”

Music and Informatics Laboratory of Marseille

Music and Informatics Laboratory of Marseille in 1992, by a group of composers and artists led by François Delalande.

19 motion trajectory models that express three features:

- 1) Basic information about the unit
- 2) Morphological descriptions
- 3) Semantic meanings

“Temporal Semiotic Units” [Les Unités Sémiotiques Temporelles]

Music and Informatics Laboratory of Marseille

WANTING TO START

Basic Description

There are various sounds, attempting to begin moving, trying to initiate motion. This unit is made of two repeated phases that carries a form of reiteration implying an effort to commence, initiate an action.

Morphological Characteristics

1. First phase is relatively short and has a shape that is described as “articulate” by MIM researchers.
2. The second phase acts contrary to the first through one or more parameters of the sound, could be in forms of silence, suspension, holding back, pushing back etc.

Semantic Description

There is a feeling of unease that is caused by the effort to initiate the flow action, however not succeeding in doing so.

Energy Models “Gesture Archetypes”

Annette Vande Gorne

Annette Vande Gorne “Treatise on Writing Acousmatic Music on Fixed Media” (2018)

She introduces 10 gesture archetypes together with Guy Reibel’s practice play-sequence (séquence-jeu) to serve as tools within electroacoustic composition.

In play-sequence, by means of a performer, a sounding object-body and a microphone, the composer explores various gestures of sounding capabilities of the object. The goal here, was to introduce intentionality that links gestural and bodily listening within electroacoustic composition.

Energy Models “Gesture Archetypes”

Annette Vande Gorne

FRICITION

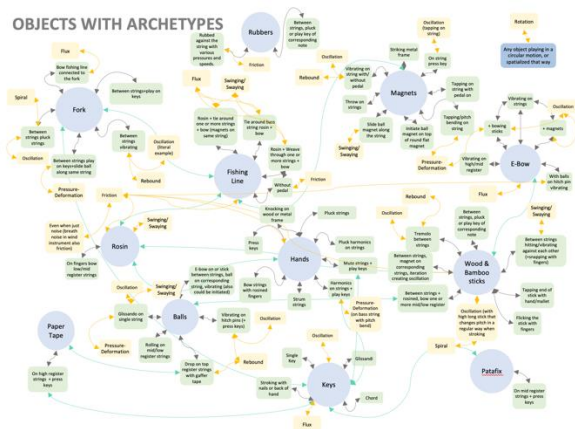
Friction is the raw energy produced when two surfaces come into contact. Transitioning from a sliding state to a stop, it examines the unstable states and equilibria between these two poles. These sounds are proprioceptive.

- Friction results in a line-point relationship. The dynamic of the line, the dynamic and the point and all the intermediary phenomena: going from one state to another within a single phenomenon.
- Dynamic of the movement, not necessarily 'straight line'. It can be smooth, granular, intermittent (fragmentary, scattered, irregular).
- The factor of <speed>, and the typological criterion of matter, <grain>, come into play as perceptive variation for friction, as well as the sustainment criterion <iterative>: sustainment of the sliced and repeated sound.

Companionship of Gesture and Motion Trajectory Models Creative (Im)Possibilities & (Mis)Understandings

Creative (mis)interpretive translations are central, experimental and diverse actions that transform energy from one state or form to another, enriching the music, giving it other dimensions.

I understand the act of sympoiesis in this context as an attentive negotiation and re-organization of these active agents and the creation of musical structures on micro and macro levels.

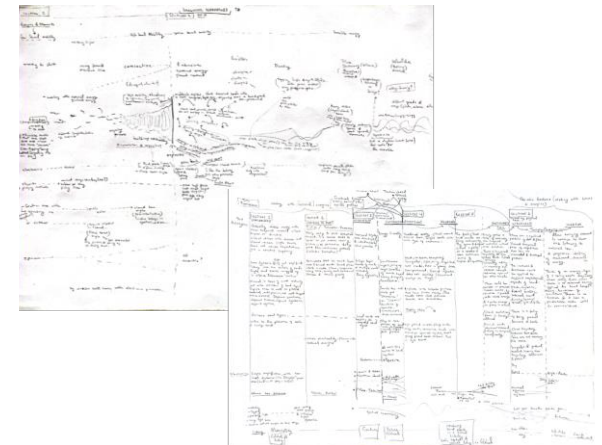
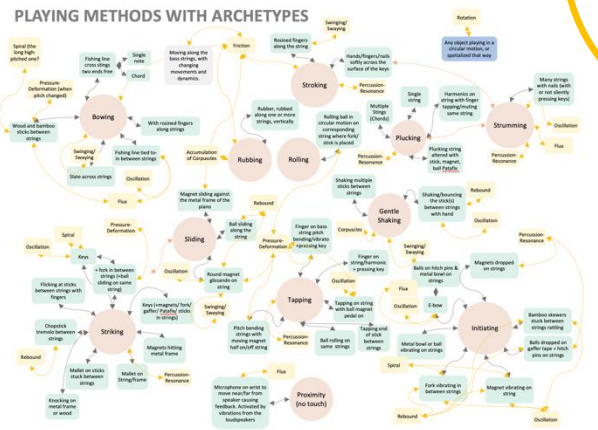


