Appendix 1

Information for self assessment

Knowing which sorts of activities will help upgrade us at each phase of development is all part of input control in neurohacking. A free self assessment for all networks is available here:
http://www.neurohackers.com/index.php/en/menu-left-nh-library/menu-left-nh-tutorials/63-art-nh-tutorial3

matrices and their associated factors: developmental phases, the abilities they confer and the processes they carry out

For assessment purposes: If you have poor or no ability in certain skills, you may be stuck in the Matrix related to those skills. You may have developed other, later skills, but they will only be used in the service of the matrix you're stuck in. Developing all these abilities relies on getting enough experience – sufficient practice for sending epigenetic signals.

Matrix 1:

Develops: phase 1 (network 1 and first half of network 2)

Natural context: Platform: the womb. Energy*: placenta. Input: fertilization (for egg); sensorimotor input, especially right after birth for calibration

Locus of attention/awareness: sensorimotor, rear brain networks. (Strictly speaking, all energy available to us throughout our lives comes from interactions between the sun, this planet, and ourselves. Energy transfer is a set of processes; not a thing.)

associated abilities:

sensorimotor skills; motion, hand-eye coordination, grasping, reflex speed,

object manipulation

ability to discern what you like and what you don't like

accurate physical assessment (awareness of hunger, thirst, etc.)

calibration of short range senses; awareness of touch, taste, temperature and pressure

spatial skills: body-space coordination & balance, copying (copying another's movements)

association: sensorimotor ordering (categorization of sensorimotor experiences with appropriate associations)

ability to remember the names of familiar things/people

audio recognition of your own name

recognizing objects and textures by touch/taste

distinguishing location of sounds

awareness of external pressure or discomfort and ability to move to achieve greater comfort

ability to distinguish places that you like from places that you don't like

recognizing different foods by taste
responding affectionately to those close to you

ability to group objects, animals and people by category

care: (of body; eating, drinking, etc. without assistance)

ability to play (learn)

control: physical/spatial - control of internal processes (eg, bladder control) and external (motion)

ability to regulate your own temperature (obviously within reasonable human limits)

system stability response dynamics

ability to pay attention

communication: with gestures, sounds and body language

ability to indicate what you like and what you don't like

learning cycle:

concentration; focusing attention on specific input (volitionally)

observation; attending to a process, thing, person or event over time

ability to perceive your surroundings and make sense out of what you see

visually tracking a moving object

attention; attending to relevant input

awareness of object constancy (you are aware that just because you can't see or hear or feel something, that doesn't mean it isn't there.

startup processes:

imagination

awareness

motor calibration

sensory calibration

emotional weighting calibration (unconscious)

proprioception

alertness

perception

sensorimotor memory

embodiment

sync

bonding

interaction

Matrix 2:

Develops: phase 2 (second half of network 2 and first half of network 3)

Natural context: Platform: parents or carers at home in natural surroundings. Energy: breastmilk. Input: spatial input (achieved by carrying in arms as parent or carer moves around, and in play)

Locus of attention/awareness: spatial, rear brain networks

associated abilities:

spatial skills: locomotion; balance, standing, sitting, walking, swimming, running and climbing

calibration of long range senses of sight and sound

ability to see long- and short-range distances, and to locate origins of sounds

awareness of where you body is in relation to surroundings and how it is moving through space

sufficient dexterity for basic tool use

ability to seek and acquire food

awareness of local territory and where to find what, in and around the home

ability to remember the names of familiar places and behaviors

drawing

orientation

ability to make or follow a 2D map

accurate behavioral assessment

eidetic skills: ability to clap your hands in time to a rhythm, move in time to music

counting and basic arithmetic

ability to follow a story in pictures

awareness of distance, rhythm, direction and balance

association: ordering: categorization of spatial experience with appropriate associations

recognition of different places, people and things via sight and sound

discrimination between higher and lower pitched sounds

ability to recognize impoverished environments consciously (boredom) and respond by seeking better input

ability to group places by category

care: awareness of hunger and thirst and able to repond appropriately

ability to feed yourself (ie, to transfer food from bowl to mouth) and drink without assistance

ability to groom yourself (teeth cleaning, hair washing, bathing, laundry etc.) without assistance

awareness of fatigue and appropriate sleep response

care: of your space; keeping things clean and where you want them to

b e

control: spatial/eidetic – control of your own behavioral processes and locomotion

control of your space, what you want in it and where

control of where you decide to go

control of what you do (your own behavior)

communication: with speech; ability to tell or show people close to you how you feel about them

learning cycle:

observation - ability to closely observe items, places or people you're interested
in

modeling - ability to model the behavior and abilities of others in order to learn them oneself

ability to compute what someone else is likely to think or is thinking

ability to compute what someone else is likely to do or is doing

added processes:

orientation

volitional seeking

kinesthesia (awareness of your body's motion in space)

