MAPPING, SCALING, RE-ENACTING DMT EXPERIENCES PERCEPTIVE, AFFECTIVE AND COGNITIVE SPATIO-TEMPORAL PHENOMENOLOGICAL COMPONENTS QUALITIES AND INTENSITIES IN VR

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I DMT Reports (340) textual analysis used to define our virtual toolbox items in Neos VR platform.
II DMT experiences phenomenological perceptive, affective and cognitive components reconstruction: mapping and scaling using NEOS Metaverse engine interactive, modular and interactive platform.
III Induction of visuo-affective embodiment phenomena within an isolation tank using VR display setup?

I DMT Reports (340) textual analysis used to define our virtual toolbox items in Neos VR platform.

The 340 DMT reports written transcripts we used is a compilation that was collected over two decades (St john, 2018) by Peter Meyer and published on Serendipity website on 2010-08-20 (See: http: www.serendipity.li/dmt/340_dmt_reports.htm. Copyright of individual reports are referenced as http://www.serendipity.li/dmt/340_dmt_trip_reports.htm#*N*, where *N* is the number of the report). We choose to run the qualitative textual analysis of the 340 DMT reports using EMOTAIX-tropes software developed by Pierre Molette and Agnès Landré (1994). This software is based on Rodolphe Ghiglione work (see: http://www.tropes; fr/). During its evolution, the software has relied on other scientific works than those of first authors. The algorithm which was integrated into the semantic analysis of EMOTAIX-Tropes software to locates the "bursts" episodes in narrative or the thematic cooccurrences is derived from the works of Pierre Lafon (1984) further described in Mathieu Brugidou thesis (1992). The scenario ontonlogy editor tool development rely on John Lyons works itself inspired by Anglo-Saxon linguistics researches. Finally for the text general style analysis it was adapted from the grammar of meaning and expression Patrick Charaudeau (1983, 2001, 2002).

1- The goal of our primary qualitative analysis is to get an overall comprehension of the 340 DMT reports by looking at the text general style and the text occurrence frequency of verbs, pronouns modalities and adjectives. Our frequency occurrence threshold is not based on the minimum of words, but calculated according to the pertinence factor. With the pertinence factor, the parameter of the analysis is calculated in ten thousandths of the word count of the text (i.e. if the pertinence factor is set at 10 corresponds it implies a minimum occurrence frequency of 3 words for a text of 3,000. The more the thresholds is increased, the more the information is lost and vice-versa if you reduce these thresholds). We run our textual qualitative analysis using the pertinence factor set at 1/3 and *a priori* excluded from our analysis the words: "reports" and "DMT" by setting them as borders. The analysis of the verbs and pronouns will help us define the subject of the action, the type of action and feelings (passive/ active/ reflexive /performative/stative/factive) and the modalities will serve to define the action location, duration and intensities. As for the analysis of the adjectives types they will provide us the characteristical properties of DMT mental representation as well as the types of emotional reactions or judgments.

In Emotaix categories, the identification of "*actant*" (when placed in front of the verb) or "*acted*" (when placed after the verb) constitutes one of the essential steps in the text analysis. As a matter of fact, when a significant reference field or a reference clearly appears in the position of actant (percentage above 60 %), it is assumed that the notion it represents carries out the action. Otherwise, when a significant field or a reference clearly appears in the position of "*acted*", it is assumed that the notion it represents is subjected to the action. When a reference universe or a reference is in an "*actant*" position (rate over 60%), it can generally be considered that the subject performs the action. In the opposite case, when a universe or a reference used is placed in position of act, one can generally consider that the subject undergoes the action. In our case, the actions we choose to examine are the type of self-motion occuring in DMT experiences in order to classify them accordingly to their types of self-motion: passive self-motion (e.g., "*I am moved*"), active-self-motion: (e.g., "*I move*") or reflexive self-motion: (e.g., "*myself moves*").

To our view, the different types of self-motion are key elements, that need to be precisely implemented in our VR scenario to match as closer as possible participants initial DMT experience level of perception-action coupling, sense of immersion and spatial presence. Therefore the personal pronoun analysis results and "*actant*" or "*acted*" identification will help us set-up experiencers right type of self–motion as well as reaching a better understanding of the person perspective (1^{th}, 2^{nd}, 3^{tr}) and related point of view adopted by DMT experiencers (in transcendental experience's ego-death phenomena it can also be point of "view from nowhere" (Nagel, 1989). This analysis attempt to highlight the connections between DMT experiences subjective phenomenons and the correlated subjective point of views from which the different categories of actions (active, passive or reflexive) are happening. The determination of the various person perspective frame of reference, field of view and self-motion dynamics (direction and velocity) will be choices in the VR scenario menu we will elaborate which will enable participants to recontruct their various spatio-temporal locations sense of self, draw their self-motion trajectories in relation to their and of their remembered past DMT experiences environment and mental imagery (II of our project).

The goal of our secondary qualitative analysis is to examine the text semantic field reference and class relations as well as to inject to the list of words used to build Emotaix-tropes predefined scenario DMT experiencer's specific vocabulary lexicon to get better scenario narratives customization. Thus, the refined Emotaix-tropes scenario will help us identify what components need to be included in the matrix modules of our VR scenario.

Results

1-Primary qualitative analysis of the text elements (text general style, modalities, setting. All words analysis: verbs, connectors and adjectives types and occurrences.)

The text general style is rather argumentative: discussing, comparing or criticizing, with some modalities that provide the means to express doubt on something or somebody: 2,4% of the modalities in the text use epistemic adverbs occurrence (196) listed as follows: *maybe*, *almost*, *perhaps*, *possibly*, *probably*, *approximately*, *apparently*, *in appearances*) *which convey notion of doubt*, *uncertainty and hesitation.*

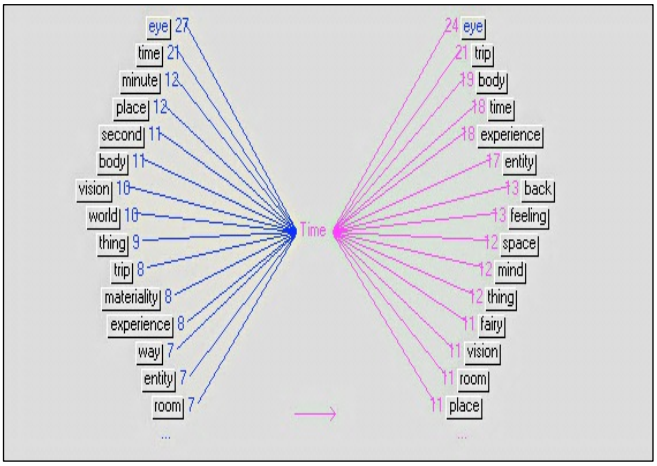
The dramatization of the discourse is provided by the means of the intensity and negation modalities. The intensity rate is 18.3% with (1493) occurrences, listed as follows : *all*, *at least*, *too*, *only*, *so*, *enough*, *somewhat*, *brightly*, *finally*, *very*, *completely*, *also*, *more and more*, *totally*, *a bit*, *well*, *most*, *mostly*, *barely*, *damn*, *extremely*, *moderately*, *madly*, *each*, *fully*, *so much*, *a lot*, *at all*, *instantaneously*, *very well*, *a lot more*, *intensely*, *nothing but*, *a great deal*, *immensely*, *altogether*, *wholly*, *to my surprise*, *above all*, *utterly*, *so well*, *obviously*, *nearly*, *alright*, *dead*, *explosively*, *all too*, *passionately*, *all at once*, *far more*, *weirdly*, *hardly*, *indeed*, *necessarily*, *entirely*, *well at least*, *as much as possible*, *particularly*, *highly*, *loud*, *instantaneously*, *terribly*, *tremendously*, *greatly*, *even more brightly*, *unbearably*, *a little bit*, *strongly*, *most especially*, *severely*, *seriously*, *moderately*, *aloud*, *indeed*, *best*, *fantastically*, *very fast*, *nearly*, *most importantly*, *hardly*, *better*, *fervently*, *little less*, *nearly too*, *so many*, *heavily*, *fairly* , *straight away*, *very powerfully*, *tightly*, *fabulously*. The negation rate is 15.1% with (1233) occurrences listed as follows : *no*, *not*, *never*, *nothing*, *not only*, *no longer*, *none*, *not at all*, *in no way*, *neither*, *no more*, *nothing more*, *no way*, *if not.*

The action location is provided by the modalities of time and place : time modalities rate is 25.2% with (2057) occurrences, listed as follows : *all of a sudden, now, faster, forth, ever, at the same time, then, momentarily, for a while then, before, ever, afterward, again, instantly, at once, immediately, before, and so one, still, simultaneously, at this moment, later, early, at first, slowly, at the moment, after, momentarily, next, suddenly, today, ever, then once again, each time, soon, during, for the first time, originally, actually, shortly after, beforehand, briefly, just then, always, rapidly, ususally, in time, already, normally, ever before, quickly, last time, infinitely, someday, yet, at the same time till, how long, previously, constantly, normally, periodically, occasionaly, initially, long, again and again, generally, weakly, to start with, for some time before, soon enough, anytime, rapidly, already, during, last time, forever, then now, over and over again, in general, for a moment, a while go, sometimes, in the past, at this time, first thing, gradually, at the end of, three times, next time, regularly,only when, the day before, for the first time ever, for a long time, at last, in time, ever till now, progressively, continually, ultimately, now rapidly, at that time, faster, how long, before long, all of a sudden, over and over, immediately after, every day, several times,in advance of, so often,*

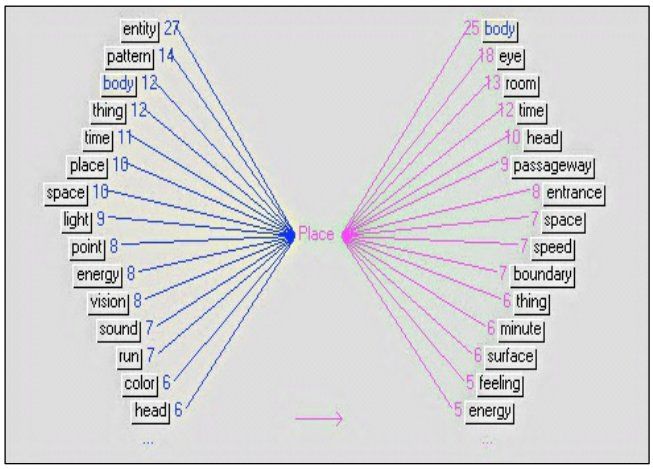
For place the modalities rate is 16.2% with (1322) occurrences listed as follows : *around, wherever, there wherever, here, where, across, out,in the midst,, upward, there, along, behind, back, farther, down, left, towards, deep in, in position, northward, far, under, away, out, on its, right, everywhere, right away, on earth, along, here, beneath, inside out, outward, inside, in the middle, all over, below, high, someplace, somewhere, throughout, near, forward, out there, further, hallway, nowhere, from behind, backwards, anywhere, downright, on top of, upwards, thus far, close to, inwards, upside down, in the head, beside, apart, in the head, closer, up and down, closely, right here, there, someplace, near, halfway across, last, ahead, apart, back there, on top of, someplace, out there, on board, across, farther away, in front, close to, here on earth, in the first place, anally, out towards, under, apart, outside, from below, from behind, farther back, further, horizontally, back on earth, closest, on top of, downtown, up and down everywhere, from above, far and away, hence, to the north, back here, nextt door, to a higher place .*

The graphs 1-2 below show the co-occurrence frequency for « *time* » : graph 1(left side) and « *place* » : graph 2(right side) existing relation with the other references of the text. For *time* : *eye* has the highest frequency and appears on both side of *time* central reference which implyies that *eye* is both the subject (its predecessor, on the left side) and the object (its sucessor on the right side). For *place* : *entity* has the highest co-occurrence frequency among the predecessor (on the left side) and *body* has the highest co-occurrence frequency among the sucessor.

Graph 1 : *Time*



Graph 2 : *Place*



The setting is involving a narrator which in descending order refers to himself using the first person perspective "I" or "me" 60.4% (5968 occurrences), "we" 2.5% (251 occurrences), the third person perspective: "they", "them" 10.1 (995 occurrences"), the second person perspective "you" 3.6% (353 occurrences), and the indefinite pronoun: "somebody" 0.5% (49 occurrences).

The narrators are dominantly subjects experiencing a first person perspective agency ("I", "me" rate exceed 60% placing it in the "*actant*" class which implies that subject is carriyng out the action), this also when we included the specific word "*SWIM* "(which stands for someone who isn't me) to Emotaix-Tropes search list of personal pronouns because sometimes DMT psychonauts refer to themselves using this abbreviation (this is probably due to the fact that DMT drug being illegal in most countries DMT experiencers are therefore compelled to adopt acronym to preserve their anonymity). We found (51 occurrences) of "*SWIM*" in an "*actant*" position (rate over 60%).

The narrator involvement is determine by the assertion modalities rate 5.0% (409) listed as follows : *really, definetely, in fact, not, sure, anymore, true, of course, surely, okay, absolutely, definetely, certainly, truly, no matter, real, exactly, perfectly, truly, yeah, really not quite, yes, of course, undoubtedly, in any case, not quite , without doubt.* The manner modalities allow the qualification of the narrator speech is rate is 17.9% with (1463) occurrences, listed as follows : *rather, clearly, independently, anyway, for one, somehow, literally, extra, sensually, lustfully , just, how, sensibly, wild, as well, though, kind of, seductively, else, ceaselessly, as well, else, seductively, ceaselessly, phenomenaly, equally, deeply, out loud, excitedly, simply, vividly, subconsciously, etc, specifically, rather, quite, for some reason, amazingly, pretty much, maddeningly, kinda, mentally, eventually, dramatically, thin, right on, that is, solely, indescribably, gracefully, such, kind of, overwhelmingly, ad infinitum, intricately, friendly, by far, impossibly, slightly, just about, on one hand, on the other hand, equally, vaguely, by the way, directly, quite, strangely, jointly, subjectively, characteristically, meticulously, even, back and forth, sneeringly, seemingly, physically, either, even a little, in and of itself, by no means, widly, funny, all in all, face to face, at heart, differently, supra, unbelievably, unearthly, unspeakably, in a sense, gently, incomprehensibly beautifully, with that, remotely, elegantly, joyfully, effortlessly, incredibly, quietly, interestingly, unexpectdly, staccato, sarcastically, especially, vaguely, hall, brilliantly, for some reason, lewdly, telepathically, with love, frankly, in on , as well, for anything, terrifyingly, wildly, mentally, back and forth, for that matter, honestly, unwordly, blindly, understandably, sensually, as well, emotionally, typically, transcendentaly, presumably, gratefully, thankfully, as it were, quite easily, consciously, as such, breathtakingly, vaguely feasible, merely, gigantically ,unendingly, endlessly, profoundly,to and fro, abruptly, repeatedly, currently, as usual, adequatly, uncontrollably, involuntarily, thoroughly, oddly, middly, electrically, very much like, with that, affectionately, hands down, continuously, symmetrically, mathematically, nonetheless, significantly, staring, euphorically, pictorially, sympathetically, startingly, chaotically, quite literally, cunningly, noticeable, regretfully, either, happily,visually, fourth, in common, magically, musically, ecstatically,, intramuscularly, firmly, primarly, pleasantly, intravenously,*

viciously, sharply, no end, in a flash, openly, dripping, all together, indescribably, liquidly, linguistically, darkly, third, excitedly, unimaginably, patiently, for dear life, carefully, adrift, similarly, translucently, freely, passing, from head to toe, precisely, dripping, actively, passively, unvoluntarily, together, basically, inseparably, unfortunately, in particular, wide, out of thin air, in reality, typically, pretty, in some ways, vastly scientifically, technologically, increasingly, absurdly, alongside, with hapiness, of necessity, dimly, tingly, straight, rhytmically back and forth, in the mind, ever so rhytmically, incidentally,in two ways, with that, sweetly, dear, rich, let alone, searchingly, softly, usly, luminously, mainly, quite naturally, for one, accurately, readily, adequately, all the more, refreshingly, bizzarely, how many, in particular, how many, astronomically, a circle, invitingly, liberally, intuitively, friendly either, significantly, basically voluntarily, voluntarely, relatively, pretty much, frivolously, potentially, menacingly, under the circumstances, prominently, in other words, back and forth, interpersonally, biologically, in the air, distinctly, collectively, deep down, sheer, relunctantly, home, fiercely, consciously, nonetheless, exponentially, presumably, prematurely, for good, faintly, frenetically, explicitly, deliberately, amok, intently, typically, face to face, that is incomprehensibly, quite diligently, miserably, roughly hall, fortunately, steadly, asleep, by the way,, routinely, how much time, by nature, joyously, by no means, thick, responsibly, thankfully, practically, surprinsingly, properly visually even, rather sharply, in circles , in darkness, insanely, coherently, badly, with chemicals, at any rate, in effect, very much like, partely, intimatelly, casually, interestingly enough , verbally, for free, all but, fucking, finely, permanently, randomly, half-heartedly, decorative, consistently, purely, that is, nostalgically, astrally, comfortably, in a man, heartidly, rather omniously, furiously, geometrically, in turn, for that matter, as usual, cautiously, wickedly, startingly, traditionally, permanently, personally, unpleasantly, laboriously, hauntingly, curiously,

The narrator expresses himself using the following verbs categories:
-Stative verbs expressing states or concepts of possession: 42.1% (7971) occurrences.
-Factive verbs expressing action: 37.6% (7110) occurrences.
-Reflexive verbs expressing statements about facts, actions, people, objects or feeling: 20.0% (3788) occurrences.
-Performative verbs expressing an act through and in the language: 0.3 % (64) occurrences.