Starting from Theory

Simultaneous movement

Starting from Practice

Working with both Bottom-up Top-Bottom Strategies

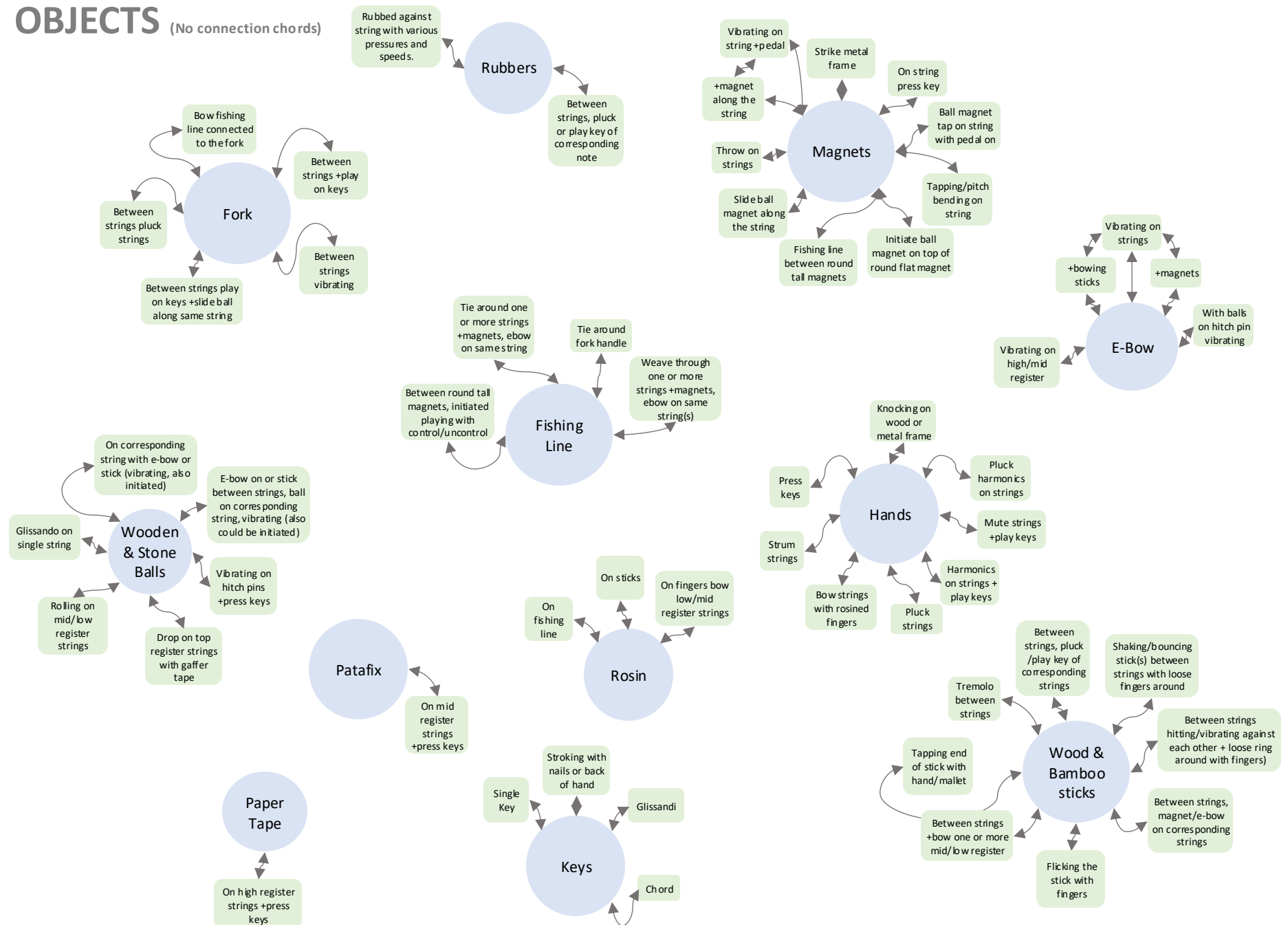


OBJECTS

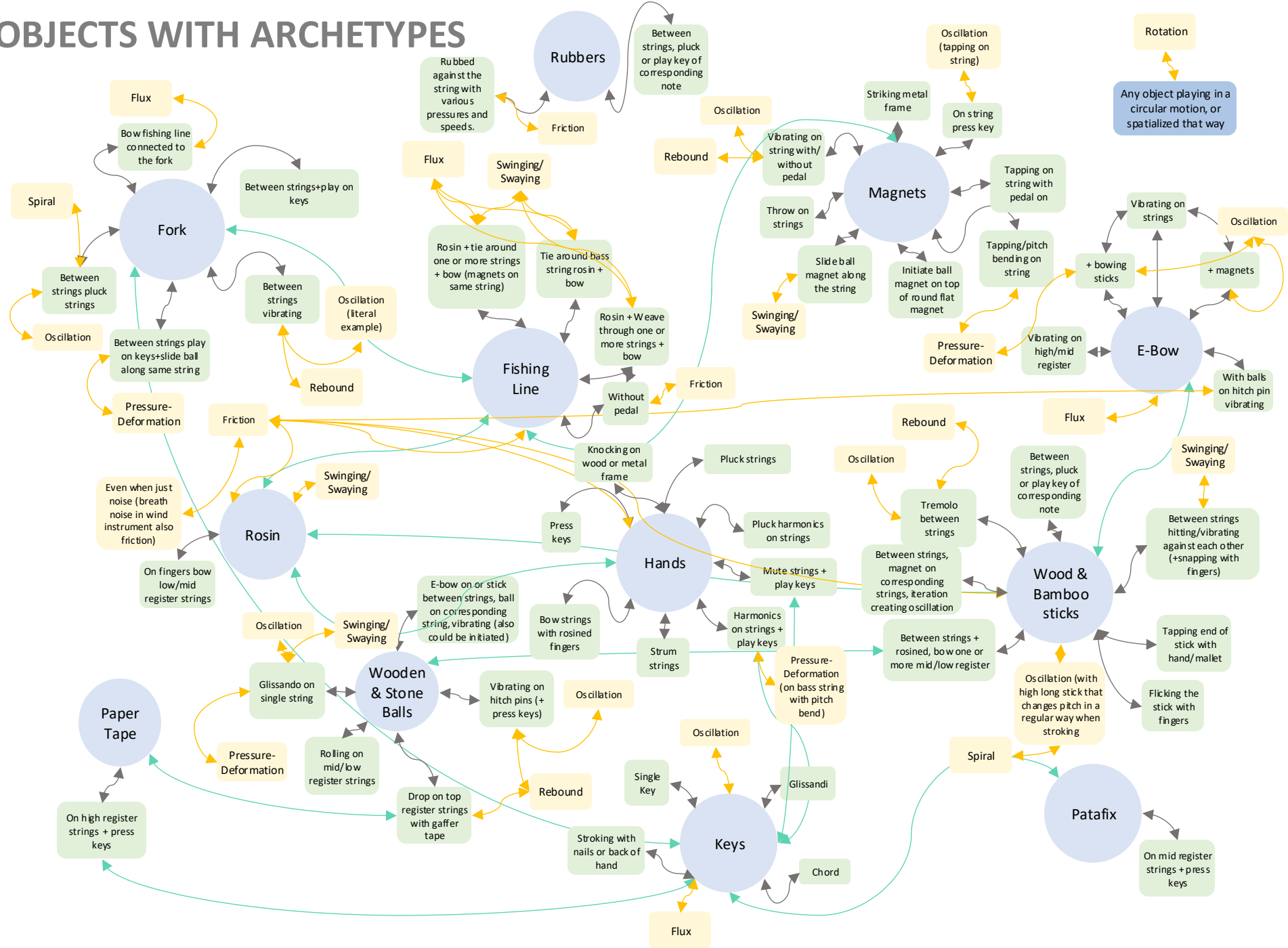


OBJECTS

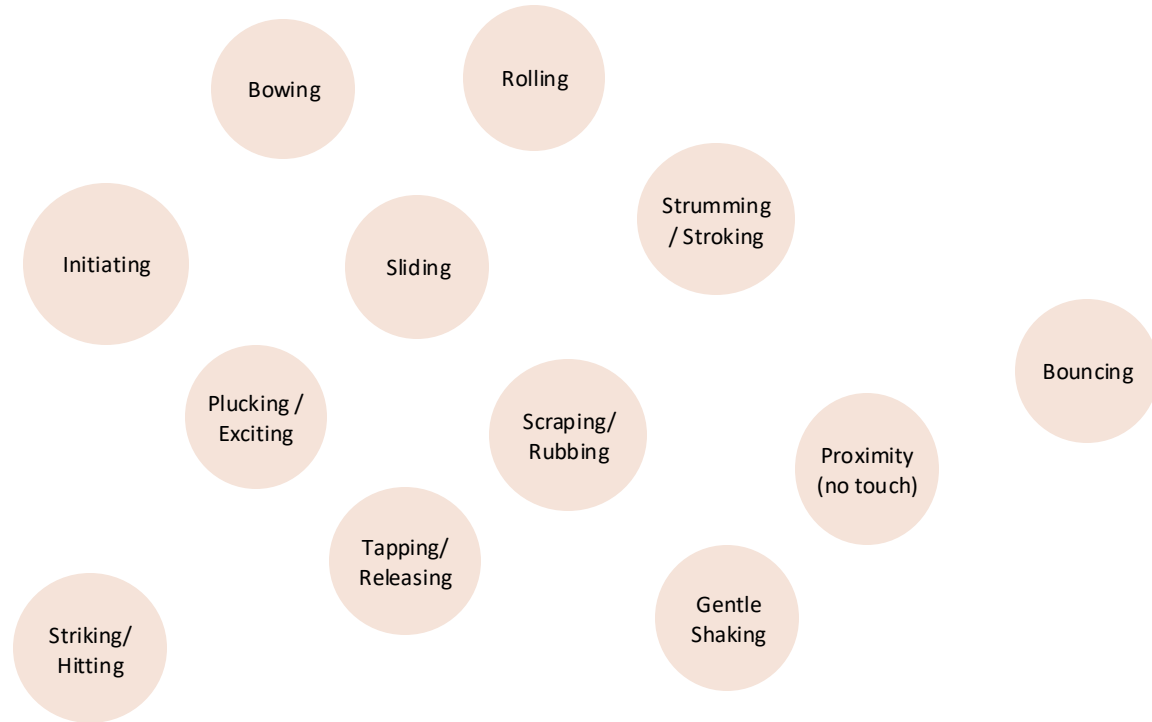
(No connection chords)