2D mapping (tracking) & coordination

spatial memory

conscious emotional weighting

Matrix 3:

Develops phase 3 (second half of network 3 qnd first half of network 4)

Natural context: Platform: The natural world; the forest, the plains, the seashore, mountains, local environment. Energy: hunting & gathering food. Input: contents of the planet (eidetic, environmental input)

Locus of attention/awareness: emotion and imagination 'mid' brain networks

associated abilities :

eidetic skills: ability to keep track of and recall a series of events in the co rrect order

autobiographical memory – awareness and accurate recall of a course of events

image memory

awareness of where you last saw items/ people

ability to make or follow a 3D map

ability to distinguish between different scents

ability to 'make-believe' (pretend) – the beginning of abstraction

emotional awareness

discrimination between fact, fiction, theory and hypothesis

accurate emotional assessment

calibration of midrange senses; odor and pheromone processing

calibration of intuition

procedural skills:

ability to detect and remove or avoid harmfuk or unpleasant items

ability to recognize when something needs to be cleaned, and to clean it (asic hygiene)

ability to warn another of danger

ability to roughly calculate relative distances

ability to explore new territory and make a mental map of what is where

ability to play and compose music, make up stories, choreograph movements

association: categorization of emotional experience with apropriate associations

ability to group events by category

recognition of and ability to name items by scent alone

synesthesia - sensory merging and association of sight with smell, sound, texture etc. (the beginning of metaphorization and concept abstraction)

concrete categorization - ability to process complex concrete concepts

reversable translation (between concrete rear networks and abstract frontal and medial networks)

care: of your emotional needs and stability, and awareness of those of others

of your input needs and provision

of your local environment

control: of what you feel - your emotions and your expression of them

ability to calm yourself down, make yourself laugh or invoke the mood of your choice

eidetic/procedural - control ofwhere you go and when

input control: ability to choose what you interact with and follow your own interests (the beginning of self determination and free will)

ability to motivate yourself

communication – ability to communicate to others what you are doing

awareness of location (you are able to walk for a distance in any direction away from home and find your way back from memory)

awareness of direction and change of direction

ability to use emotion appropriately in communication

ability to form bonds that enhance communication

ability to use metaphoric language

learning cycle:

modeling: ability to model the states of mind of others in order to learn them oneself

empathy: ability to compute what someone else is likely to feel or is feeling

practice: sufficient 'staying power' or tenacity to see things through to the end

added processes:

synesthesia

metaphorization

abstraction

Theory of Mind

empathy

3-D mapping (navigation)

central memory-processing hub coming online

concrete/abstract translation algorithms (based on archetypal presets)

eidetic memory, short term memory (RAM)

emotional weighting

congruity

Matrix 4:

Develops: phase 4 (second half of network 4 and first half of network 5)

Natural context: Platform: human culture; all the skills, art and science of our species. Energy: gardening, processing & cooking food. Input: stories, explanations & demonstrations (procedural input – how to do things)

Locus of attention/awareness: Concrete operational right frontal networks

associated abilities

procedural skills:

ability to create, follow and remember procedures

creativity, construction and designing skills

ability to make up a story

ability to follow a recipe, list of instructions, directions or series of movements

ability to explain a series of steps or instructions to another

ability to demonstrate things you can do so that others can copy you

accurate reading, handwriting, typing, spelling

ability to write music, poetry, stories and prose

complex tool/machine use

aesthetics - awareness of harmony and discord in sound, color, proportion etc.