The verbs frequency occurrences in decreasing order is as follows:
Be (4035); have (618); can (513); feel (499); see (450); do (424); seem (282); will (252); know (245); look (243); think (230); come (224); say (208); make (187); go (183); like (168); take (155); begin (150); 136 (become); give (131); try (129); remember (126); open (121); experience (113); get (112); start (107); hear (105); appear (101); show (92); talk (84); want (76); close (75); describe (73); realize (72); move (72); keep (63); leave (62); tell (62); happen (62); turn (62); find (61); hold (60); laugh (58); could (57); let (51); ask (49); watch (49); smoke (48); notice (47); form (44); back (3); put (42); sit (42); exist (38); fill (38); communicate (37); believe (37); return (36); lay (36); fly (36); enter (34); understand (34); pass (34); dance(34); sense (34); call (33); reach (33); create (33); may (31); break (31); morph (30); float (30); speak (30); grow (30); stand (29); fall (28); recall (28); use (28).

The objective adjectives: 68.8% (6905 occurrences) shows the existence or absence of a property.
The subjective adjectives 22.6% (2267 occurrences) express an emotional reaction or a judgment on something. The objective adjectives found are as follows: *swirling, oscillating, own, each, near, distant, next, complete, other, final, changing, both, up to, favourite, treaky, morphological, all, serpentine, alien, relevant, pretty, ontological, utter, nth, like, glinting, titanic, iridescent, certain, whole, very, groping, jewelled, knowable, woolly, out, physical, felt, incarnate, all over, freaky, all over, perceptual, inner, external, every, sensitive, galactic, swarming, profound, previous, apt, self-dribbling, whatever, existential, arbitrary, all, away, ineffable, first, like, played, freaky, many, only, submarine, preparatory, all the, the next, out, lit, prime, up to, crisp, vivid, pre-room, welcome, ringing, flashing, dozen, raw, returning, familiar, true, hallucinating, transformed, another lined, prime, symbolic, every, seeing, two-dimensional, light, panic, chosen, personal, crashing, total, dying, vibrant, iconic, only, alright, moving, fluid, head, must, semi-liquid, both, entering, zero, perceived, various, gelatinous-hexagonal, progressive, various, distinct, reborn, continued, triangular, happening, angered, ready, several, visual, glowing, holistic, hurried, breathing, sultry, surrounding, medieval, animated, unlike, own, at ease, multi, golden, very, reported, else, wise to, amazed, geometric, miniature, enough, even shut, patterned, Holy, the next few, twisted, constant, churning, colourful, pulsing, spinning, alive, silvery, plastic, leaping, coming, shamanic-like, arch, smoky, gargantuan, very ghostlike, silver, oral, vanished, crawling with, noticed, random, pointed, uproarious, grunting, alive with, tantric, inhaling, filled every, covered, astounding, reminiscent of, ancient, translucent, indefinable, faulty, basic, earthly, losing all, involved complete, unbounded, crystal each, other than, entire, kaleidoscopic, changing, dramatic, intricate colourful pastel, earthly, individual, everyday unaltered, familiar, sensory, high-pitched, buzzing, trembling, multiple, giant, amazing, preceding, several, crystal clear, bipedal, giant, knowledgeable, unbidden, central, standard, fleeting, interlocked sinusoidal, ever-changing, undetected, sacred, home flying, endless, golden, like countless, countless non-defined, loving, living, enthralled, fluorescent, many colours, following, all sentient, breathing, unique, play, head first, soothing, average, multi-chambered, needed, creeping up on, scared shitless, electrostatic, vast, very three-dimensional, bifurcated, countless, vivid, crisp, alarming, inert, still very, like glowing, ordinary, walking, equivalent to, frowning, stuck, wanted, alive still, black and white, inhaled, whole, self, unimportant so-called, power, throbbing, paid, state, common, chemical, advised, last, ordinary, insubstantial, concrete, neoclassical, contrived, aesthetic, wretched excess, designed, barbaric, luxury, buxom, long-haired, isomorphic, consistent, internal, inexorable, own linear, extreme, epic, certain , bejewelled, dense, aligned, cubic, cut out, constant, connected, cosmic, sinusoidal, exhaling, vague, total sensory, definite, at the same time, suspended, untitled hallucinatory, microscopic, light, outer, valiant, patterned, intricate, Indian, rushing, three dimensional, focused, circular, frightening, initial, only complete, colourful, neutral, all encompassing, alright, worth, such, plastic , turned on, meted, bothered, vague, literal, multi-coloured, beginning, a couple of, staring, happening, same, away, whole, at ease, fuzzy, pervasive, telephonic, built, buzzing ,total , uncontrollable, kept, curved, compassionate, brilliant, dazzling, awesome, continued, evanescent, away, forward, horizontal, unfathomable, multi-limbed, non-threatening, mercurial, seraphic, burning, leaping like, irrational, leaping like, desert, spoken, lascivious, slippery, luminescent, daft, withered, changing, corporeal, uncanny, essential, reserved, well, thinking, in for, utter, ornate, detailed full-blown, engulfed, captivating, unifying, unchanged, dormant, metallic, to the point, gold, molecular, endless, attached, matured, concentrated, conical, singular, ethereal, enchanting, crystalline, celestial, archetypal, peculiar, all divine, prominent, controlled, alternate, serpentine, concentric, uniform appealing, outstretched, jaunty, frenetic, intimate, confused, circling, sensed, mild, exhaling, meaningless, searching, curious, indeterminate, convincing, shiny, final, finished, living, going, returning, ultra-high, stopped, content, at peace, male, unconditional, seen, realized visionary, spinning, covered, texture, tangy, earlier, silver, flickering, sitting, rested, foetal, curled up, focused, ethereal, light, sheer, organic, menacing, threatening, reverse, grey, spiral, tortuous, extreme, moaning, unsafe, temporary, tingling, parallel, distant , empty, formless, growing, staccato, devastating, temporary, steely, shrill, chilling, pulpy, flaccid, chilling, squishy-squashy, slimy, abhorrent, screaming, pitched, roman, etched, vanished, together, blended together, expected, mortal, maternal, neural , cerebral, talented, three-dimensional abstract, charged , smoked, ingested, palpable, tangible, actual, building, psychic, very sinister, invasive, timeless, resonating, centred, tentative, like elfin, non-visual, hieroglyphic, extreme physical, multidimensional, linear, several, flooding, weaving, trembling, shimmering, meticulous, sinuous, auditory, breakneck, coiling, cylindrical, ludicrous, , tensile, freakish, orchestral, amoeboid, outward, gargantuan, labyrinthine, every, miraculous, architectonic, staggering, mundane, variegated, unimaginable, indecipherable, diaphanous, miraculous, incandescent, primal, undeniable, divine, incalculable, Boolean, lyrical, gelatinous, otherworldly, dazzling, devouring, flood, delectable, filled every, total, handheld, taut, dense, primordial, spinning, straining, revolving, phosphorescent, imperceptible, remembered, at hand, found , experienced, starry,, felt, slumbering, well disposed, happening, mere, changing kaleidoscopic, losing all, another, stable , distorted, seeing, meaningful, confusing, overt alien, confusing erratic, moving ,auditory, seen , forgotten, occasional, flabbergasted, fleeting, waving, usual,*

patterned visual, falling away, blank, increased, mint, regarding, everyday conscious, following, psychic, several, approaching, considerable, penetrating, holding the next, jumbled, rocky auditory, brilliant shimmering, external sensory, conventional, rushing, tried, moving visual, subdued, repetitive, personal, stemmed, bodily , animated, decorative, carnival, open-eyed, high-flying, equivalent to, sloppy serpentine, extra-terrestrial, apparent, emerging, answering, underway, unguarded, going, last, very triangular, surrounded, almond-shaped, unmoving, gigantic holographic, born, dream like, esoteric, unwavering, spontaneous, whatever, needles, splitting, kept changing, conscious, intended, one way non verbal, , moving geometric patterns, the matter, halfway, shattering, futuristic patterned, relentless, very slender, taking, like opening, straight, ellipsoid, detailed, arriving, subsequent, frightening, seeming, descending shaped, dazed, striking, frantic, wound up, wooden, dirt, waving, complete, disorienting, makeshift, chicken, jabbering, prepared, paying, still, crowded, thankful, whatever, apparent, , ambient, distinct, elaborate, recognized, coming, intergalactic, presented, continued, even initiated, gigantic beetle, finest unpainted, renewed, , non toxic, reminiscent of, bouncing spring, equidistant, oily liquid, peeling , triumphant, at home a few, like molecular, straining, acid like, sudden, burst, ripped, stuck square, guided, classic, ordinary, mighty, fell, rocky, antique, irregular, harmonious, vibrant like, unsurpassable, intermingled, spiralling, rotating, multi-eyed, numb, vegetative, pseudo hallucination, slight, tingling, sizzling, kaleidoscopic-geometry, creative ,sweating, playful , contained, acrid, miniature, frozen, arachnoid, commensurate, concrete, indescribable, interlocking at the same time, roaring, unrolled, mighty, enough, in sight, in relation to, responsible for, unintelligible geometric, bottom-up, moving-up, stupendous, metallic pastel, wedge-shaped, indicative of, understood, constituent, amoral, benevolent, congeal, reluctant, fragmented, sparkling, low-lying, many ill-defined, middle aged, greenish, male, open to, devoid of, backward away, luminescent, idealistic, wanted, surreal, incandescent, observing, menacing, , uniform , overall, true, only, meaningless, not able, primitive, enveloped, ring shaped, elusive, veritable, approximate, singsong, resonant, leaping , withdrawing, moonlit, take home , rising, vaulted, newfound, pitched, , complicated, faint, raging colossal, flaming, ringing, identical, cloudless, disconnected, featureless, inner, encroaching, peripheral vision, head, rectangular, patient of, dozen, circular, sentient, one and the same, rectangular, spherical, unblinking , predatory, indicative of, lingual, confident, flowing past, fading, formed, autonomous colour visual, aural, wiggly, rounded, polished, aligned, layered vaporized, crashing, echoing, double helix, expanding, ended, hurtling, , acid ,mosaic , timeless, scared, floating, continuous, man-made, ready, banging, comforting, relaxed, like other, suspended, silky, creamy, fucking wicked, dropping, unbearable, like droning, shattered, rushing accelerating, understanding, smelling, velvet, cubist, spoken, Hindu india-ish, eidetic, flattened, unfamiliar, hectic, somatic, inadvisable, art, autonomic, controlling respiratory, pulled, filled entire, disembodied, hollow, fascinating, defenceless; checkered wall, peeling, various, elemental, objective, spongy, definite, evolutionary, remote, exhaled, anti-clockwise, plush, solar, life–size, teeny, cellular, microscopic, ruffled, several pulsating, annoyed, in awe of, functional, potent, relentless, scratchy, crackling, horizontal, very unearthly, laid back, benign, tripping , ornery, healing, common, routine, overwhelmed, internal, understood, interstate, blessed, fluttering, stone, separate, concerned, detached, at work, on the job, goofy, corresponding, doubled, alarming, intramuscular, womanly, copper colour, filmy, womanly, momentary, soaring, influential, profound, poring , terminal, loving, cosmic, impersonal, incarnate, reluctant, flashing, setting, pervasive, void of, overshot, Holy, genetic, vibratory, material, ceremonial, taught, multiplied, light hearted, moist, encrusted, light-hearted, burnished, static, disabled, inlaid, appointed, trapezoidal glowing, questioning, upward, hammered, crispy, blasting, muddy greenish, muddy, empty –handed, approximate, polar, trans-geometric, overdone, unmentionable, infinitesimal, explosive, accelerated, hallucinating, mythic, slight, irrelevant, multifaceted, inflated, congealed, many psycho-active, neural, choked, panoramic, residual, sculpted alien, deathless, telepathic, limitless, induced, misty circular, shivering, punitive, jocular tone, ultimate, informed, feathery, fuelled, soothing, chaotic, on the move, Byzantines faces, in depth, plasmatic prismatic, satisfied, oscillating, contextual, charged, intimate, losing, undulate like, stocking, blocky, folded, darkened, reassured, terrestrial, surimposed, teeming with, well done, interrupted, non–threatening, humble, veiled, unveiled, cute , shy, mirrored , occupied, guardian, outstretched, pushy, smothering, luscious, underwater, all the mirrored, vascular, repeated, lacking bodily, possessed, outlined, all over, concrete enough, like-dawn figures, inhaling, regular, blazing , enumerable, semi-conscious, terminal, traveling, curly, crossed, instant, ornate, shifting, vibrant, enchanting, many many, captivating, fucking, together in harmony, lined, running up to, sacred , unknown, dead set, pointing, relevant, indescribable blurry, apparent, conscious enough , hallucinogenic, fleeting, unseen, cleansed, aflame, spreading , impassioned, crackling/sizzling, a pair of, stationary, alive pulsating :, nameless, gone , controlled , stemmed, furious, compact, thumping, shrilling, energizing, gone , grey, chemical, pitch-black, traditional colourful, upright, alright, octagonal, expanding out, bending, condensed, inspiring confusing, felt at home , in length, monstrous, raised, proximal, howling, beige, plain, mathematical, sized, all pervading, dressed like Vikings, planetary, alternative, own pretty parochial, hung ,alternate, greedy, unprepared, futile inconsequential , exponential , switch, prominent, awesome, closed in rushed, hurried, giddy, radiating , ever changing, pulled, eaten, untouched, worth, powered, computerized, blueish, synchronous, concerned, surpassing, majestic domed, faceless, repeated a few times, trembling, tangible, stainless, dominated, homogenous, detailed, stopped, exotic, involved with, gigantic, agnostic/atheistic, located, psychic, Hebrew, invigatoring astral, relaxed, sensory, instant, crystalized, continuous, overpowering, greedy, acknowledged, karmic, effective, neutralized, very primal, interlinking, unforgettable, carpeted, puffed, holographic, metaphorical, astral, far-flung, tantric, woven, chattering, burbling, tentacular, faceted, stretched, disguised, perpendicular, adjacent, every billowing, ambiguous, archaic, impersonal cosmological, reconstructed, humane, building another, well–disposed, slumbering, impacted labyrinth, disembodied, gnostic, learned, two-dimensional, orthogonal, twisting, decipherable, arcane, diaphanous, sheer-jagged, superficial, immanent, intrinsic, undeniable, underlying, fictional, very nasty, steep, ornate rusty, penetrating.