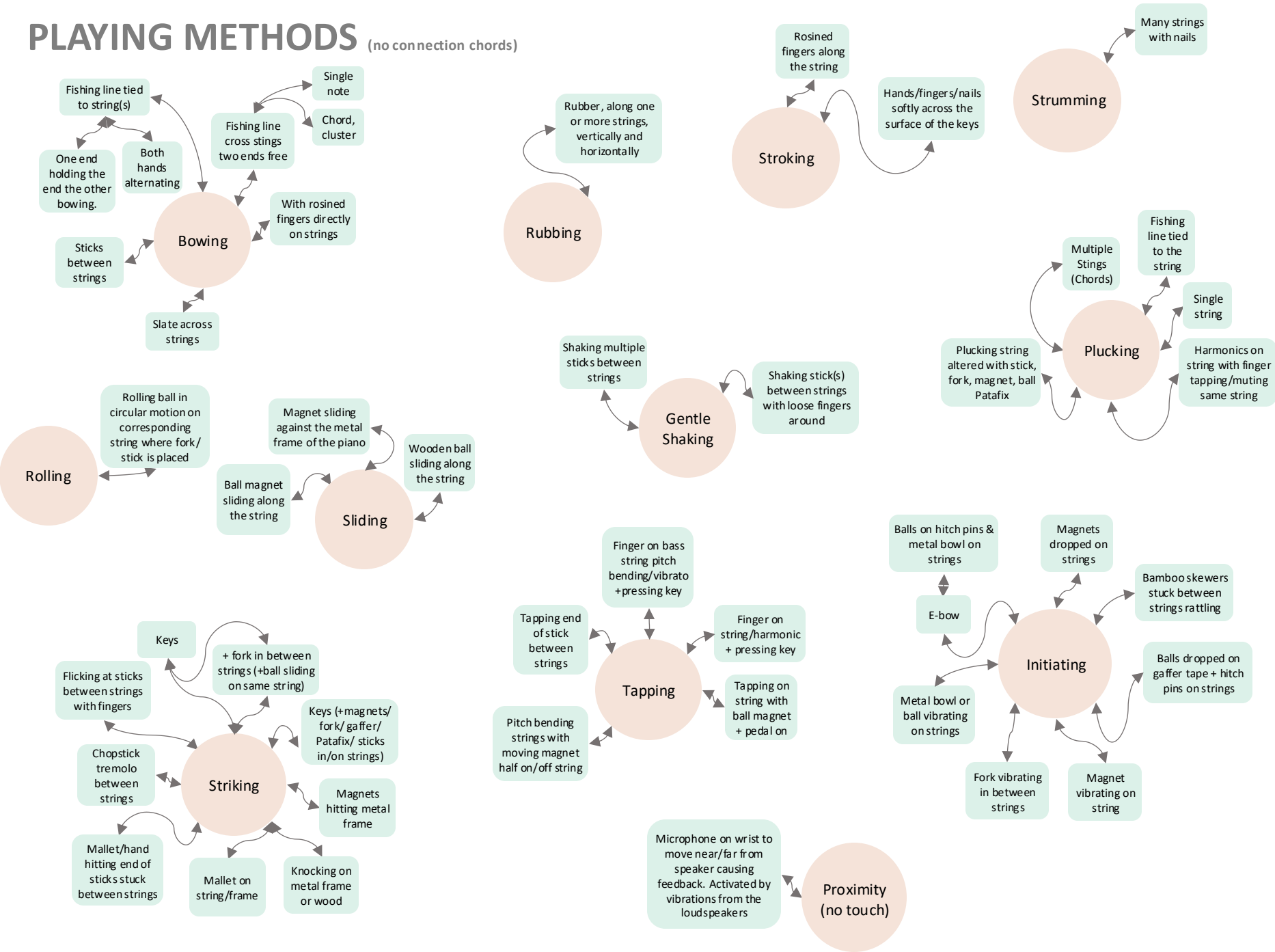
OBJECTS WITH ARCHETYPES



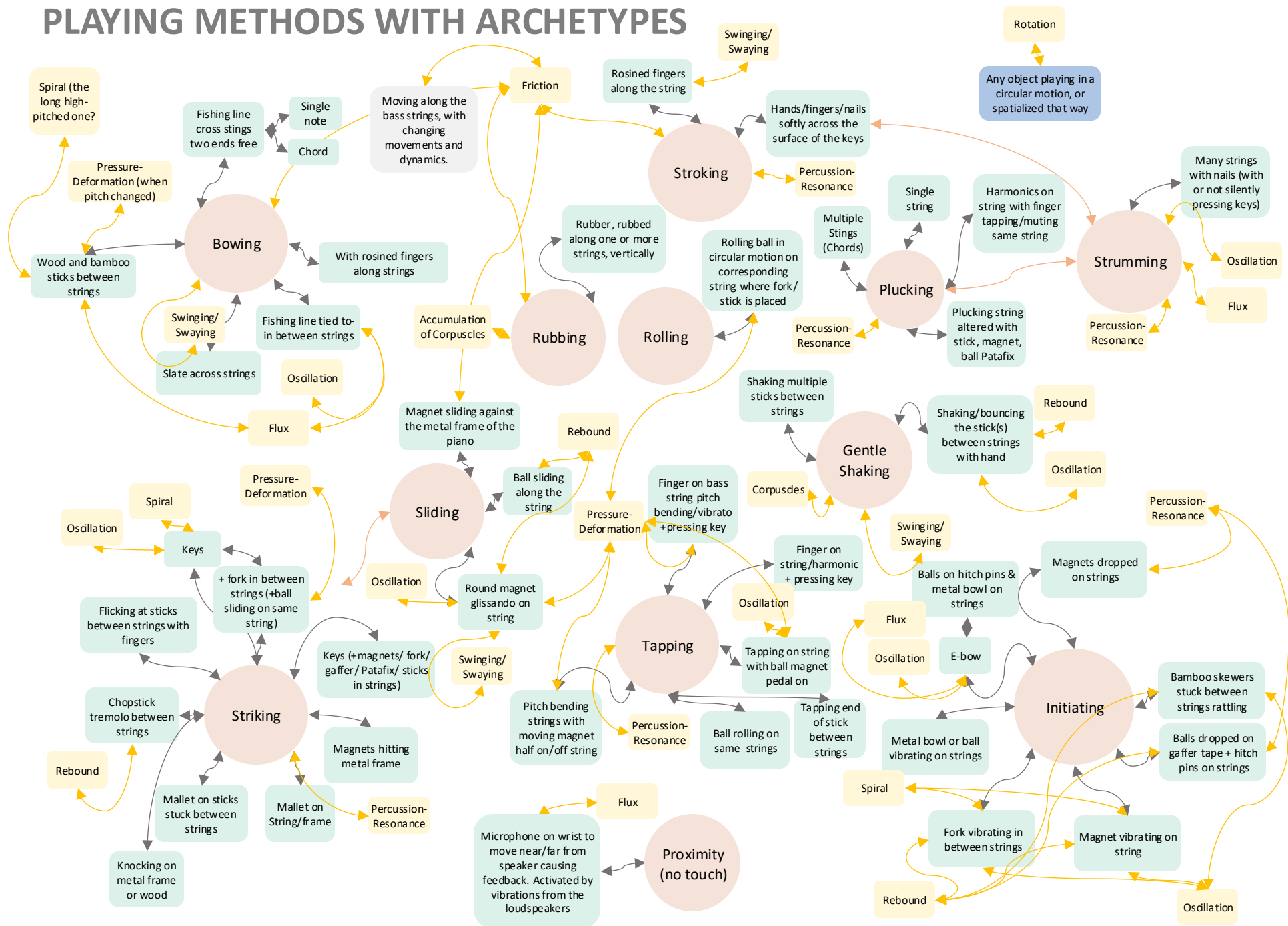
PLAYING METHODS



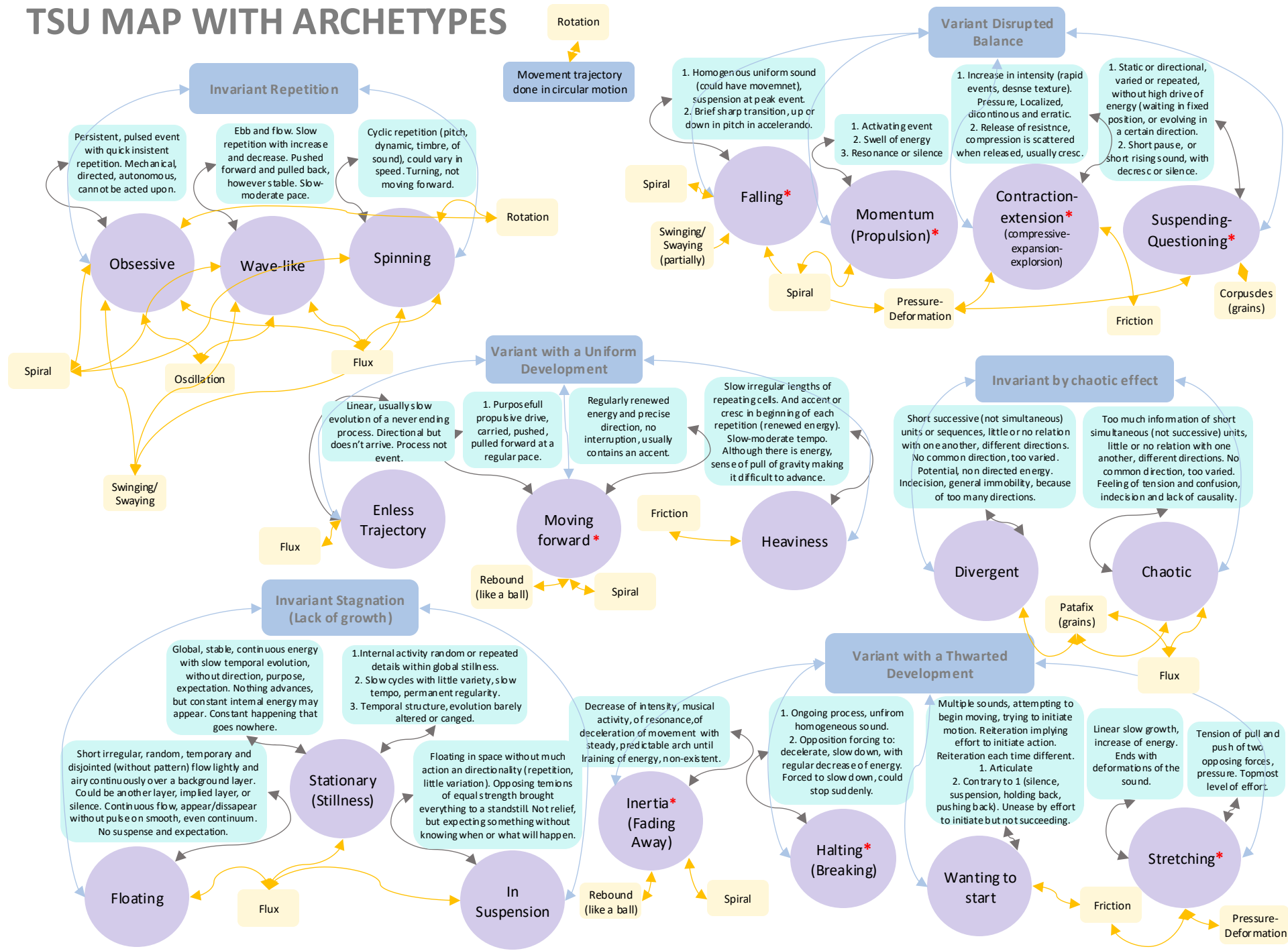
PLAYING METHODS (no connection chords)