sense of humor

accurate situational assessment

calibration of abstract senses; time, perspective, aesthetics and humor

declarative skills:

ability to remember the names and addresses of friends, family and close ones

temporal awareness (ability to estimate time, awareness of times, dates and measures

innovation

association: categorization of procedural experience with appropriate associations

abstract categorization - ability to process complex abstract concepts

care: of others where necessary

preservation and sharing of your culture

control: procedural/declarative

dexterity - fine control of bodily movements, ability to do complex tasks with tools/materials

ability to focus on the item or issue you choose to

communication: diplomatic skills,propriety, skill-sharing, creative output, technology

learning cycle:

practice: sufficient 'staying power' or tenacity to see things through to the en d

variation: beginning to introduce or express your ideas across different domains and media

added processes:

synthesis

procedural memory

Matrix 5

Develops: phase 5 (second half of network 5 and first half of network 6)

Natural context: Platform: your mind. Energy: your brain. Input: facts, data & information (declarative input)

Locus of attention/awareness: Formal operational left frontal networks

associated abilities:

declarative skills:

ability to logically follow and remember facts and figures

ability to demonstrate procedures; an experiment, instructions, techniques, series of movements

ability to present your creative output in appropriate ways

ability to follow formal logic or reasoning

accurate self-assessment

executive skills:

intellect

analysis, judgment, decisions, planning, comoutation, calculation, resource allocation

association: categorization of declarative experience with appropriate associations

care: of your own mind and mental health

control: full autonomy of self - control of your own thoughts, beliefs, decisions and choices

declarative/executive – control of what you say and how

free will of volitional choice in all aspects of your life

communication: ability to present and explain ideas, facts and theories coherently via a choice of media

learning cycle:

variation: ability to try the same idea in different ways and differe nt ideas in the same context

applying or expressing your ideas across different domains and media

competence: closing the gap between between understanding and comprehension.

added processes:

analysis

declarative memory

Matrix 6

develops phase 6 (second half of network 6)

Natural context: Platform: entelechy (the progran itself). Energy: the universe. Input: interaction (working memory input).

Locus of attention/awareness: executive functional mid-frontal networks

associated abilities:

executive skills: self-direction, strategy, planning, coordination, conflict resolution, problem solving

association: categorization of all domains of experience with appropriate associations

care: multiple skills in all aspects of self care, care of others and environment

control: control of what you think, say, do and feel

directive control of your life path

forward planning and accurate prediction

communication: via multiple means

learning cycle:

competence: closing the gap between between understanding and comprehension; full ability in the discipline sought

added processes

working memory

coordination

strategy

networks/processors and their related skills

key to categories in each network:

1 senses/tools for comprehending (based on core concept/network agent)

2 simple behaviors (based on core behaviors/context)

3 memory & association (based on core concept

4 complex behaviors (abilities) & processing (based on core concept/matrix)

5 tools for awareness, feedback, monitoring (based on core concept/matrix)

6 data transfer/communication mode

Network 1 abilities & functions

1.1 Senses of touch, taste, temperature and pressure matter related tools

1.2 Motion, self care & hygiene, system maintenance & repair system stability & response dynamics (animal behaviors: “serene & clean”)

1.3 Sensorimotor memory & association memory & association

1.4 Sensorimotor processing & categorization knowin g where things belong in matrix/processing context

1.5 Attention & concentration Navigating through varying circumstances, analyzing what's going on

1.6 Cell mechanics

Network 2, abilities & functions

2.1 Senses of sight, hearing, distance, rhythm, direction & balance spatial related tools

2.2 Proprioception/ kinesthesia, dexterity & locomotion system stability & response dynamics (animal behaviors: “Seek & Squeak”)

2.3 Spatial memory & association memory & association

2.4 Spatial processing & mapping knowing where things belong in matrix/processing context

2.5 Motivation, Orientation, Observation Navigating through varying circumstances, analysing what's going on.

2.6 2D mapping

Network 3, abilities & functions

3.1 Senses of smell, pheromone detection density related tools

3.2 Emotional stability & weighting system stability & response dynamics (animal behaviors: befriend or defend)

3.3 Eidetic memory/ RAM & congruous association memory & association

3.4 Eidetic processing; Imagination, Perception & 3D mapping knowing where things belong in matrix/processing context

3.5 Empathy, Intuition, Prediction, Modeling & Bonding Navigating through varying circumstances, analysing what's going on.

3.6 Analogical, Eidetic graphics

Network 4, abilities & functions

4.1 Senses of time, perspective, aesthetics and humor (abstract audio/visual)? time related tools

4.2 Complex tool use, dexterity, construction & synchronized motion system stability & response dynamics (animal behaviors: create & cooperate)

4.3 Procedural memory & association memory & association

4.4 Cultural/complex behavior processing & synthesis knowing where things belong in matrix/processing context

4.5 Inspiration, Tenacity, willpower (self control) & propriety, play, Metaphoric language & Creativity Nav igating through varying circumstances, analyzing what's going on.