The subjective adjectives 22.6% (2267 occurrences) express an emotional reaction or a judgment on something.

The subjective adjectives found are as follows: *inconceivable, super, absolute, able, psychedelic, voluptuous, necessary, trying, Merry, imponderable, super, aware, pale, omnipotent, inevitable, too large, exalted, unwanted, spiritual, intimidating, just, predominant, disoriented, sober, radical, cocky, diabolical, crazy, stylized, kind, most, fundamental, encouraging weird, heavenly, eternal, symbiotic, known, precise, peaceful, particular receptive, careful, mischievous, hostile, dull, pompous, realistic, coherent, voluptuous, cretinous, coherent, controllable, neat, most, runnier, peaceful, awkward, just, natural, sticky, further, awe-inspiring, unbelievable, enlightened, immense, inexplicable, reasonable, inviting, hostile, abrupt, dreamy, impossible, bewitching, ok, guilty, crazy, wackiest, scary, whimsical, trying, coherent, odd, calm, typical, secure, round, bearable, weird, cruel, energetic, pleasurable, typical, enjoyable, terrifying psychedelic, disturbing, predominant, overwhelming, outlandish, zany, capricious, further, glorious, scintillating, imaginable, gleeful, eccentric, whimsical, heavenly, coherent, inquisitive, solemn, unbelievable, careful, dynamic, reassuring, particular, known, necessary, odd, brief, revolting, scarier, pale, illusory, dubious, positive, spiritual, egotistical, insane, virtual, slinky, crude, terrifying, immense, grotesque, outlandish, demonic, heavy, calm, frustrating, imminent, odd, loose, kind, typical psychedelic, compelling, subtle, abrupt, realistic, breathy, good for you, eternal, busy, powerless, persistent, partial, loose, dull, tactile, tactile energetic, calm, illusory, skinny, busier, inexplicable, hostile, just, brusque, modern, inviting, natural, prankish, pleasant, mischievous, hypersensitive, busy, lucid, sober, self-conscious, grateful, intentional, fundamental, lightest, childlike, poignant, supposed, subtle, tender, insane, weird, childlike, shaky, radiant, stubborn, bewildered, immense, loose, intact, omniscient, inconceivable, coolest, serene, indifferent, careful, hostile, necessary, most enjoyable, traumatic, hostile, precise, petrified, explicit, immortal, mean, just, forceful, imagined, neat, awestruck, dissipated, horrifying, mysterious, intentional, further, too bad, guilty, blissful, inevitable, subjective, calm, brief, cutest, innocent, truthful, enlightening, horrifying, imaginable, super, dizzy, cheeky, good-natured, sneaky, permissive, disruptive, variable, terrified, fragile, careful, awe-inspiring/terrifying, tricky, scarier, steady, vindictive, decided, sensible, dissipated, childlike, crazy, impartial, suspicious, positive, brave, clean-cut, intriguing, dire, high-tech, wondrous, natural, swell, touched, imaginary, pleasurable, berserk, immaculate, disturbing, proud, pretty much, innocent, modern, imagined, insane, unbelievable, gross, grateful, tearful, eternal, coherent, clumsy, proven, equal, particular, decided, dumb founded, imprecise, trivial, tranquil, drastic, fabulous, feeble,*

The numeral adjective represents 8.7%(869) occurrences.

Adjectives frequency occurrences

In decreasing order:

Like (310); all (191); out (128); very (124); other (119); little (90); another (84); different (80); beautiful (74); first (73); geometric (71); bright (66); intense (66); just (63); large (62); every (60); many (59); back (59); only (59); down (56); whole (56); aware (55); own (53); small (53); deep (52); strange (51); same (49); visual (49); light (47); physical (45); amaze (45); big (44); great (44); incredible (44); next (44); fast (42); each (42); hard (41); white (41); few (41); entire (40); away (40); colored (39); blue (39); alien (39); psychedelic (38); pure (38); able (38); open (36); new (36); new (36); looking (34); high (33); closed (32); tiny (32); colourful (32); green (32); good (31); huge (30); felt (30); black (29); right (28); real (28); similar (28);

2- Secondary qualitative analysis: text semantic field reference dominant relations.

The goal of the secondary analysis is firstly by examining the text semantic field references relations' dominant connection to highlight DMT experiences structural components hierarchical organization and secondly the customized DMT experiences scenario results created by Emotaix-tropes software will serve to determine the menu of the virtual toolbox assets (characteristic and properties), the type of spatial navigation the participants will use in NEOS interactive platforms, the menu of the emotion, feeling , sensation he will be able to select to categorize his self-location within the virtual reconstitution of his DMT experience.

-Text semantic field references dominant relations' connection

These relations are defined by the words found together in the same order and in the same position in the text. We choose to list only the main relations frequency occurrences (until and including 4) in their decreasing order as follows:

Field/vision (14); time/space (13); mind/body (9); back/body (8); fairy/creature (7); flowering–plant/pattern (7); space/time (7); colour/pattern (7); experience/life (6); feeling/love (6); part/experience (6); inside/head (5); "swimming", namely SWIM (someone who is not me)/friend (5); colour/coloration. Eye/vision (5); back/head (5); people/room (5); colour/shape (5); soul/body (5); soul/body (5); back/materiality (5); energy/body (5); feeling/presence (5); energy/form (5); vision /back (4); presence/entity (4); god/love (4); shape/colour (4); thing/window (4);one /vision (4); life /violence (4); insecta/creature (4); thousand/entity (4); face/eye (4); life/eye (4); body/mind (4); consciousness/body (4); glass/pipe (4); entity/nature (4); aircraft/existence (4); wall/room (4); smile /face (4); pattern/colour (4); machine/ fairy (4); time/feeling (4); part/body(4).

The results of the analysis of Meyer's 340 DMT reports compilation using Emotaix-Tropes highlight the textual style and semantic field and the following charts and lists emphasize the spatio-temporal characteristics and properties of DMT spaces as well as the experiencers behaviors and feelings:

- **Chart I** 340 DMT reports analysis scenario;
- **Chart II-A** DMT spaces properties & characteristics; **Chart II-B** Spatial properties; **Chart II-C** Physical properties; **Chart II-D** Visual properties; **Chart II-E** Dimensions; **Chart II-F** Colours; **Chart II-G** Consistency; **Chart II-H** Perceptibilities; **Chart II-I** Visual properties; **Chart II-J** Appearances and attractiveness; **Chart II-K** Times references; **Chart II-L** Ways type of space references;
- **Chart III-A** Body position; **Chart III-B** Body felt velocity.
- **Chart IV**-A DMT experience lived impressions of certainty/uncertainty;
- **Chart VI-B DMT** experience lived impressions of credibility/incredibility; **Chart VI-C** experience lived impressions of comfort/discomfort; **Chart VI-D** experience lived impressions of complexity/simplicity;
- **Chart VI-A** DMT Body references, **Chart VI-B** Body part; **Chart VI-C** Body; **Chart VI-D** Torso & abdomen; **Chart VI-E** Head & neck; **Chart VI-F** Bones; **Chart VI-G** Head Vascular system references; **Chart VI-H** Tissues system; **Chart VI-I** Organs; **Chart VI-J** Muscles;
- **Chart VII-A** Behaviors & feelings; Chart **VII-B** Behaviors & feelings repartition; **Chart VII-C** Feeling types; **Chart VII-D** Behaviors references; **Chart VII-E** Feeling repartition; **Chart VII-F** Emotions; **Chart VII-G** fears and apprehension; **Chart VII-H** Joy and happiness; **Chart** VII-I Love and affection; **Chart VII-J** Melancholy & sadness; **Chart VII-K** Pains; **Chart VII-L** Pleasure; **Chart VII-M** Cruelty and evil; **Chart VII-N** Desires; **Chart VII-O** Perceptions;
- **Chart VIII-A** nervous disorders; **Chart VIII-B** death and mortality;
- **Chart IX-A** Others concepts; **Chart IX-B** Action/act; **Chart IX-C** Question/answer; **Chart IX-D** Mathematics.
- **Chart X-A** Technologies; **Chart X-B** Devices;
- **Chart XI-A** Imaginary beings. **Chart XI-B** Divinity.
- **Chart XII-A** Animals; **Chart XII-B** Mammals; **Chart XII-C** Invertebrates; **Chart XII-D** Birds; **Chart XII-E** Insect; **Chart XII-F** Fishes; **Chart XII-G** Amphibians; **Chart XII-H** Reptiles;
- **Chart XIII-A Plants.**
- **Lists 1-7 created from Meyer 340 DMT reports (Emotaix-tropes scenario)**
- **List 8: sequencing of the DMT experience in the literature (two examples).** Peter Meyer sequencing into 4 levels of experience and "*Agekalipso*" (*psychonaut pseudo on the web https://qualiacomputing.com/2016/12/12/the-hyperbolic-geometry-of-dmt-experiences/*) sequencing into 6 levels of experience.

Moreover, to reach a higher level of descriptive accuracy of DMT mental imagery we have also retrieved some descriptive material from DMT-Nexus website lexicon (see: https://wiki.dmt-nexus.me/Hyperspace_lexicon#Candyland). Thereafter we classified into categories of interest this additional material (See: **Table 1** DMT spatio-temporal qualities (space-time, matter-texture); **Table 2** DMT Physical and affective states; **Table 3** DMT Archetypal bestiary of entities and beings; See: **Mental imagery examples POLY 3D free assets**). In this way we gained a more comprehensive understanding of the cognitive, affective and perceptive components of DMT experiences qualitative content that will help us design the relevant items and systems that need to be included in the virtual toolbox menu of our virtual computer generated scenario in NEOS VR platform. Namely, the participants system of navigation, mental imageries "bestiary", sound-objects and emotion wheel type.

II DMT experiences phenomenological perceptive, affective and cognitive components reconstruction: mapping and scaling using NEOS Metaverse engine interactive, modular and interactive platform.

Participants source of recruitment and preliminary interview See: DMT functional chart

We will use LogiX- VR multiplayer visual programming interface system, this collaborative visual scripting interface will allow us to build complex functionality to design the framework of our DMT experience reconstitution game in NEOS

(see LogiX tutorial: *https://www.youtube.com/playlist?list=PLoAvz0_U4_3zkwJQWd8eD8TWyQ0_0JWnw*)

The participant using HTC-Vive Head mounted display and hand controller will interact in NEOS platform 3D computer generated environment. NEOS platform is "a shared social universe where both casual users and creators coexist, collaborate using powerful building tools to create something new right inside VR (https://neosvr.com/) to reconstitutes their DMT experience participants will use the virtual toolbox (**see: Virtual Toolbox in NEOS system; See: Virtual toolbox content and properties**) we will create within NEOS platform.

For participants locomotion we will use NEOS navigation system existing tool (*ie. Fly, teleport, slide, grab modeI. In Neos navigation system it is possible to run different mode of navigation from the left and right hand controller* (*ie: right hand: teleport mode and left hand: flying mode*). Each participants DMT experience will be stored as a "world" in a folder within NEOS Inventory system (https://neosvr.com/introduction-2-2-2/). With participants prior consent their DMT experiences will constitute a " virtual archive" accessible to others participants; this will enable the sharing of DMT experiences not only with DMT experiencers but also to NEOS users audience.

Participants task instruction processing order in NEOS VR platform

** Participant's reconstruction and mapping will constitute the raw data of our analysis and it will be recorded live within the NEOS system.*

We predesigned in NEOS inspector panel a menu with the total number of participants DMT experience sequences (according to experiencer sequencing realized during the preliminary interview). Each sequence will be an empty scene in the menu.

1- Select in the menu the first empty scene of the DMT experience.

2- Adjust the degree of freedom (DOF: 0-360°) and depth of their field of view (FOV: 0-∞) from initial physical body position.

3- Select the quality/ies they wish to apply to the FOV (*i.e color, specific environment material/ textures, brightness/darkness, opacity/transparency, focused/blurred*).

4- Participants will use the virtual toolbox to:

a- Select among the assets the relevant item/s of their choice (*i.e environment, object, imagery, sound-object*) that best match their memories.

b- Placed the item/s in the space, scale (up/down/rotate/Zoom in/out)

c- Apply to each item/s the relevant rendering effect included in the toolbox.

d- Control the image formation speed, permanence/ stability using a sliding cursor in the menu of our virtual toolbox.

5 – Select on the interactive wheel of emotion[1] the affects type on hedonic axis (negative/positive/ unspecified) that best match the scene memories.

6- Navigate accordingly to the remembered self-motion velocity to the next position using the hand controller menu to open up NEOS navigation system tool (*if the position corresponds to a new scene they will beforehand open the new scene*).

**Participants will reproduce the same steps (1, 2, 3, 4, 5, 6) for each new positions and/or scene of their experience.*

III Induction of visuo-affective embodiment phenomena within an isolation tank using VR display setup?

The isolation tank [2] gravito-inertial force reduction and absence of exteroceptive stimulation will help participants to concentrate on their inner body sensations like in entheogen experiences. Further, the altering of the body matrix (Riva., et al, 2018), the boundaries of peripersonal and extrapersonal spaces should facilitate participants disembodiment process. This altering could facilitate out of body experience and with it pre-egotique experiencing and eidetic "*projection*". Thus, to our view the isolation tank immersive environment constitute an ideal setting that might boost visuo-affective phenomenon of video visual content (*i.e image of light source*) where subject bodily consciousness is transferred to a self-location (the subjective impression of where I am located in a place) and where the participant feels: "*I am what I see*" (*i.e "I am the light*") ** The videos content will be define in project part II.*

For perceptual correctness, we need to reproduce not only DMT specific spatial self/ego positioning and field of view (FOV) but we also need to simulate the experiencers' perceptual oriented illusion of self/ego motion (vection) within DMT space. To reduced breaks in presence (BIP Slater and Steed, 2000) the self/ego motion should be made on the base of gaze input. Participant gaze input will control their navigation within the VR video content presented in the isolation tank display. Further theses active visuo-motor interactions within the virtual space should enhance spatial presence (the sensation of being at another place than where one's own body) and with it the visuo-affective embodiment by the self/ego motion (vection). The Self/ego motion (vection) could be visually rendered: self/ego motion could leave a trail (ie. Lucid trip game[3]) and vibro-acoustic stimulation could be produced in synchronisation with the visual effect of the trail rendering to enhanced self/ego velocity impressions of motion.

** We will use the vibro-acoustic device of the Galim center and for the Vr display in the isolation tank the waterproof VR headset add-on low-cost solution of Zhang & Chen (Zhang.,et al, 2017) or 3D Google cardbox printed in soft plastic material with a smartphone enclosed in a hermetic case (L. V Zhihan, 2015) .*

** After the isolation tank cession participants will fill up the Ego-Dissolution Inventory (EDI) (Nour., et al , 2016).*

**Subsidiary question: how the retinal and gravitational reference frames interact during vection in the tanks setting?*

[1] We adapted in virtual reality the GEW emotion wheel (version 3.0 Scherer., et al, 2013)

[2] https://www.floatinisrael.com/scientific-research/

[3] https://store.steampowered.com/app/389260/Lucid_Trips/

Bibliography

-Albertazzi, L. (2018). *Naturalizing phenomenology: A must have*? Front. Psycho. 9:1933.doi: 10; 3389/fpsyg.2018.01933

- Brugidou, M. (1992). *Discours et enjeux politiques: une analyse de l'offre politique à l'Heure de Vérité pendant la campagne pour l'élection présidentielle de 1988* (Doctoral dissertation, Paris 1).

- Castelli, P., D'Ercole, M., Giannini, A. M., & Sbrilli, A. Mental imagery scale: an application in the field of art didactics.

-Çamcı, A., Lee, K., Roberts, C. J., & Forbes, A. G. (2017, October). INVISO: A Cross-platform User Interface for Creating Virtual Sonic Environments. In *Proceedings of the 30th Annual ACM Symposium on User Interface Software and Technology* (pp. 507-518). ACM.