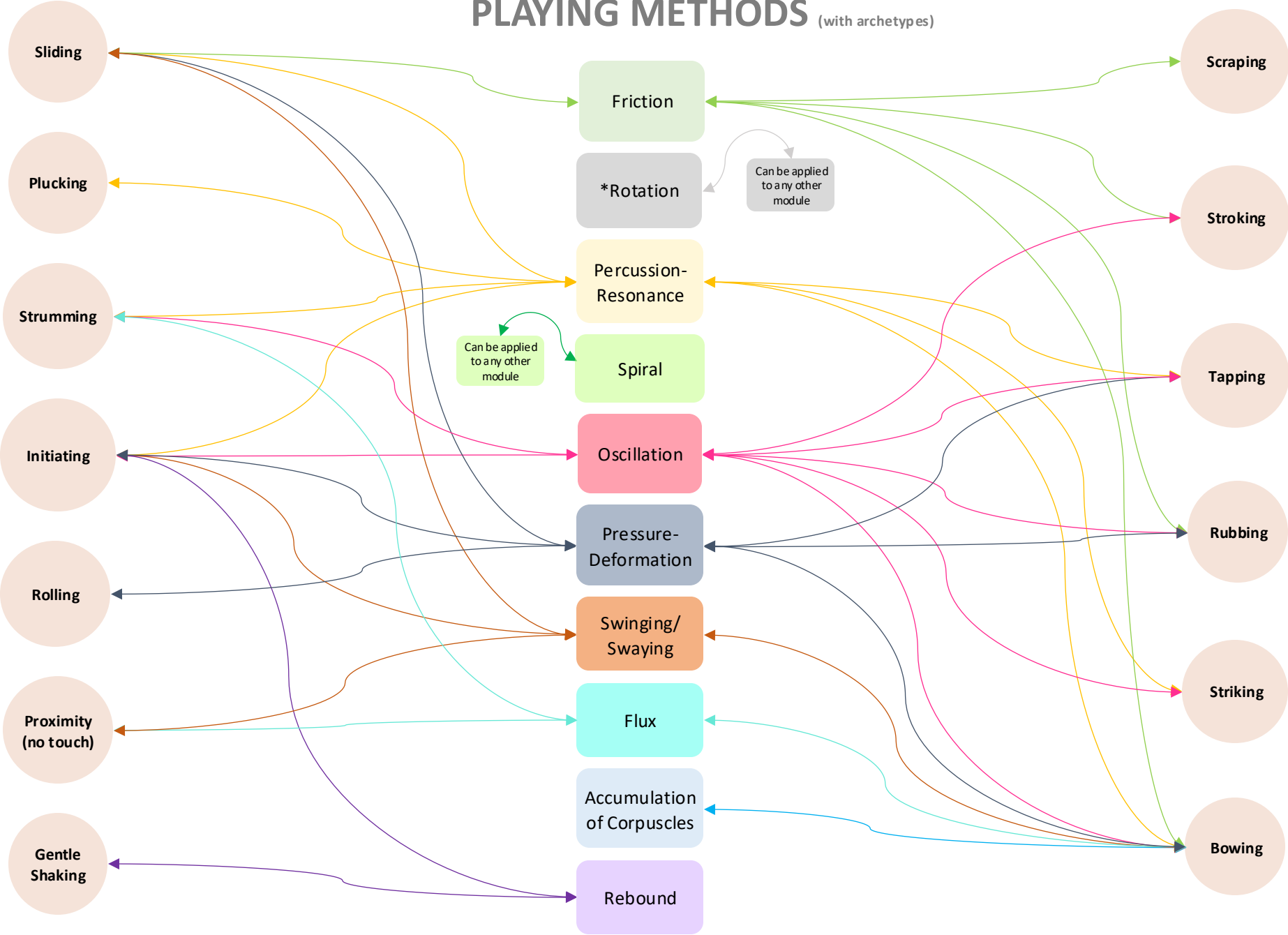
PLAYING METHODS WITH ARCHETYPES



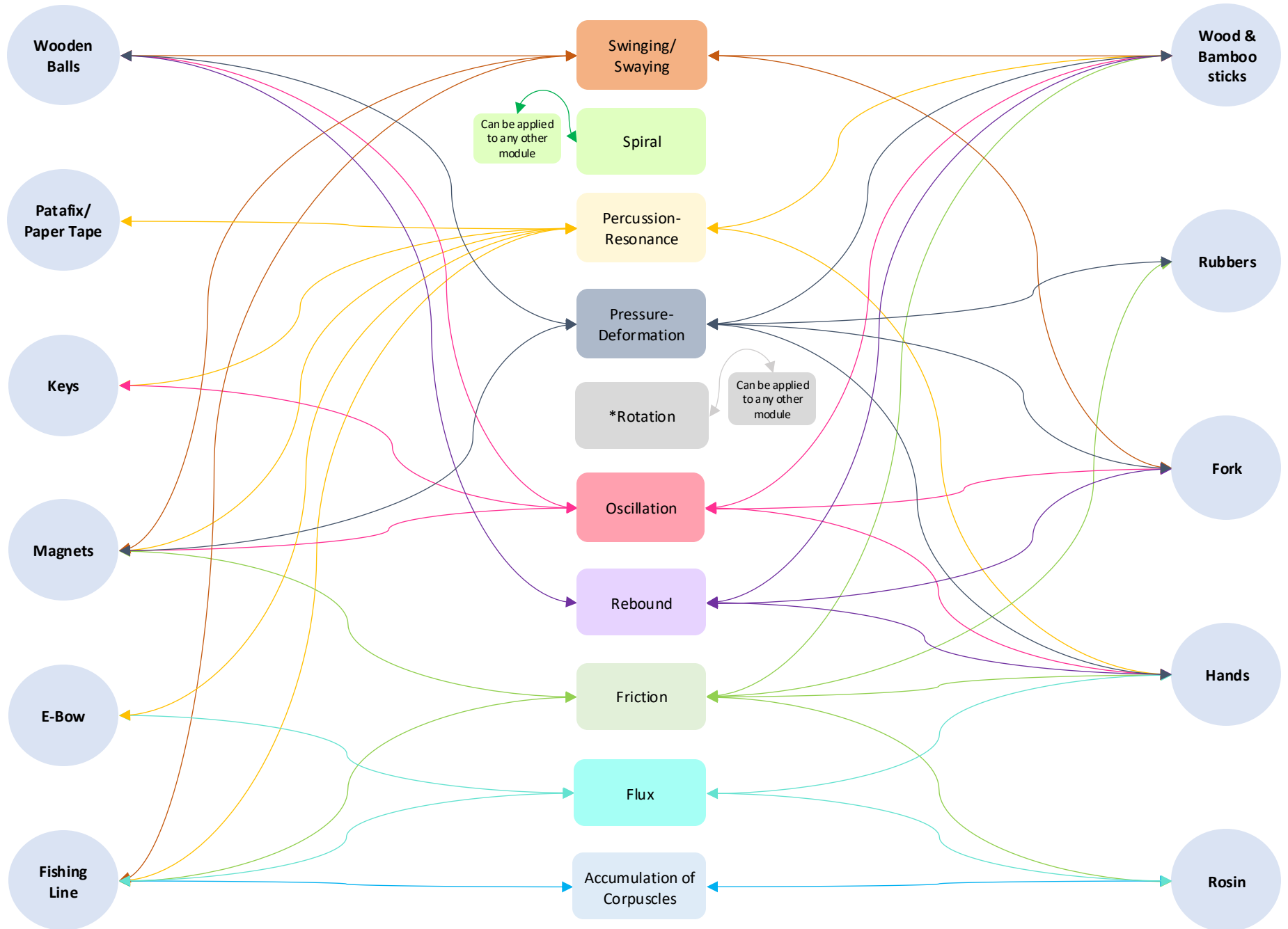
TSU MAP WITH ARCHETYPES