4.6 Archetypal stories

Network 5, abilities & functions

5.1 sense of acceleration/deceleration, hardwired calculation abilities (abstract pressure/touch/taste/temp.?) energy related tools

5.2 Self awareness, self esteem, presentation system stability & response dynamics (animal behaviors: assess & impress)

5.3 Declarative memory & association memory & association

5.4 Ergonomic processing & analysis knowing where things belong in matrix/processing context

5.5 Intellect (IQ), Autonomy, innovation, introspection

& planning Navigating through varying circumstances, analysing what's going on

5.6 Formal language & symbols

Network 6, abilities & functions

6.1 Self direction & morality (tools for interaction) power related tools

6.2 Diplomacy & communication system stability & response dynamics (animal behaviors: coordinate & communicate)

6.3 Working memory & association memory & association

6.4 Coordination knowing where things belong in matrix/ processing context

6.5 Interaction; Judgment, decisions & strategy Navig ating through varying circumstances, analyzing whats going on?

6.6 pure thought (non-verbal)

symptoms of being stuck in a matrix

People stuck in M1:

Relate everything to: Womb experience (fists clenched, curled up, thumb sucking).

Get anxious when: Awake, due to sensory overload.

Cannot cope with: Sensory motor input.

Deal with anxiety by: Wimp behavior (sleeping heavily, or crying, whimpering and screaming if made to stay awake or exercise much).

Possible phobias: Fear of physical exercise, walking etc.

People stuck in M2:

Relate everything to: Getting sensorimotor input (sex, food, fighting, territory, physical movement).

Get anxious when: Their desires are not quickly met, or when faced with anything too different from themselves, or when their 'parental substitute (usually a partner) seems threatened.

Cannot cope with: Stillness, Silence, being ignored.

Deal with anxiety by: Concrete bully behaviors: Using aggression, noise, physical violence, rage.

Possible phobias: Fear of silence, fear of solitude (Monophobia), fear of insects and/or animals (and may harm animals), fear of the unknown/strange/foreign (Xenophobia), fear of emotional expression, poetry or poetic language, fear of outdoor/ open spaces (Agoraphobia). Bad cases often won't leave home, or even go outside. Mild cases feel anxious doing so.

People stuck in M3:

Relate everything to: Emotion and imagination (melodrama, superstition, magic, religion, fiction, sentiment).

Get anxious when: The environment/nature seems threatened, or they believe they have 'sinned' (transgressed the moral rules of their society's belief system).

Cannot cope with: Confinement, especially indoors.

Deal with anxiety by: Wimp behaviors: complaining, moaning and whining, or appealing to a 'higher power' (prayer, self denial), or bully behaviors: emotional blackmail (an attempt to make others feel they have 'sinned').

Possible phobias: Fear of small spaces or confinement (Claustraphobia), fear of machines or technology (Technophobia).

People stuck in M4:

Relate everything to: Material things and constructs (tool usage and manipulation, society, objects, machines, systems, order, bureaucracy).

Get anxious when: Their position in society or their group seems threatened, or material things do not function as they should.

Cannot cope with: Disorder, tardiness, the unconventional, unexpected change, non-conformism.

Deal with anxiety by: Abstract bully behaviors: Sulking, leaving in a huff, stonewalling, slamming doors/thumping, throwing or kicking material objects, posturing, threats of legislation or 'official' punishment.

Possible phobias: Fear of solitude (Monophobia), Fear of

failure (Atychiphobia), fear of abandonment (Autophobia), fear of change (Metathesiophobia), fear of the future (Chronophobia).

People stuck in M5:

Relate everything to: Their own ideas, and coming up with those; analysis. Financial gain, narcissism and possession of objects.

Get anxious when: Anything gets in the way of their ideas or anyone disagrees with them.

Cannot cope with: Criticism, distractions, interference, boredom, confrontation, lack of resources.

Deal with anxiety by: Wimp behaviors: Self isolation, running away, self medication, or bully behaviors: Shouting, threatening behavi
or, blustering.

Possible phobias: Fear of germs, fear of crowds (Enochlophobia), Fear of intimacy (Aphenphosphobia).