- Charaudeau, P. (1983). *Langage et discourse: éléments de sémiolinguistique* (*théorie et pratique*). Hachette.

- Charaudeau, P. (2001). *Grammaire du sens et de l'expression*. Hachette.

- Charaudeau, P., & Maingueneau, D. (2002). *Dictionnaire d'analyse du discours*. Seuil.

- Compaan, A. (2012). Jung in the 21st Century: Evolution and Archetype. Vol. I Jung in the 21st Century: Synchronicity and Science. Vol. II by Haule, John Ryan. *Journal of Analytical Psychology*, *57*(2), 260-263.

- de Araujo, D. B., Ribeiro, S., Cecchi, G. A., Carvalho, F. M., Sanchez, T. A., Pinto, J. P., ... & Santos, A. C. (2012). Seeing with the eyes shut: neural basis of enhanced imagery following ayahuasca ingestion. *Human brain mapping*, *33*(11), 2550-2560.

- D'Ercole, M., Castelli, P., Giannini, A. M., & Sbrilli, A. (2010). Mental Imagery Scale: a new measurement tool to assess structural features of mental representations. *Measurement Science and Technology*, *21*(5), 054019.

- Gallimore, A. R. (2013). Building alien worlds-the neuropsychological and evolutionary implications of the Astonishing Psychoactive Effects of N, N-Dimethyltryptamine (DMT). *Journal of Scientific Exploration*, *27*(3), 455-503.

- Gallimore, A. R., & Luke, D. P. (2015). DMT research from 1956 to the edge of time. In *Neurotransmissions–An Anthology of Essays on Psychedelics from Breaking Convention*, (pp. 291-316).

- St John, G. (2015). *Mystery school in hyperspace: A cultural history of DMT*. North Atlantic Books.

- St John, G. (2018). The breakthrough experience: DMT hyperspace and its liminal aesthetics. *Anthropology of Consciousness*, *29*(1), 57-76.

- Lafon, P. (1984). *Dépouillements et statistiques en lexicométrie*(Vol. 24). Slatkine.

- Lilly, J. C. (1977). *The deep self: Profound relaxation and the tank isolation technique*. Simon & Schuster.

- Lyons, J. (1981). *Language and linguistics*. Cambridge University Press.

-Mordvintsev, A., Tyka, M. & Olah, C. deepdream (google/deepdream). *GitHub repository* (2015). Available at: https://github.com/google/deepdream.

- Nagel, T. (1989). *The view from nowhere*. oxford university press.

- Nour, M. M., Evans, L., Nutt, D., & Carhart-Harris, R. L. (2016). Ego-dissolution and psychedelics: validation of the ego-dissolution inventory (EDI). *Frontiers in human neuroscience*, *10*, 269.

- Nouriani, D. S. (2017). Mundus Imaginalis: Bridging Body and Spirit. *Psychological Perspectives*, *60*(3), 386-394.

- Richards, W. A. (2005). Entheogens in the study of religious experiences: current status. *Journal of Religion and Health*, *44*(4), 377-389.

- Pfeuffer, K., Mayer, B., Mardanbegi, D., & Gellersen, H. (2017, October). Gaze+ pinch interaction in virtual reality. In*Proceedings of the 5thSymposium on Spatial User Interaction* (pp. 99-108). ACM.

- Riecke, B. E., & Schulte-Pelkum, J. (2015). An integrative approach to presence and self-motion perception research. In *Immersed in Media* (pp. 187-235). Springer, Cham.

- Rubo, M., & Gamer, M. (2018, March). Using Vertex Displacements to Distort Virtual Bodies and Objects While Preserving Visuo-Tactile Congruency during Touch. In *2018 IEEE Conference on Virtual Reality and 3D User Interfaces* (*VR*)(pp. 673-674). IEEE.

- St John, G. (2017). Hyperespace dans le cyberespace: DMT et méta-ritualisation. *Drogues*, *santé et société*, *16*(2), 76-103.-St John, Graham. "The breakthrough experience: DMT hyperspace and its liminal aesthetics." *Anthropology of Consciousness* 29.1 (2018): 57-76.

- Slater, M., & Steed, A. (2000). A virtual presence counter.*Presence: Teleoperators & Virtual Environments*, *9*(5), 413-434.

- Szabo, A., Horvath, L., & Szummer, C. (2014). Phenomenology and altered states of consciousness: A new framework for analysis. *Psychologia Hungarica Caroliensis*, *2*(2), 7-29.

- Scherer, K. R., Shuman, V., Fontaine, J., & Soriano Salinas, C. (2013). The GRID meets the Wheel: Assessing emotional feeling via self-report.

- Timmermann, C., Roseman, L., Williams, L., Erritzoe, D., Martial, C., Cassol, H., ... & Carhart-Harris, R. (2018). DMT models the near-death experience. *Frontiers in psychology*, *9*, 1424.

- EU-funded project on "Perceptually Oriented Ego-Motion Simulation" (POEMS-IST-. 2001-39223)

- Riva, G., Botella, C., Baños, R., Mantovani, F., García-Palacios, A., Quero, S., & Villani, D. (2015). Presence-inducing media for mental health applications. In *Immersed in media* (pp. 283-332). Springer, Cham.

- Riva, G. (2018). The neuroscience of body memory: From the self through the space to the others. *Cortex*, *104*, 241-260

-Velmans, M (2017) what and where are conscious experiences? Dualism reductionism and reflexive monism. In K. Almqvist & A.Hagg (eds.) The return of Consciousness: A new science on Old Questions, Stockholm: Axel and Margaret Axson Jonhson Foundatio, pp 125-143.

- Zhihan, Lv,. (2015, October). Bringing immersive enjoyment to hyperbaric oxygen chamber users using virtual reality glasses. In*Proceedings of the 3rd 2015 Workshop on ICTs for Improving Patients Rehabilitation Research Techniques* (pp. 156-159). ACM.

- Zhang, W. (2017). A virtual reality head mounted display for underwater training and recreational purpose (Doctoral dissertation).

CHART I DMT reports analysis
scenario

Properties & characteristics	Column1	Health, life & casualties	Column2
Visual properties	674	Body	1371
Dimensions	546	Way	292
Other characteristics	303	Housing	240
Spatial properties	269	Transport & travel	235
Open & closed	264	Goods	208
Physical properties	233	Medicine & health	160
Sound & sound properties	217	Life & destiny	138
Good, bad, better	187	Clothings & fabrics	109
Differences	103	Death & mortality	74
Materiality & immateriality	101	Birth & reproduction	6
Extraordinariness & unusualness	87	**Birth & reproduction**	
Intensity	85	Birth	6
Distances	66	**Body**	
Surface	55	Body	269
Motion	48	Brain & nervous system	46
Complexity & simplicity	45	Cells	11
Equality & sameness	44	Digestive system	11
Perceptibilities	39	Sensory system	6
Boundary	33	Embryo	1
Consistency	25	Vein	5
Easy & not easy	23	Blood	4
Frequency	23	Protoplasm	2
Walk	23	Artery	1
Possible	22	**Body parts**	
Certainty & uncertainty	14	Head & face	600
Importance	14	Limbs	186
Exposure & weakness	12	Organs	100
Truth	12	Torso & abdomen	41
Comfort & discomfort	11	Body tissues	22
Safeness & dangerousness	11	Bones	18
Accuracy & inaccuracy	10	Hair & beard	13
Harmony & compatibility	8	Muscles	13
Ignorance	8	Dorsum	8
Feature	7	Sex	5
Quality	7	Trachea	2
Carriage	6	Articulation & cartilage	1
Free	5	**Articulation & cartilage**	
Increase & decrease	5	Articulation	1
Loss	5	**Body tissues**	
Name	5	Skin	17
Capability	4	Flesh	5
Clean & unclean	4	**Bones**	
Directness & indirectness	4	Bone	8
Order	4	Jaw	6
Reference	4	Hip	3
Regularity & uniformity	4	Pelvis	1
Role	4	**Dorsum**	
Characteristic	3	Buttock	8
Originality	3	**Hair & beard**	
Range	3	Hair	12
Section	3	Beard	1

CHART I DMT reports analysis

scenario

Version	3	**Head & face**	
Available	2	Eye	312
Major & minor	2	Head	97
Performance	2	Face	92
Special	2	Mouth	54
Validity & invalidity	2	Neck	11
Acceptability & unacceptability	1	Nose	11
Bodily properties	1	Throat	6
Division	1	Eyebrow	1
Fat	1	Eyelid	6
Option	1	**Mouth**	
Popularity & success	1	Mouth	34
Signal	1	Tooth	8
Style	1	**Nose**	
Suitability & unsuitability	1	Nasal	1
Acceptability	1	Arms & hands	144
Accuracy & inaccuracy		Legs	42
Accuracy	2	Hands	110
Exactness		**Hands**	
Exact	5	Hand	87
Stature	1	Wrist	1
Certainty & uncertainty		**Legs**	
Doubt	8	Leg	20
Certainty	3	Foot	14
Uncertainty	2	Knee	4
Clean & unclean		Ankle	1
Clean	4	**Muscles**	
Comfort & discomfort		Plexus	1
Comfort	9	**Organs**	
Discomfort	2	Respiratory system	67
		Heart	29
Complexity & simplicity		Glands	1
Complex	19	Organ	1
Complexity	12	Viscera	1
Consistency		**Glands**	
Solidity	12	Endocrine glands	1
Thickness	3	Pineal gland	1
Viscosity	2	**Respiratory system**	
Fluidity	1	Lung	10
Solidity		**Torso & abdomen**	
Credibility & incredibility		Shoulder	7
Incredibility	44	Abdomen	6
Authenticity	1	Waist	1
Credibility	1	**Abdomen**	
Difference		Belly	3
Difference	102	**Breast**	
Different	80	**Body substances**	
Dimensions		Tear	4
Big	167	Secretions	2
Little	90	**Secretions**	
High	33	**Brain & nervous system**	
Long	25	Brain	42

CHART I DMT reports analysis scenario

Short	11	Nervous system	1
Depth	11	**Cells**	
Low	7	Cell	11
Height	5	Intestine	1
Grand	3	**Embryo**	
Length	1	**Clothings & fabrics**	
Gap	1	Clothings	34
Large	62	Fabric	21
Huge	43	Headdress	12
Low		Footwear	4
Lower	5	Belt	2
Directness	4	**Clothings**	
Directness		Garment	7
Distances		Trousers	6
Distance	23	Dress	5
Far	21	Shirt	3
Easy & not easy		Costume	1
Easy	8	Undergarment	1
Effortlessness	4	**Garment**	
Not easy		Cloak	3
Uneasy	1	**Skirt**	
Equality & sameness		Sarong	1
Sameness	2	Corset	1
Similarity		**Fashion**	
Exposure & weakness		**Fashion makers**	
Exposure	7	Mannequin	9
Helpless	1	Shoe	4
Extraordinariness & unusualness		**Handwear**	
Bizarre	11	**Piece of cloth**	
Unusualness	8	Veil	15
Extraordinariness	6	Bedclothes	11
Remarkable	4	**Death & mortality**	
Spectacular	4	Death	55
Impressive	2	Dead	11
Uncommonness	1	Killings	5
Good, bad, better		Mortality	2
Great	72	Dead person	1
Good	63	**Dead person**	
Better	31	Cadaver	1
Bad	14	**Killings**	
Fine	7	Killing	5
Bad		**Mortality**	
Dirty	1	Immortality	2
Worst	1	**Goods**	
Better		Foods & beverages	111
Best	14	Furnishings	93
Good		Goods & merchandises	4
Too much	11	**Foods & beverages**	
Exquisite	6	Foods	51
Excellent	1	Beverages	31
Harmony & compatibility		Fruits	16
Harmony	5	Flavorers & sauces	8

CHART I DMT reports analysis

scenario

Inadequation	2	Vegetables	5
Appropriate	1	**Beverages**	
Ignorance		Drinks	22
Ignore	4	Drink, drinking, drunk	9
Ignorant	2	**Drink, drinking, drunk**	
Increase & decrease		Drinking	1
Increase	4	Drunk	3
Decrease	1	**Flavorers & sauces**	
Major & minor		Sage	3
Male & female		**Foods**	
Female	35	Candy	11
Materiality & immateriality		Egg	8
Materiality	100	Dessert	3
Immateriality	1	Meal	3
Open & closed		Meat	3
Closed	107	Dairy product	2
Originality		Jam	2
Original	1	Sweetening	2
Pure	38	Dainty	1
Real	28	Dish	1
Clear	23	Dough	1
Finiteness & infiniteness	20	Pasta	1
Perfect	17	**Dairy product**	
Pretty	17	Cheese	1
Mad	12	**Dessert**	
Afraid	11	Cake	3
Alone	9	**Fruits**	
Universal	8	Fruit	2
Sure	7	Lemon	2
Sweet	5	Apple	1
Wrong	5	Plum	1
Rich	4	**Vegetables**	
Cool	3	Bean	1
Fulfilment	3	Cucumber	1
Gentle	3	Pea	1
Serious	3	**Furnishings**	
Significant	3	Furnitures	88
Taste properties	3	Floorcover	5
Fertility	2	Seat	24
Numerous	2	Table	24
Sane	2	Bed	14
Useful	2	Furniture	8
Acute	1	Curtain	5
Correctness & incorrectness	1	Pad	1
Critic	1	**Goods & merchandises**	
Genuine	1	Consumer goods	4
Immobility & steadiness	1	**Goods & merchandises**	
Inability	1	Appliance	4
Invariability & changelessness	1	**Housing**	
Logicality & illogicality	1	Area	210
Traditionalism & unoriginality	1	Housing	3
Underground	1	Construction	1

CHART I DMT reports analysis scenario

Unsure	1	**Area**	
Correctness & incorrectness		Room	157
Correctness	1	Living room	9
Finiteness & infiniteness		Palace	9
Immobility & steadiness		Hall	6
Immobility	1	Apartment	5
Invariability	1	Kitchen	3
Logicality & illogicality		Nursery	3
Tactile properties & texture		Closet	1
Texture	4	Parlor	1
Sourness	1	**Building**	
Spiciness	1	House	14
Sweetness	1	Building	4
Traditionalism & unoriginality		Porch	3
Perceptibilities		Construction	2
Transparency	9	**Construction**	
Clearness	7	Builder	1
Distinctness	6	**Housing**	
Invisibility	4	Harem	1
Luminosity	4	Living quarters	1
Obviousness	4	Tent	1
Audibility	2	**Life & destiny**	
Opacity	2	Life	132
Cloudiness	1	Destiny	6
Physical properties		**Life**	
Bright	66	Living	9
Full	26	Real life	5
Strong	25	Live	4
Warm	20	Life style	1
Loud	19	**Medicine & health**	
Soft	7	Drugs	59
Smooth	7	Mental health	49
Reflection	4	Diseases	20
Strength	2	Medical institutions	9
Pierce,-ing	2	Health professionals	7
Flexibility	2	Medical procedure	6
Elasticity	2	Medicine	3
Echo	2	Anatomy	2
Wet	1	Sick and handicapped persons	2
Tight	1	Dental care	1
Rough	1	**Dental care**	
Heavy	1	Dentist	1
Deflection	1	Digestive system diseases	6
Popularity & success		Nervous system diseases	5
Achievement & success	1	Injuries	4
Achievement & success		Signs and symptoms	2
Success	1	Infectious diseases	1
Quantities		Pathology	1
Temperature	14	Visual impairments	1
Pressure	9	Nausea	5
Linear unit	7	Indigestion	1
Angle	6	**Infectious diseases**	