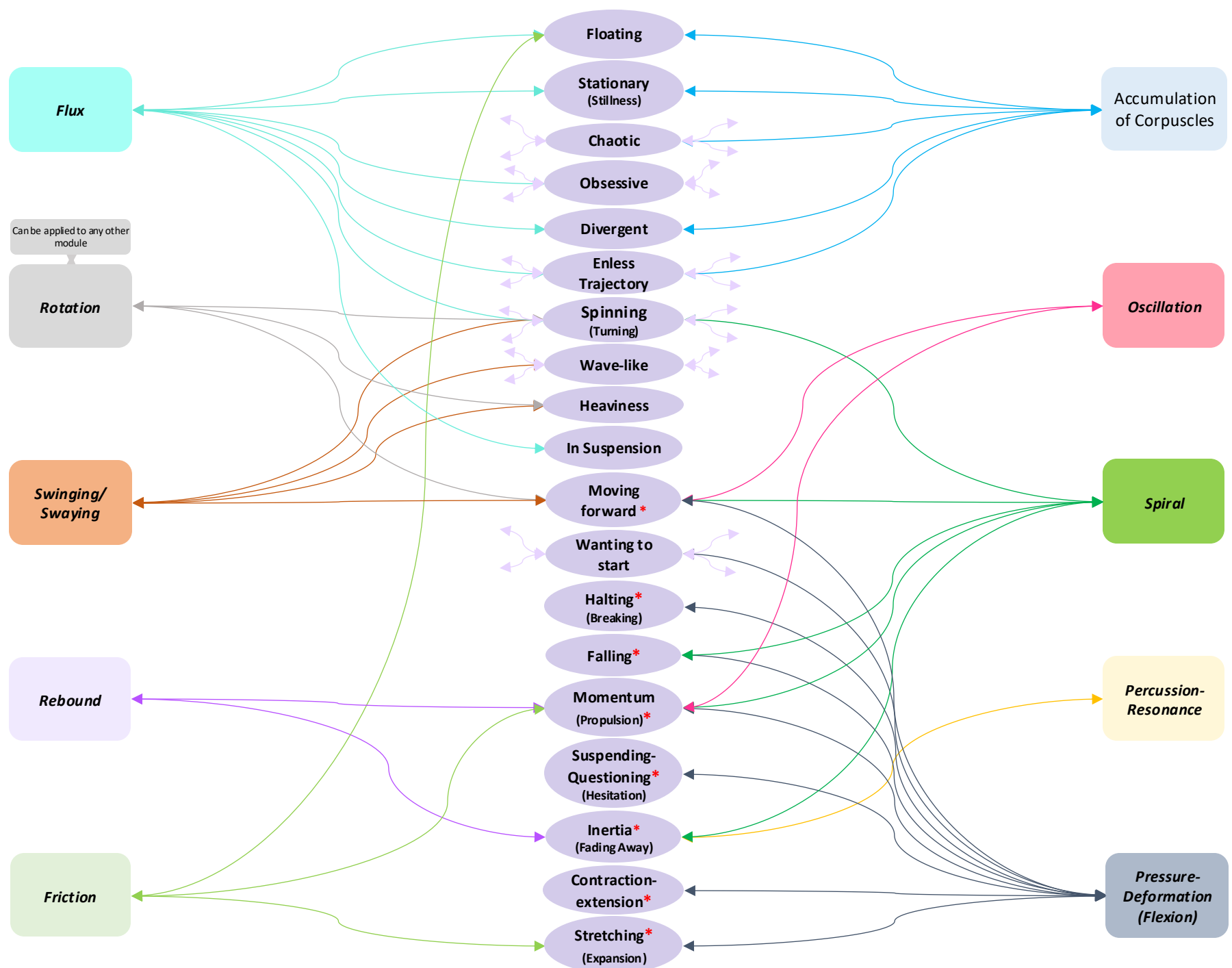


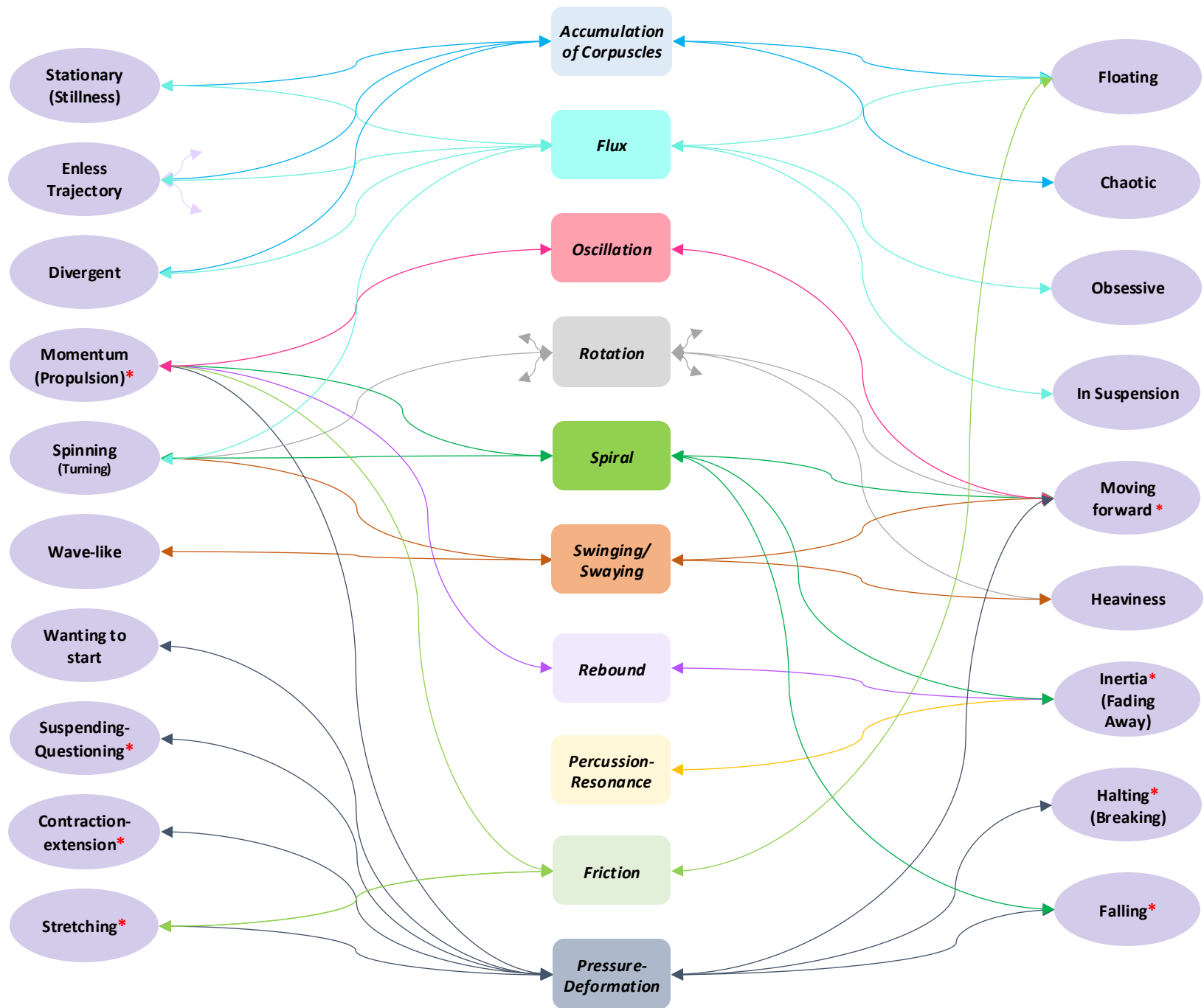
PLAYING METHODS (with archetypes)