CHART I DMT reports analysis scenario

Masses	4		
Momentum	1	Injury	4
Mass	4	Headache	5
Temperature		**Pathology**	
Hotness	6	**Signs and symptoms**	
Temperature	2	Dizziness	1
Weights		Sickness	1
Load	4	Sickness	1
Range		**Visual impairments**	
Regularity & uniformity		**Drugs**	
Cyclicity	4	Drug addiction & illicit drugs	32
Safeness	9	Soporific	1
Dangerousness	2	**Drug addiction & illicit drugs**	
Safe	6	**Illicit drugs**	
Safety	3	Hallucinogen	17
Sound & sound properties		Cannabis	13
Noise	26	Hard drug	2
Pitch	6	Doctor	6
Rhythmicity	6	Surgeon	1
Silence	6	**Medical institutions**	
Sound property	3	Hospital	7
Harshness	2	Mental hospital	2
Spatial properties		**Medical instruments**	
Position	111	Stethoscope	1
Deepness	60	**Medical procedure**	
Sharpness	17	Injection	2
Symmetry	9	Therapeutics	2
Spatial property	3	Massage	1
Curvature	1	**Therapeutics**	
Position		**Medicine**	
Down	56	Neurology	2
Left	13	**Mental health**	
Apart	6	Nervous disorders	49
Center	2	Hallucination	40
Upstairs	1	Paranoia	4
Speed		Stress	3
Speed	66	Manias	1
Fast	52	Mental illness	1
Slow	4	**Manias**	
Immediacy	3	**Paranoia**	
Haste	2	Paranoid	1
High-speed	1	Patient	2
Suitability & unsuitability		**Sports**	
Convenience	1	Water sports	54
Superiority	2	Gymnastics	5
Superiority		Racing	4
Validity & invalidity		Combat sports	2
Validity	2	Court games	2
Visual properties		Football, rugby & soccer	2
Colors	530	Other sports	2
Coloration	67	Athletics	1
Darkness	25	Baseball	1

CHART I DMT reports analysis scenario

Complexion	20	Field games	1
Brightness	18	Sports	1
Visible	13	**Athletics**	
Visual property	1	Athletics	1
Colors		**Combat sports**	
Blue	62	Match	2
Green	55	**Competition & championship**	
Black	54	Medals	3
White	54	Winner	2
Red	44	**Medals**	
Yellow	27	Gold medal	3
Violet	19	**Court games**	
Gray	15	Basketball	2
Pink	15	**Cycling & motorcycling**	
Brown	8	Cycling	3
Orange	8	**Field games**	
Darkness		Lacrosse	1
Dark	25	**Football, rugby & soccer**	
Statistics on a list of words (occurrences)		Football	1
		Soccer	1
		Gymnastics	
		Gymnastics	5
		Other sports	
		Acrobat	1
		Surf	1
		Racing	
		Circuit	2
		Racing	2
		Sports	
		Stadium	1
		Water sports	
		Swimming	51
		Diving	1
		Surfing	1
		Swimming pool	1
		Transport & travel	
		Trip & travel	163
		Air travel	40
		Ground travel	13
		Aeronautics	7
		Rail travel	7
		Transport	5
		Aeronautics	
		Aerospace	7
		Aerospace	
		Spacecraft	4
		Space station	2
		Jet engine	1
		Air travel	
		Aircraft	26
		Flight	13
		Propeller	1

CHART I DMT reports analysis
scenario

	Ground travel	
	Car	6
	Train	3
	Bicycle	2
	Driver	1
	Wagon	1
	Rail travel	
	Railway	5
	Freight	1
	Locomotive	1
	Transport	
	Carrier	2
	Transport	1
	Trip & travel	
	Trip	126
	Travel	33
	Hotels	3
	Tourism	1
	Hotels	
	Hotel	3
	Travel	
	Destination	2
	Excursion	2
	Traveler	2
	Way	
	Way	106
	Entrance	80
	Passageway	69
	Road	13
	Path	8
	Street	6
	Stairway	4
	Bridge	2
	Highway	2
	Passage	2
	Statistics on a list of words (occurrences)	

CHART I DMT reports analysis
scenario

Behaviors & feelings	Column3	Other concepts	Column4
Feelings	1296	Thinkings & cognition	686
Perceptions	661	Other concepts (less frequent)	525
Behaviors	144	Other concepts (not frequent)	319
Appearance & attractiveness	122	Point	128
Sensations	37	Sense	95
Opinion & guess	10	Part	79
Liberty & servitudes	3	Question & answer	49
Mistakes & errors	2	Right	46
Appearance & attractiveness		Connection	43
Beauty	109	Structure	27
Appearances	6	Measure	24
Unattractiveness	6	Figure	23
Lovely	1	Procedure	21
Appearances		View	21
Appearance	6	Identification & authentication	15
Beauty		Line	14
Beautiful	74	Fact	13
Unattractiveness		Source	13
Ugliness	6	Set	12
Behaviors		Acts	11
Violence & ferocity	24	Creation	10
Courtesy & demeanor	23	Serie	10
Humaneness & inhumaneness	11	Use	9
Cruelty & evil	10	Chance	8
Disrespect & abuse	7	Practice	8
Tease	7	System	8
Courage & heroism	6	Deal	6
Seduction	6	Character	5
Composure & discomposure	4	Group	4
Kindness & goodness	4	Query & response	4
Absurdity & folly	3	Visit	4
Aggressiveness	3	Class	3
Elegance	3	Decision	3
Respectability & righteousness	3	Exploitation	3
Unpleasant persons	3	Issue	3
Humor & frivolity	2	Search	3
Naivete	2	Copy	2
Pride & arrogance	2	Feed	2
Thoughtfulness & unthoughtfulness	2	Race	2
Trustworthiness & untrustworthiness	2	Reproduction	2
Unsociability	2	Rule	2
Ambition & initiative	1	Support	2
Attentiveness & inattentiveness	1	Affair	1
Bad persons	1	Analysis	1
Behavior	1	Collection	1
Compulsiveness	1	List	1
Cowardice & timidity	1	Plan	1
Exaggeration & excess	1	Project	1
Femininity	1	Submission	1
Hostility & antagonism	1	**Acts**	
Morality & virtue	1	Action	6

CHART I DMT reports analysis scenario

Selfishness	1	Act	5
Sociality	1	Luck	8
Trustfulness & distrust	1	**Connection**	
Worthiness & unworthiness	1	Junction	33
Wrongdoings	1		
Absurdity & folly		**Creation**	
Absurdity	2	Creation	8
Fool	1	Master	2
Attentiveness & inattentiveness		**Exploitation**	
Attentiveness	1	Development	3
Bad persons		Identification	15
Womanizer	1	**Identification**	
Composure & discomposure		Identity	12
Composure	3	Identify	3
Repose	1	**Other concepts (less frequent)**	
Courage & heroism		Entity	221
Courage	5	Creature	55
Heroism	1	Ball	35
Heroism		Soul	32
Superhero	1	Piece	29
Courtesy & demeanor		Observation	16
Manner	14	Run	14
Informality	5	Care	10
Courtesy	2	Arrangement	9
Demeanor	2	Beam	8
Cowardice & timidity		Sight	8
Cowardice	1	Core	6
Cruelty & evil		Cause	5
Evil	4	Rise	5
Nefariousness	3	Shock	5
Cruelty	1	Sign	5
Maleficence	1	Subject	5
Malevolence	1	Access	4
Disrespect & abuse		Glory	4
Mock	4	Key	4
Ridiculous	3	Session	4
Exaggeration & excess		Sum	4
Excess	1	Adventure	3
Hostility & antagonism		Scan	3
Resentment	1	Stranger	3
Humaneness & inhumaneness		Challenge	2
Humaneness	6	Interface	2
Mercifulness	3	Limit	2
Mercilessness	2	Mark	2
Humor & frivolity		Resolution	2
Humor	2	Separation	2
Kindness & goodness		Share	2
Goodness	2	Accusation	1
Beneficence	1	Base	1
Kindliness	1	Brand	1
Morality & virtue		Button	1
Morality	1	Chart	1

CHART I DMT reports analysis
scenario

Pride & arrogance		Duty	1
Arrogance	1	Engagement	1
Pride	1	Flavor	1
Honesty	2	Input	1
Parental quality	1	Integration	1
Seduction		Mound	1
Sexy	4	No problem	1
Selfishness		Safari	1
Selfishness	1	Solution	1
Sociality		**Adventure**	
Sociability	1	Adventurer	1
Thoughtfulness & unthoughtfulness		**Mound**	
Thoughtfulness	2	Mound	1
Trustfulness & distrust		**Separation**	
Distrust	1	Separation	2
Trustworthiness & untrustworthiness		**Other concepts (not frequent)**	
Responsibility	2	Vibration	33
Unpleasant persons		Cube	19
Asshole	2	Sphere	16
Troublemaker	1	Shift	12
Violence & ferocity		Pool	10
Violence	24	Pulse	10
Worthiness & unworthiness		Defender	9
Worthiness	1	Bit	8
Wrongdoings		Disclosure	7
Wrongdoers	1	Hole	7
Wrongdoers		Maze	7
Deceiver	1	Mystery	7
Feelings		Projection	7
Feel	499	Combination	6
Feeling	126	Adieu	5
Joy & happiness	120	Probe	5
Friendships	95	Ring	5
Fears & apprehensions	90	Synthetic	5
Emotions	75	Cone	4
Love & affection	74	Experiment	4
Pleasures	36	Generation	4
Astonishment & surprise	34	Lighter	4
Admiration & liking	18	Medium	4
Pains	17	Opposite	4
Emotionalities	16	Representation	4
Desires	14	Transformation	4
Discontentments	13	Arrow	3
Unpleasantness	10	Catch	3
Melancholy & sadness	8	Exfoliation	3
Despair & resignation	7	Fall	3
Embarrassments	7	Listening	3
Anger & indignation	5	Reading	3
Gravity	5	Rear	3
Hope & optimism	4	Tie	3
Expectations	3	Vault	3
Gratitude & ingratitude	3	Approach	2

CHART I DMT reports analysis
scenario

Hates	3	Atomizer	2
Nervousness	3	Cap	2
Difficulty	2	Cleaning	2
Enthusiasms	2	Gall	2
Sensitivity & perceptivity	2	Gesture	2
Sympathy & compassion	2	Handle	2
Shame	1	Harlequin	2
Skepticisms	1	Host	2
Stupidity	1	Kick	2
Admiration & liking		Nice	2
Friendliness	18	Particle	2
Anger & indignation		Plate	2
Anger		Polygon	2
Annoyance	1	Premise	2
Bad temper	1	Progress	2
Astonishment & surprise		Reaction	2
Astonishment	18	Sample	2
Surprise	16	Sink	2
Desires		Stamp	2
Sensuality	9	Striking	2
Desire	5	Amber	1
Despair & resignation		Ambience	1
Despair	3	Apology	1
Resignation	4	Bass	1
Discontentments		Bid	1
Disappointment	11	Branch	1
Frustration	2	Buffoonery	1
Embarrassments		Chase	1
Confusion	7	Closure	1
Emotionalities		Conservative	1
Coldness	7	Crown	1
Unemotionality	1	Detection	1
Emotions		Entirety	1
Emotion	34	Exercise	1
Ecstasy	23	Fallacy	1
Distress	14	Hop	1
Anxiousness	2	Interference	1
Hesitance	2	Interpretation	1
Enthusiasms		Interval	1
Eagerness	1	Introduction	1
Enthusiasm	1	Knot	1
Expectations		Led	1
Expectation	3	Liner	1
Fears & apprehensions		Loom	1
Fear	51	Pole	1
Scare	21	Purge	1
Panic	15	Reversion	1
Apprehension	1	Roll	1
Foreboding	1	Sampling	1
Frisson	1	Sensitizing	1
Friendships		Spasm	1
Friend	82	Spill	1

CHART I DMT reports analysis scenario

Girlfriend	5	Steam	1
Companion	4	Stick	1
Roommate	3	Threshold	1
Boyfriend	1	Twig	1
Gratitude & ingratitude		Twin	1
Gratitude	3	Um	1
Gravity		Variable	1
Gravity	5	Zero	1
Hates		**Projection**	
Hate	3	Projector	1
Hope & optimism		**Query & response**	
Hope	2	Response	4
Encouragement	1	**Question & answer**	
Hopefulness	1	Question	30
Joy & happiness		Answer	19
Smile	35	**Reproduction**	
Happiness	23	Reproduction	1
Euphoria	17	**Thinkings & cognition**	
Joy	15	Cognition	323
Laugh	14	Experience	193
Bliss	8	Thinking	55
Exhilaration	4	Dreams & sleep	39
Closeness	1	Ability & intelligence	32
Contentment	1	Knowledge	25
Gaiety	1	Reason	12
Satisfaction	1	Comprehensibility	5
Love & affection		Awakening	2
Love	63		**Ability & intel**
Erotism	5	Intelligence	13
Affection	3	Intelligent	11
Beloved	1	Ability	8
Benevolence	1		**Cognition**
Kiss	1	Mind	158
		Consciousness	91
Melancholy & sadness		Unconsciousness	27
Sadness	5	Understanding	16
Sorrow	2	Imagination	11
Depression	1	Cognition	6
Pains		Concept	4
Pain	11	Reasoning	2
Suffering	2	Principle	1
Irritation	1		**Comprehensi**
Pleasures		Incomprehensibility	3
Fun	12	Unclearness	1
Pleasantness	9		**Dreams & sle**
Pleasure	6	Dreams	35
Amusement	5	Sleep	4
Delight	3		**Dreams**
Enjoyment	1	Dream	34
Sensitivity & perceptivity		Nightmare	1
Sensibility	1		**Knowledge**
Sensitivity	1	Know-how	8

CHART I DMT reports analysis
scenario

Skepticisms			**Thinking**
Skepticism	1	Thinking	29
Sympathy & compassion		Idea	26
Sympathy	2		**Use**
Unpleasantness		User	2
Unpleasantness	7	Statistics on a list of words (occurrences)	
Awfulness	3		
Liberty & servitudes			
Liberty	3		
Liberty			
Free will	3		
Mistakes & errors			
Mistake	2		
Opinion & guess			
Guess	4		
Point of view	4		
Preconception	2		
Perceptions			
Visual property	482		
Auditory perception	108		
Touch perception	26		
Perception	21		
Olfactory property	12		
Taste property	12		
Auditory perception			
Hear	105		
Synesthesia	3		
Olfactory property			
Smell	12		
Perception			
Kinesthesia	1		
Touch perception			
Touch	26		
Visual property			
Look	277		
Vision	140		
Image	49		
Display	11		
Visual perception	5		
Image			
Pixel	1		
Sensations			
Sensation	35		
Hunger	2		
Hunger			
Hungry	1		
Statistics on a list of words (occurrences)			

CHART I DMT reports analysis
scenario

Things & substances		Arts & culture	5	Numbers, time & dates
Devices	337	Language & texts	208	Time & duration
Thing	229	Mythologies	192	Dates
Substances	140	Entertainment	180	Numbers
Light	123	Music & audio	134	1900->2050
Objects	96	Arts	52	**1900->2050**
Coverings	24	Literature & writing	24	2000s
Gift	16	Design	19	**2000s**
Block	12	Architecture & ornamentation	7	2001
Enclosure	12	Decoration	7	**Dates**
Membrane	11	Culture	3	Days
Picture	9	Occultism & predictions	3	Years
Painting & painters	6	Photo	3	Months
Ice	4	Video	2	Holydays
Channel	3	**Architecture & ornamentation**		Date
Animal materials	1	Architecture	5	New year
Artifacts	1	Architect	1	Thanksgiving
Excavations	1	Ornamentation	1	**Months**
Garage	1	**Arts**		April
Animal materials		Graphic arts	18	August
Animal skin	1	Painting	12	**Years**
Animal skin		Art & artwork	10	Century
Fur	1	Plastic arts	4	Thousand
Coverings		Famous artists	3	Number
Roof	11	Artist	2	Billion
Mask	6	Artistic movements	1	**Time & duration**
Wrapping	3	Work of art	1	Time periods
Devices		**Art & artwork**		Time
Mechanisms	98	Art	9	New
Devices	74	Artwork	1	Ages
Containers	59	**Artistic movements**		Beginning
Other devices	43	Realism	1	Future
Tools	21	**Famous artists**		Durations
Equipments	16	Dali	2	Past
Acoustic devices	11	Picasso	1	Present
Drum	6	**Graphic arts**		Temporal arrangement
Fountain	5	Graphic art	13	Temporal properties
Building materials	3	Drawing	5	Time scales
Utensils	1	Plastic art	3	**Ages**
Acoustic devices		Sculpture	1	Old
Bell	9	**Culture**		Age
Horn	2	Body art	1	Childhood
Building materials		Gothic	1	Adulthood
Building block	1	**Body art**		**Durations**
Building material	1	Tattoo	1	Delay
Plaster	1	**Decoration**		Duration
Box	14	Decoration	6	**Temporal properties**
Container	14	Embellishment	1	Simultaneity
Case	10	**Entertainment**		Synchronism
Bottle	7	Games	42	**Time periods**
Receptacle	4	Dance & choreography	37	Hours
Bag	3	Playthings	37	Moment

CHART I DMT reports analysis scenario

Package	2	Movies	21	Night
Pot	2	Social occasion	17	Eternity
Envelope	1	Magic	15	Week
Devices		Entertainment	7	Late
Device	49	Dramatic compositions	2	Season
Source of illumination	14	Film industry	1	Timing
Pen	5	Hobbies	1	Evening
Fan	4	Dance	30	Weekend
Filter	1	Dancer	5	Afternoon
Hardware	1	Ballet	2	Dawn
Equipments		**Dramatic compositions**		Morning
Equipment	7	Theater	2	Now
Instrument	5	**Entertainment**		**Hours**
Apparatus	2	Entertainment	3	Minute
Kit	2	Entertainer	2	Second
Mechanisms		Cheerleader	1	Hour
Pipe	36	Spectator	1	**Time scales**
Mechanical device	26	**Film industry**		Cosmic time
Clock	14	Disney	1	Statistics on a list of words (
Mechanism	6	**Disney**		
Gear	5	Disney world	1	
Measuring instrument	3	**Games**		
Wheel	3	Game	22	
Fastener	2	Gambling	7	
Motor	2	Card game	6	
Cooling system	1	Game equipment	3	
Other devices		Bet	1	
Mirror	16	Computer game	1	
Window	14	Game of chance	1	
Screen	5	Player	1	
Wire	5	**Game of chance**		
Furnace	1	Slot machine	1	
Ladder	1	**Hobbies**		
Slab	1	Hobby	1	
Tools		**Magic**		
Tool	12	Magic trick	9	
Cutting implement	6	**Movies**		
Hand tool	2	Movie	11	
Power tool	1	Cartoon	10	
Utensils		**Playthings**		
Brush	1	Plaything	31	
Excavations		Puzzle	3	
Pit	1	Puppet	2	
Objects		Doll	1	
Object	42	**Social occasion**		
Whatchamacallit	20	Celebration	3	
Jewelry	16	Festival	3	
Cross	12	Show	11	
Disk	3	**Language & texts**		
Shell	3	Grammar	99	
Jewelry		Language	83	
Jewel	13	Texts & documents	15	

CHART I DMT reports analysis scenario

Painting & painters		Linguistics	10
Paint	6	Translation	1
Substances		**Grammar**	
Minerals and mining	50	Language unit	93
Liquid	32	Alphabet	3
Substance	19	Sentence	2
Wood & woodwork	6	Punctuation	1
Paper	5	**Language**	
Wax	3	Speech	40
Dust	2	Saying	24
Rubber	2	Talk	10
Coloring material	1	Language	4
Fiber	1	Context	3
Coloring material		Accent	1
Ink	1	Dialogue	1
Minerals and mining		Rhetorical device	7
Minerals	46	Linguistics	1
Mining	4	**Texts & documents**	
Minerals		Book	9
Crystal	16	Text	3
Gem	13	Library	2
Mineral	13	Catalog	1
Sand	1	**Literature & writing**	
Stone	3	Literature	20
Mining		Writing	3
Mine	4	Poetry	1
Paper		**Literature**	
Wallpaper	2	Story	14
Wood & woodwork	**Wood**	Fiction	4
Wood	2	Literature	1
Woodwork	4	Novel	1
Wood		**Poetry**	
Wood	2	Poetry	1
Statistics on a list of words (occu		Music & concerts	108
		Music styles	7
		Groups & singers	6
		Audio	5
		Musicians	5
		Audio	
		Audio system	2
		Groups & singers	
		Nirvana	3
		Garbage	2
		Bob marley	1
		Music & concerts	
		Music	52
		Musical instrument	38
		Orchestra	2
		Refrain	2
		Music styles	
		Jazz	4
		Rock & pop	2

CHART I DMT reports analysis scenario

	Classical music	1
	Jazz	
	Blues	4
	Rock & pop	
	Pop music	2
	Musicians	
	Famous musicians	2
	Musician	2
	Singer	1
	Famous musicians	
	Beethoven	2
	Mythologies	
	Imaginary beings	158
	Imaginary places	32
	Mythology	2
	Imaginary beings	
	Fairy	140
	Evil spirit	9
	Ghost	4
	Mythical monster	3
	Patron saint	2
	Imaginary places	
	Hell	20
	Heaven	10
	Imaginary place	2
	Occultism	3
	Occultism	
	Alchemy	1
	Sorcery	2
	Sorcery	
	Sorcerer	2
	Photo	
	Camera	2
	Photograph	1
	Video	
	Video	2
	Statistics on a list of words (occurrences)	

CHART I DMT reports analysis scenario

6	Countries & locations	7	Nature & wildlife	8
651	Locations	556	Animals	186
61	Countries	78	Plants	169
61	States	30	Nature & wildlife	19
1	Asia	24	Garden	15
	Europe	16	Hunting & fishing	4
1	North america	15	Microorganisms	1
	Middle east	14	Wood & forests	1
1	Cities	13		
	West europe	13	**Animals**	
25	Cities & suburbs	12	Insecta	43
24	City	12	Mammals	33
9	Southwest asia	11	Reptiles	31
2	India	11	Invertebrate	24
1	East asia	6	Birds	15
1	Japan	6	Other terms	13
1	Desert	4	Animal	8
	South america	4	Amphibians	6
1	Africa	3	Arthropods	6
1	African	3	Fishes	5
	Oriental	3	Predator	1
1	Country	2	Protoctists	1
20	Southeast asia	2		
14	Southeast europe	2	**Amphibians**	
4	Outdoors	1	Salamander	3
	Village	1	Batrachian	2
272	America	1	Amphibian	1
252	Oceania	1		
36	Ethnic group	1	**Arthropods**	
31	Amerindian	1	Arachnid	5
21	China	1	Myriapod	1
10	Siberia	1		
7	Tibet	1	**Birds**	
6	Japanese	1	Bird of prey	6
6	Indonesia	1	Passerine	4
6	Thailand	1	Bird	3
3	East europe	1	Game bird	1
1	Russia	1	Ratite	1
	Spain	4		
18	Greece	2	**Fishes**	
3	Ireland	2	Fish	2
3	Italy	1	Ray	1
1	Egypt	10	Soft-finned fish	1
	England	6	Spiny-finned fish	1
4	Arabia	3		
3	Nevada	3	**Insecta**	
	Canada	2	Insecta	17
1	Mexico	2	Cockroach	9
2	London	1	Butterfly	4
	Iran	1	Grasshopper	3
	Persian	1	Ant	2
45	Canada	1	Bee	2

CHART I DMT reports analysis
scenario

22	Canadian	1	Beetle	2
17	Mexican	1	Dragonfly	2
7	Mexico	1	Bug	1
6	Arkansas	1	Wasp	1
3	California	1		
3	Hawaii	1	**Invertebrate**	
2	Iowa	1	Mollusk	11
2	New mexico	1	Coelenterate	5
1	New york	1	Crustacean	4
1	Tennessee	1	Worm	4
1	Texas	1		
1	Australasia	1	**Mammals**	
	Australia	1	Feline	10
75	Inca	2	Canine	6
61	Peru	1	Aquatic mammal	4
22	Venezuela	1	Primates	3
	Locations		Equine	2
1	Area	305	Pachyderm	2
occurrenc	Place	118	Bear	1
	Location	73	Bovine	1
	Field	36	Camels	1
	Home	8	Musteline	1
	Foreign	6	Rabbit	1
	Region	5	Rodent	1
	Borders & frontiers	3		
	Districts & territories	1	**Other terms**	
	Site	1	Aquarium	1
	Area		Carapace	2
	Back	162	Claw	2
	Wall	61	Feather	5
	Floor	35	Fin	1
	Top	23	Tail	2
	Bottom	9		
	Platform	3	**Protoctists**	
	Borders & frontiers		Protozoan	1
	Boundary line	2		
	Frontier	1	**Reptiles**	
	Districts & territories		Snake	25
	Territory	1	Reptile	4
	Location		Crocodilian	1
	Side	46	Saurian	1
	Horizon	8		
	West	4	**Hunting & fishing**	
	Zone	4	Fishing	1
	East	1	Hunting	3
	Location	1		
	Meridian	1	**Fishing**	
	South	1	Fishing	1
	Vantage point	1		
	States		**Hunting**	
	Kingdom	29	Hunt	1
	Empire	1	Hunter	2

CHART I DMT reports analysis scenario

Statistics on a list of words (occurrences)

	Microorganisms	
	Pseudopod	1
	Nature & wildlife	
	Nature	19
	Plants	
	Vascular plants	59
	Woody plants	32
	Plant parts	23
	Fungus	15
	Herbs	13
	Vegetation & plants	10
	Succulents	6
	Vines	5
	Genus	4
	Organic compounds	1
	Fungus	
	Mushroom	14
	Fungus	1
	Genus	
	Dicot genus	4
	Herbs	
	Herb	10
	Buttercup	1
	Mullein	1
	Tobacco	1
	Organic compounds	
	Resin	1
	Plant parts	
	Plant part	7
	Leaf	5
	Plant organ	5
	Stalk	4
	Reproductive structur	1
	Root	1
	Succulents	
	Cactus	6
	Vascular plants	
	Flower	31
	Flowering plant	28
	Vegetation & plants	
	Plant	10

CHART I DMT reports analysis
scenario

Vines	
Vine	5
Woody plants	
Tree	27
Shrub	5
Wood & forests	
Jungle	1

Statistics on a list of words (occurrences)

CHART I DMT reports analysis
scenario

Sciences & technology	9
Chemistry & chemical compounds	96
Mathematics & logic	63
Electronics	41
Optics & microscopy	27
Electricity & magnetism	21
Physics & astronomy	21
Computer & information science	18
Automation & robotics	17
Technology & technique	13
Sciences	10
Earth sciences	9
Studies	7
Biology & paleontology	4
Philosophy & moral	3
Human sciences	1

Automation & robotics	
Automaton	17

Biology & paleontology	
Biology & biochemistry	2
Genetics & genomics	2

Biology & biochemistry	
Biology	1

Chemistry & chemical compounds	
Organic chemicals	30
Gases	22
Atoms, ions and molecules	18
Metals	17
Chemical compounds	8
Chemical process	1

Atoms, ions and molecules	
Atom	8
Molecule	8
Atomic	2

Chemical compounds	
Acids	3
Other chemical compounds	3
Nitrogen compounds	1
Pesticides	1

Acids	
Acids	3

Nitrogen compounds	
Nitrous	1

CHART I DMT reports analysis scenario

Other chemical compounds	
Chemical compound	2
Pudding stone	1

Pesticides	
Insecticide	1

Chemical process	
Catalysis	1

Catalysis	
Catalyst	1

Gases	
Noble gases	13
Gas	7
Ammonia	1
Nitrogen	1

Gas	
Vapor	5

Nitrogen	
Nitrous oxide	1

Noble gases	
Neon	12
Helium	1

Metals	
Transition metals	9
Alloys and metal products	5
Metal	3

Alloys and metal products	
Amalgam	1
Bronze	1
Stained glass	2
Tinfoil	1

Transition metals	
Chromium	5
Silver	2
Copper	1
Platinum	1

Organic chemicals	
Nucleic acids	14
Amines	13
Plastic	2
Hydrocarbons	1

CHART I DMT reports analysis scenario

Amines	
Biogenic amines	13

Hydrocarbons	
Acyclic hydrocarbons	1

Nucleic acids	
Dna	14

Plastic	
Plastic	2

Computer & information science	
Computers	10
Computer science	3
Hardware	2
Software	2
Malware & spam	1

Computer science	
Database and data processing	1
Programming	1
Virtual reality	1

Database and data processing	
Database	1

Computers	
Personal computer	1
Supercomputer	1

Personal computer	
Pc	1

Hardware	
Peripherals	1
Storage devices	1

Peripherals	
Printer	1

Storage devices	
Floppy disk	1

Malware & spam	
Spam	1

Earth sciences	
Ecology & bionomics	8
Geology & mineralogy	1

Ecology & bionomics

CHART I DMT reports analysis scenario

Ecology	8
Geology & mineralogy	
Tectonics	1
Electricity & magnetism	
Electricity	10
Electrical device	4
Magnetism	1
Electrical device	
Electrical conductor	1
Electricity	
Radio wave	5
Electric	4
Electric resistance	1
Magnetism	
Electromagnetism	1
Electronics	
Electronic devices	36
Electronic devices	
Memory device	27
Laser	5
Radio receiver	3
Vacuum tube	1
Human sciences	
Psychology & psychoanalysis	1
Psychology & psychoanalysis	
Psychology	1
Mathematics & logic	
Mathematics	62
Logic	1
Mathematics	
Topology	29
Geometry	18
Matrix	9
Equation	4
Applied mathematics	1
Geometry	
Trigonometry	2
Topology	
Fractal	29

CHART I DMT reports analysis scenario

Optics & microscopy	
Optical devices	27

Optical devices	
Zoom	19
Optical device	5
Microscope	2
Telescope	1

Philosophy & moral	
Existentialism	1
Philosophy	2

Physics & astronomy	
Physics	13
Physical phenomenons	6
Astronomy	2

Astronomy	
Big bang theory	2

Big bang theory	
Big bang	2

Physical phenomenons	
Radiation	4
Optical phenomenon	2

Radiation	
Ultraviolet	2
X-radiation	1

Physics	
Space-time	3
Atomic theory	2
Magnetic field	1
Physical mechanics	1
Physicist	1
String theory	1

Atomic theory	
Quantum mechanics	1
Quark	1

Physicist	
Physicist	1

Sciences	
Theory	5
Research	2
Laboratory	1

CHART I DMT reports analysis scenario

Science	1
Scientist	1
Research	
Research staff	2
Research staff	
Researcher	2
Technology & technique	
Technologies	9
Methods	2
Technique	2
Technologies	
High-tech	1
Technology	7
Statistics on a list of words (occurrences)	