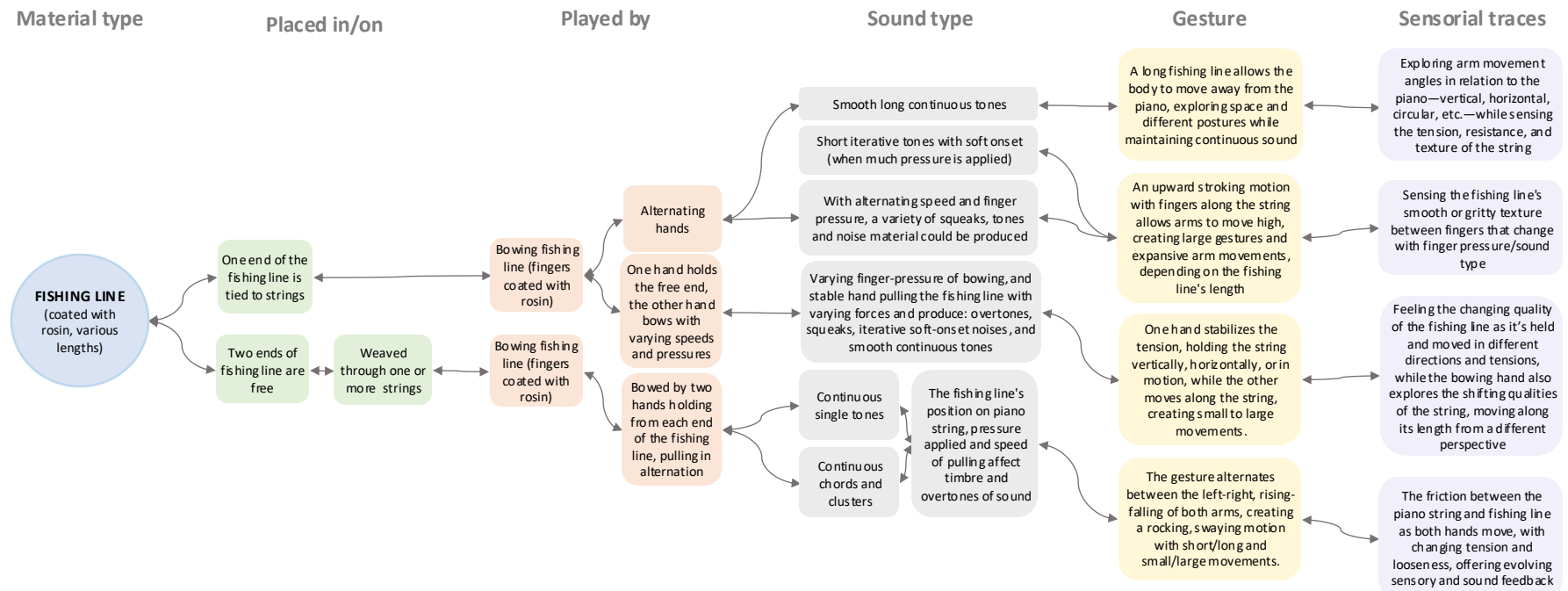
OBJECTS (with archetypes)