Chart II-B

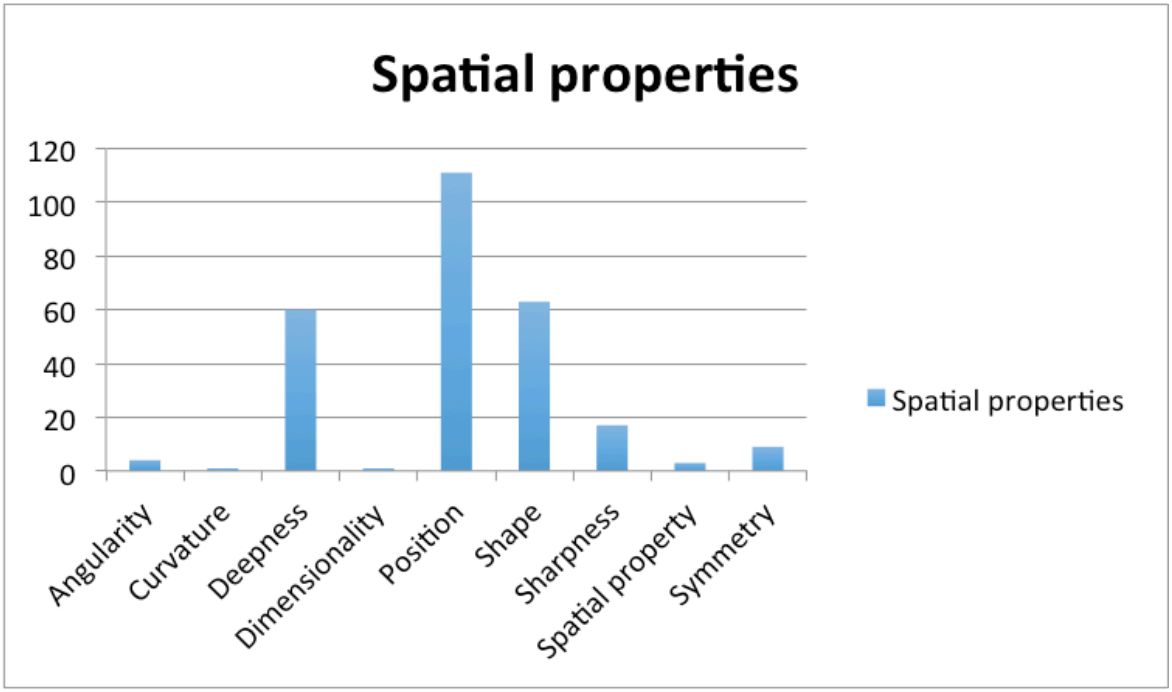


Chart II-C

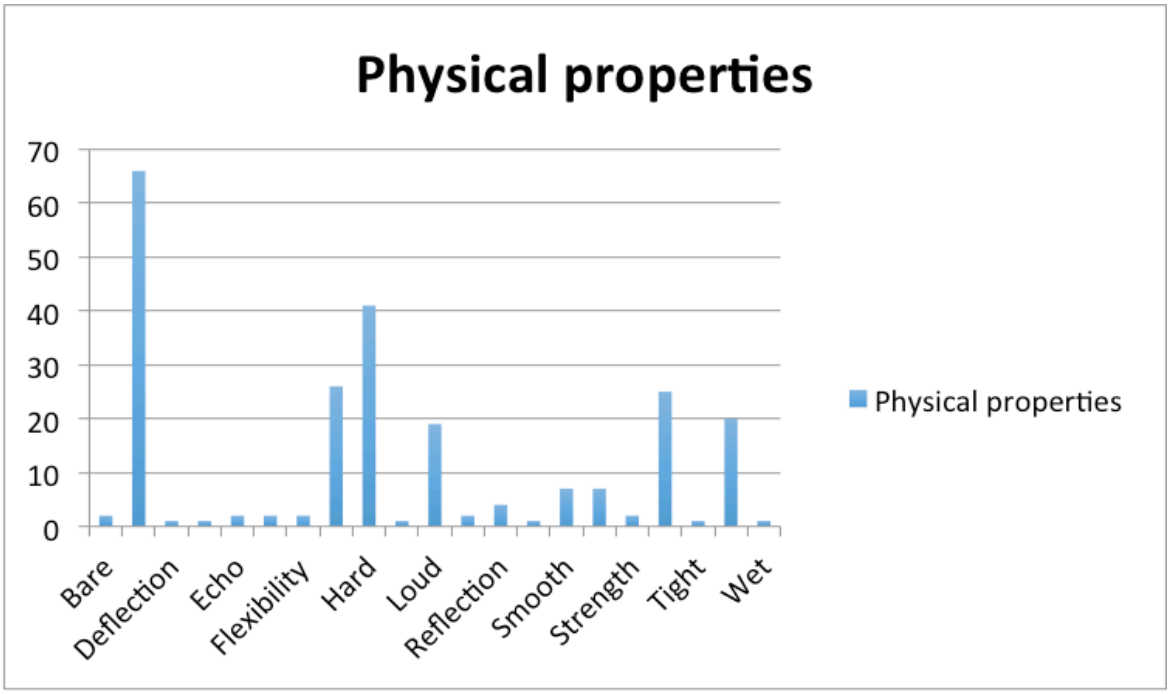


Chart II-D

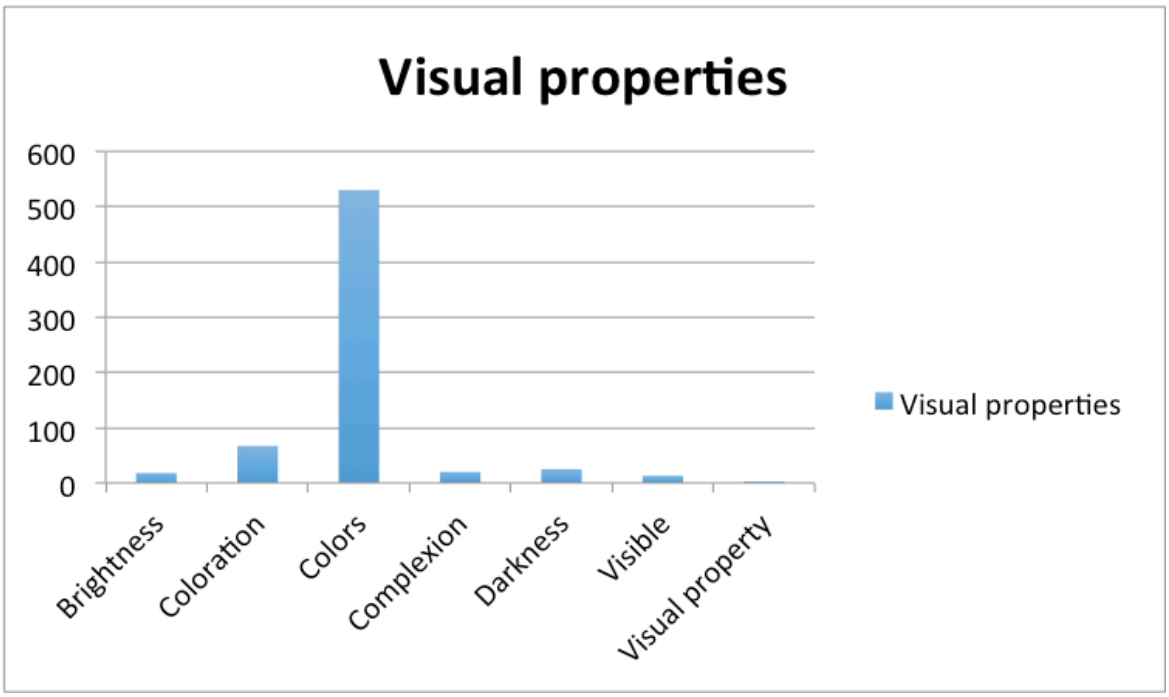


Chart II-E

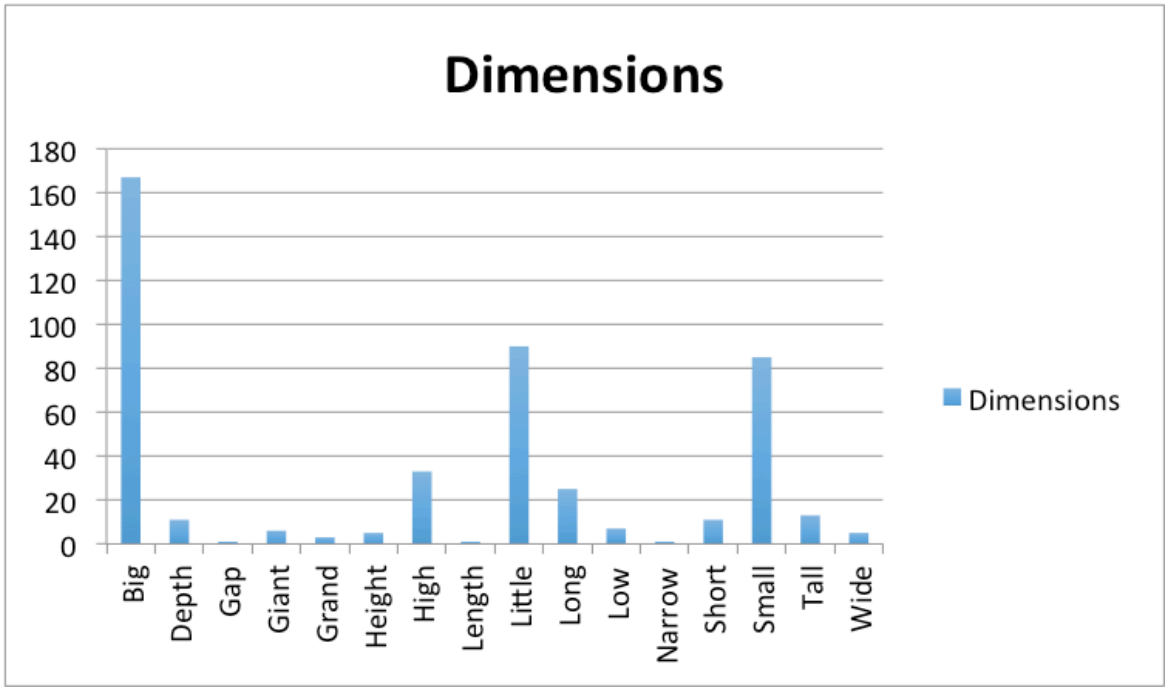


Chart II-F

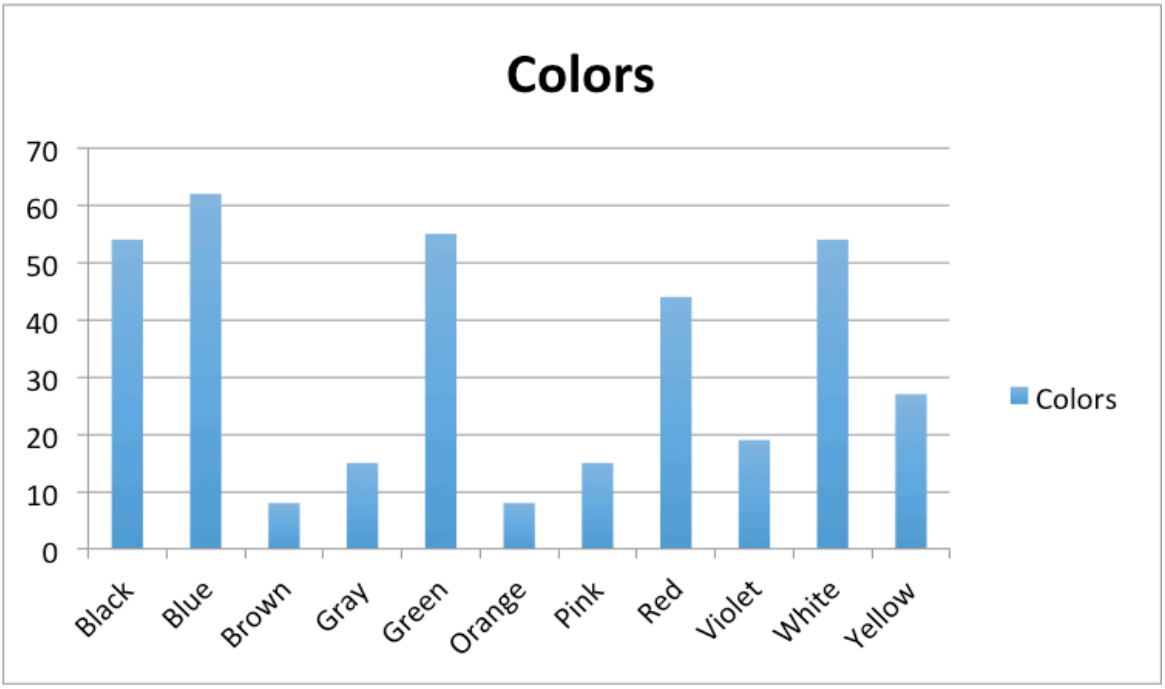


Chart II-G

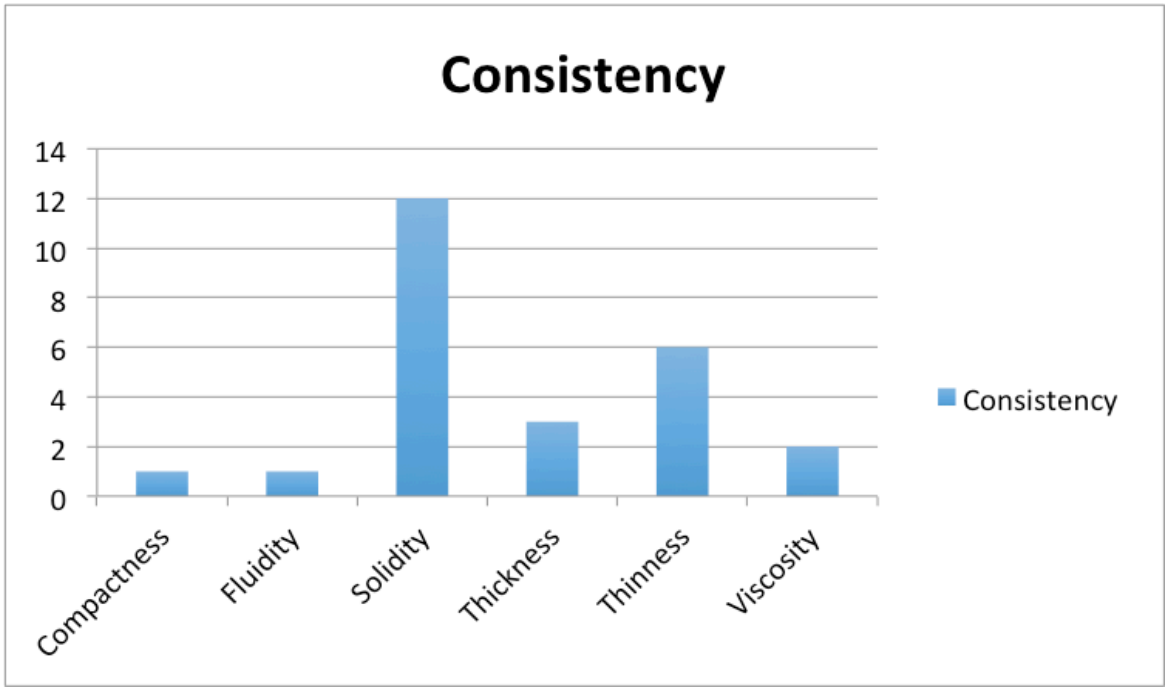


Chart II-H

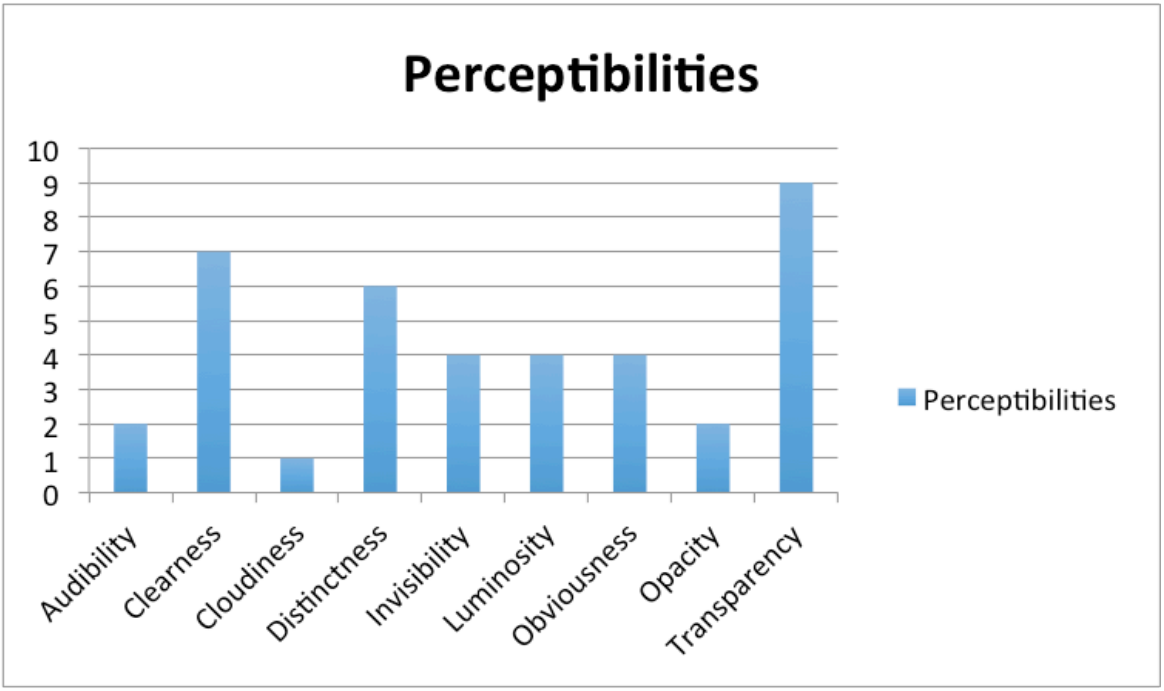


Chart II-I