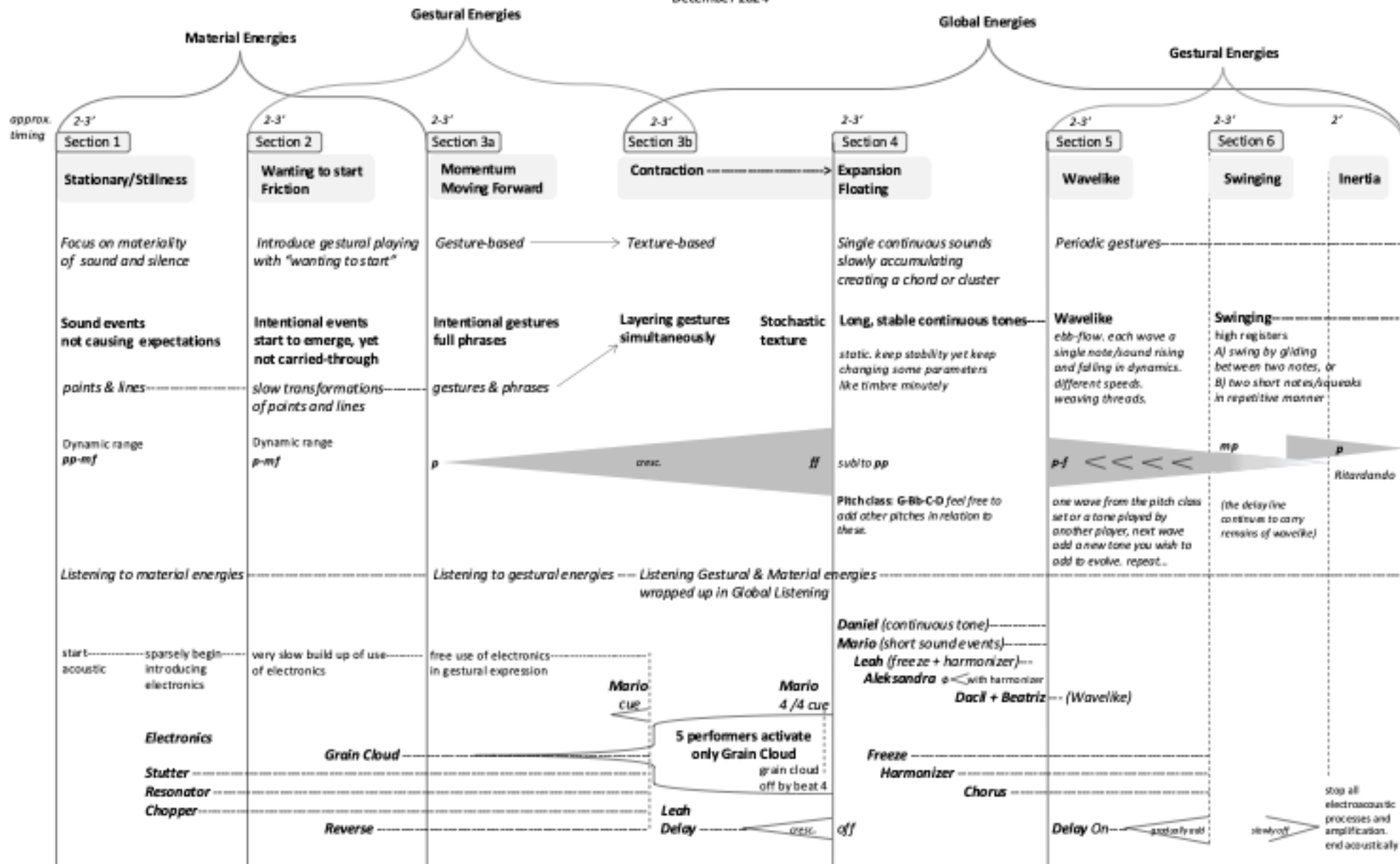


Objects, Playing Methods, Sound Types, Gestures, Sensorial Experience

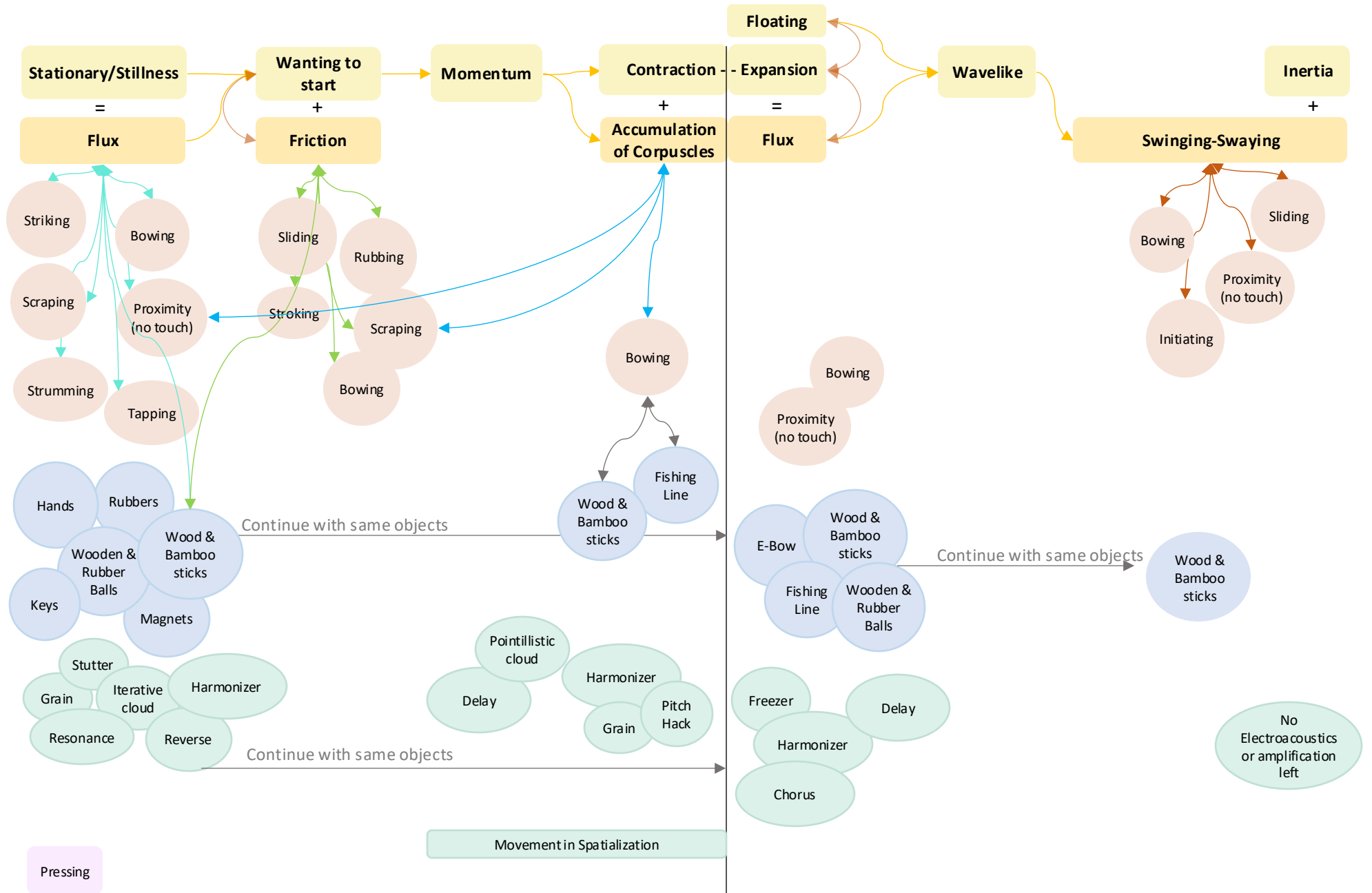


Unexpected Arrivals

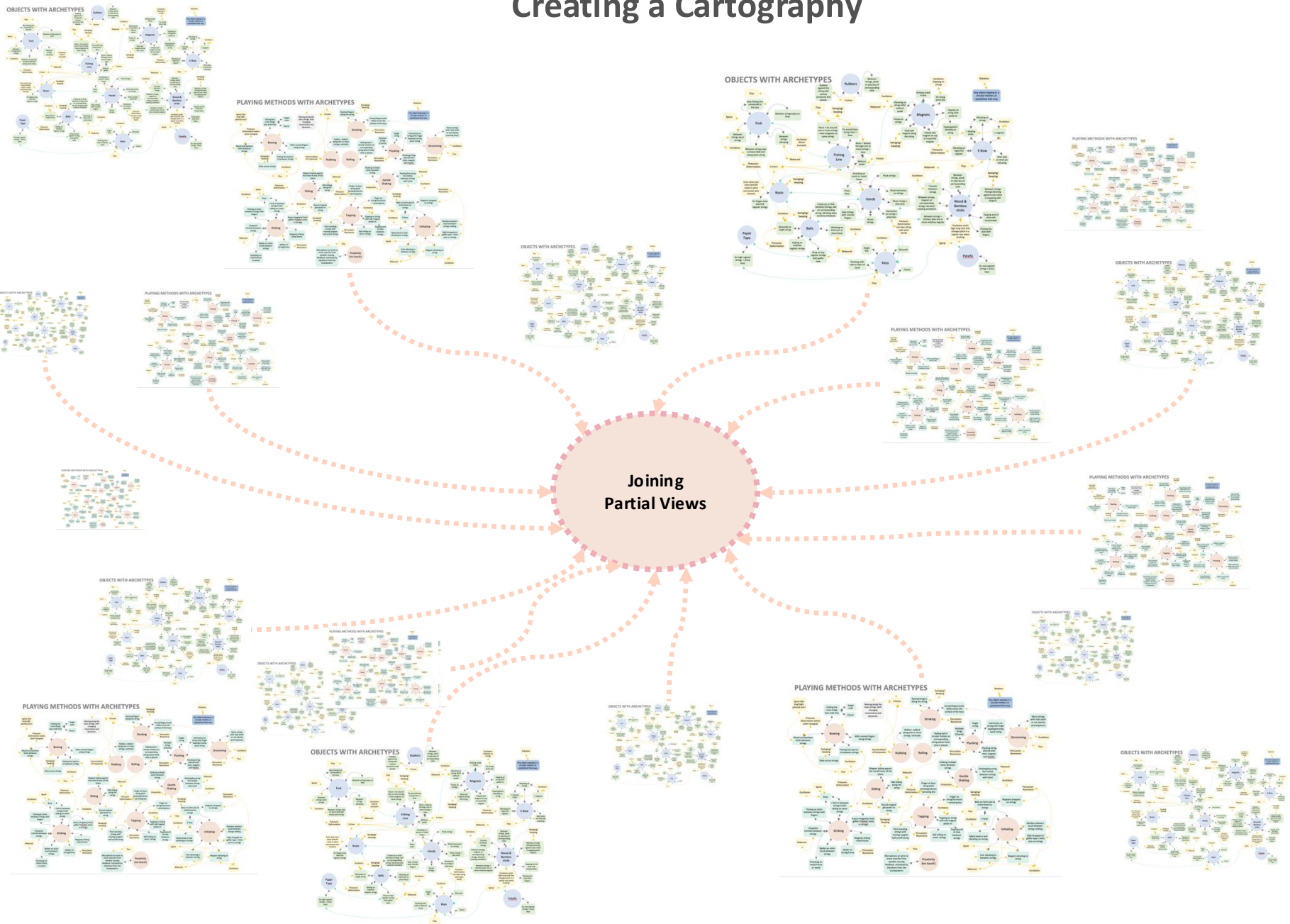
December 2024



Archetypes + TSU with Objects & Playing Methods



Creating a Cartography



SITATED KNOWLEDGES

Donna Haraway

“Situated knowledges are about communities, not about isolated individuals. The only way to find a larger vision is to be somewhere in particular... Its images are not the products of escape and transcendence of limits (the view from above) but the joining of partial views and halting voices into a collective subject position that promises a vision of the means of ongoing finite embodiment, of living within limits and contradictions-of views from somewhere.” (Haraway, 1988, p. 590)