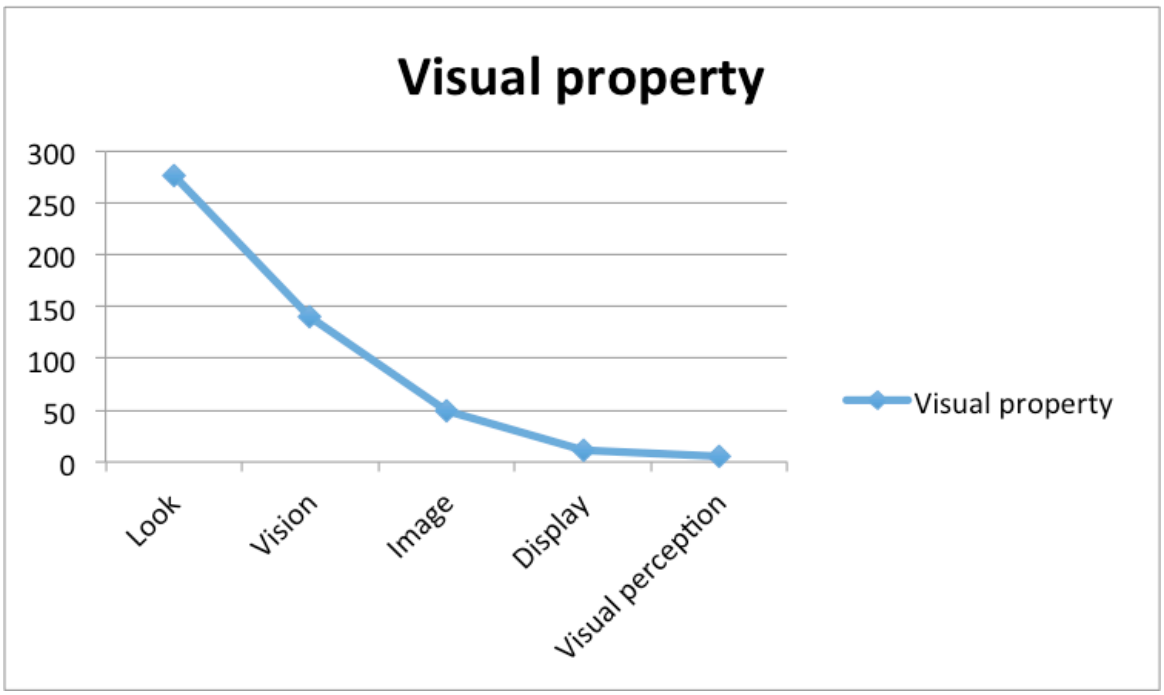


Chart II-J **Appearance & attractiveness**

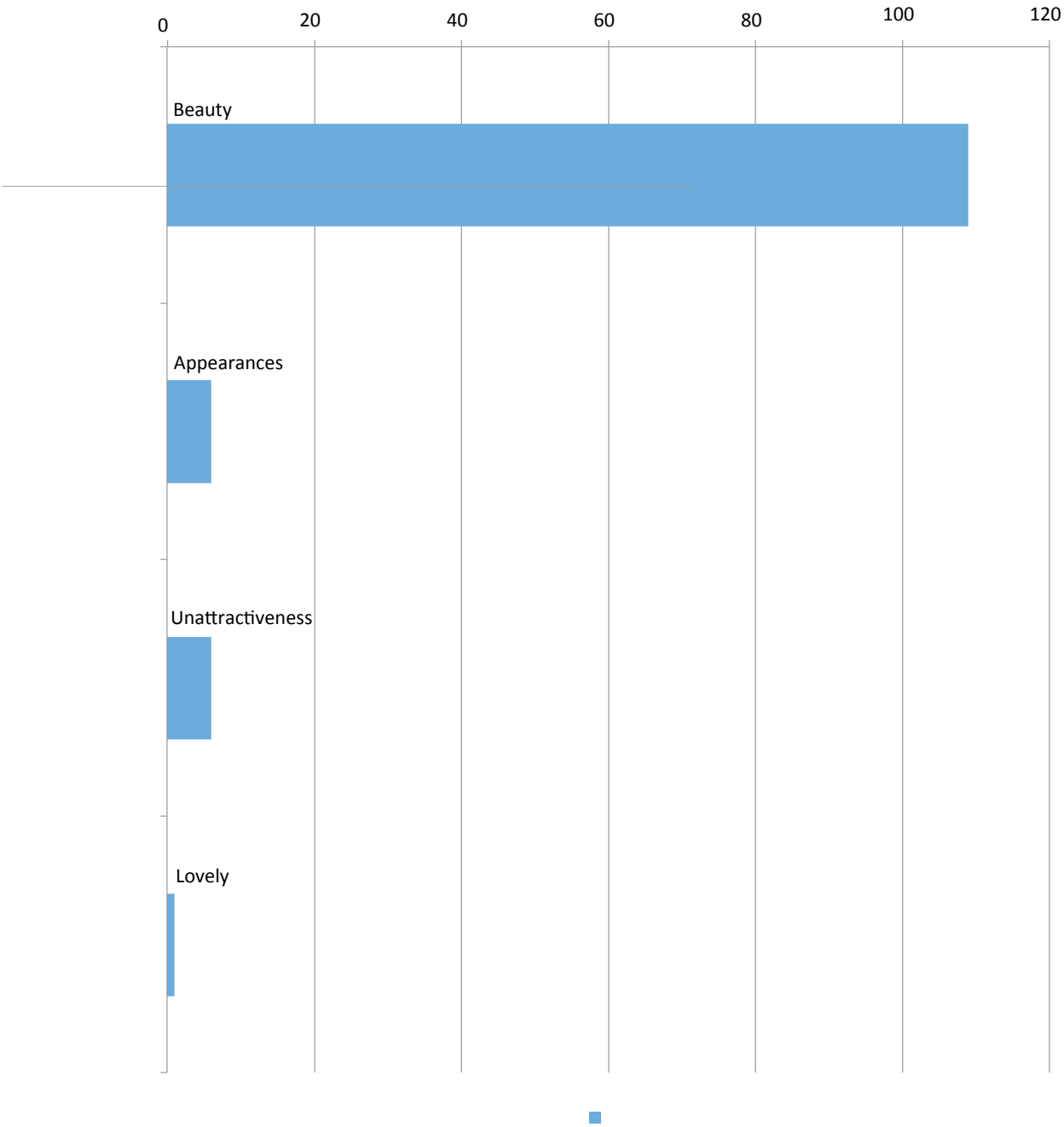


Chart II-K **Times references**

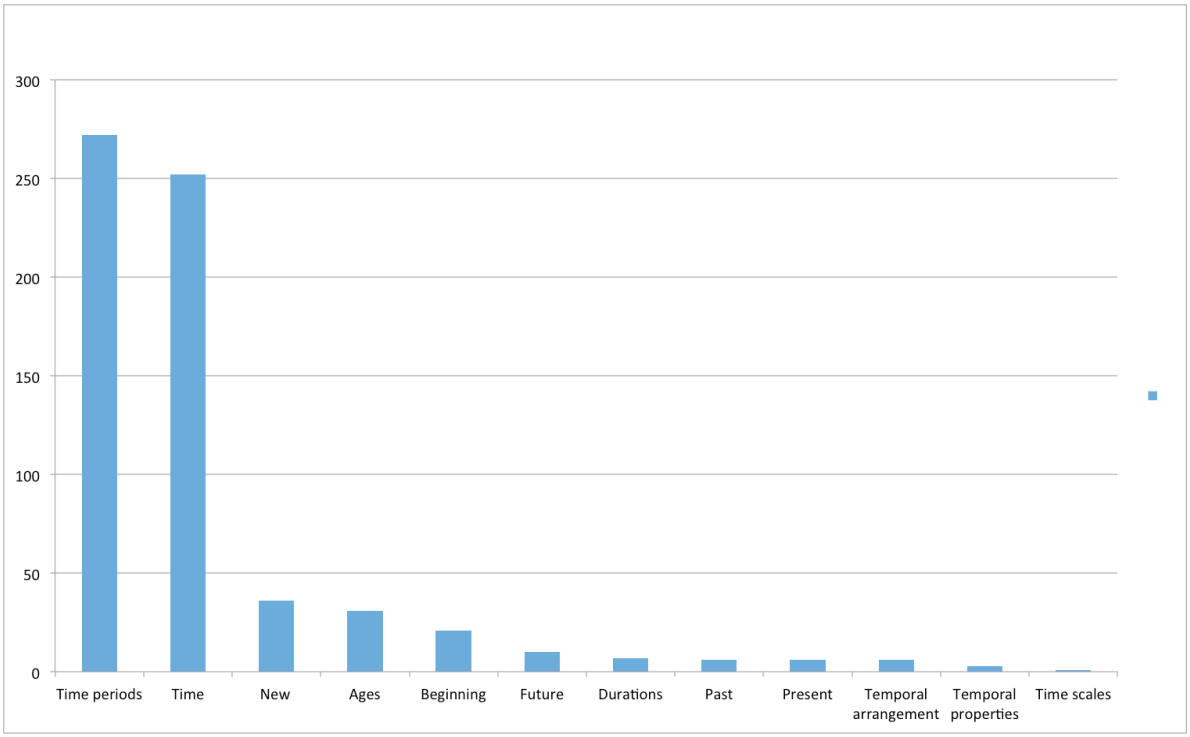


Chart II-L

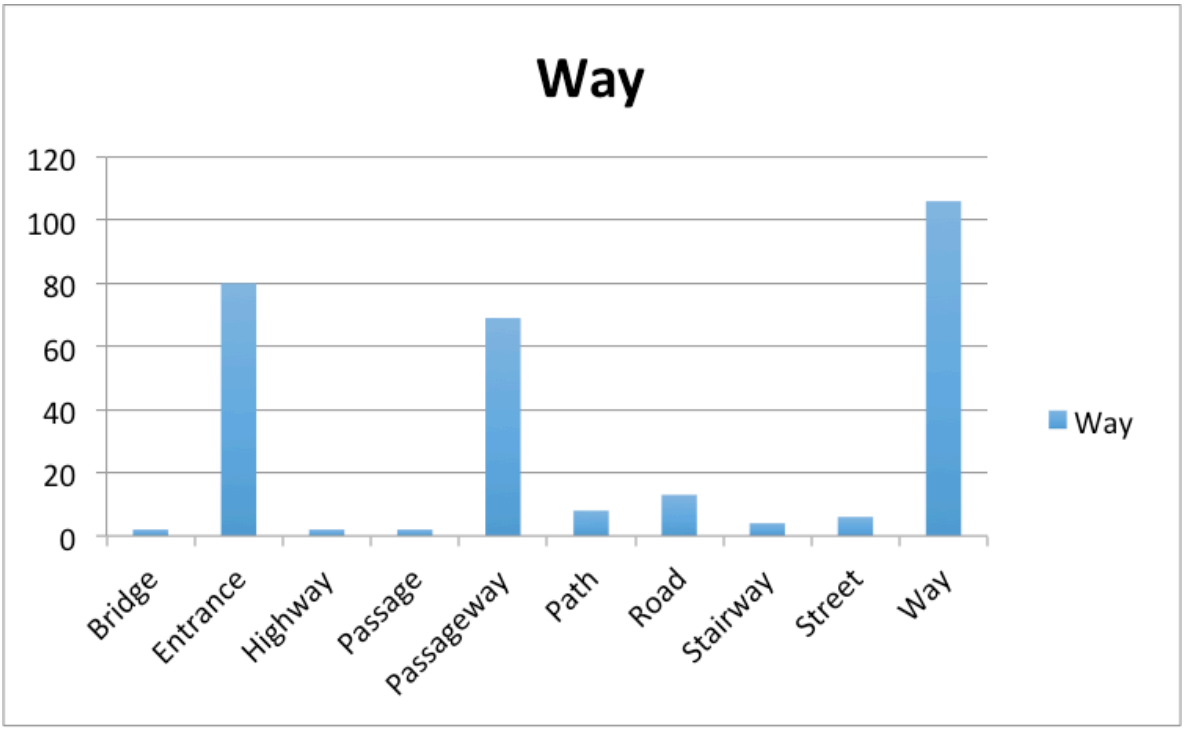


Chart III-A

Chart III-B

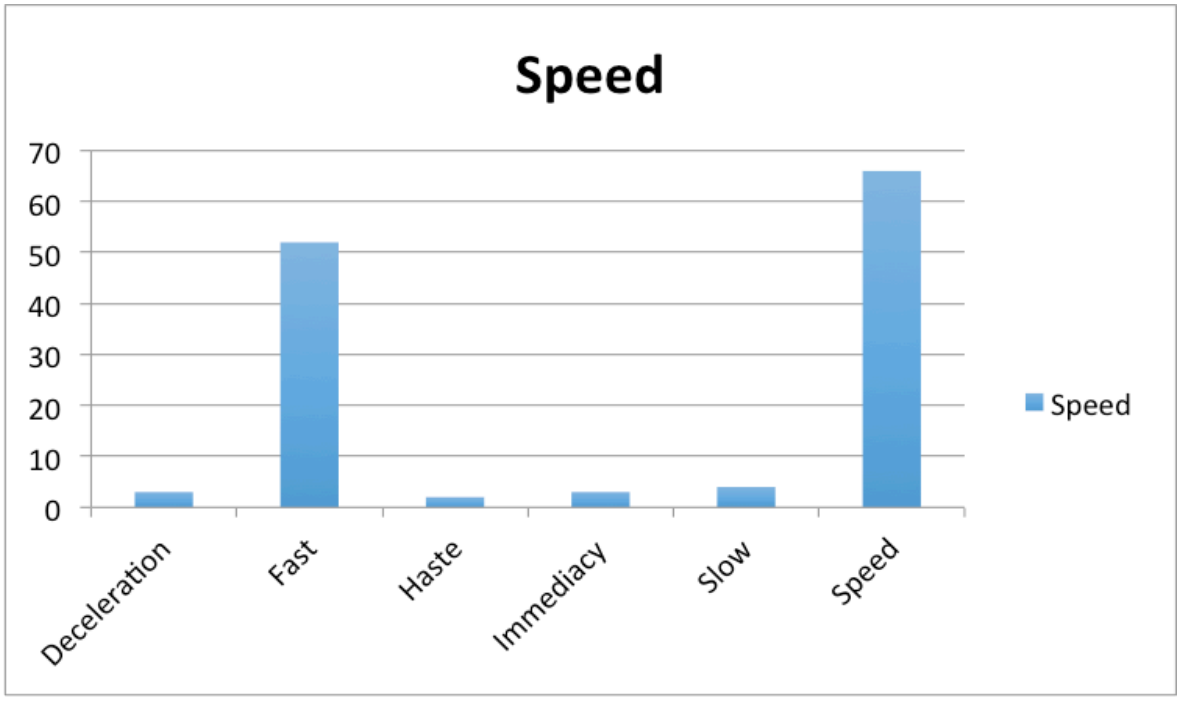


Chart IV-A **DMT experience lived impressions of certainty/uncertainty**

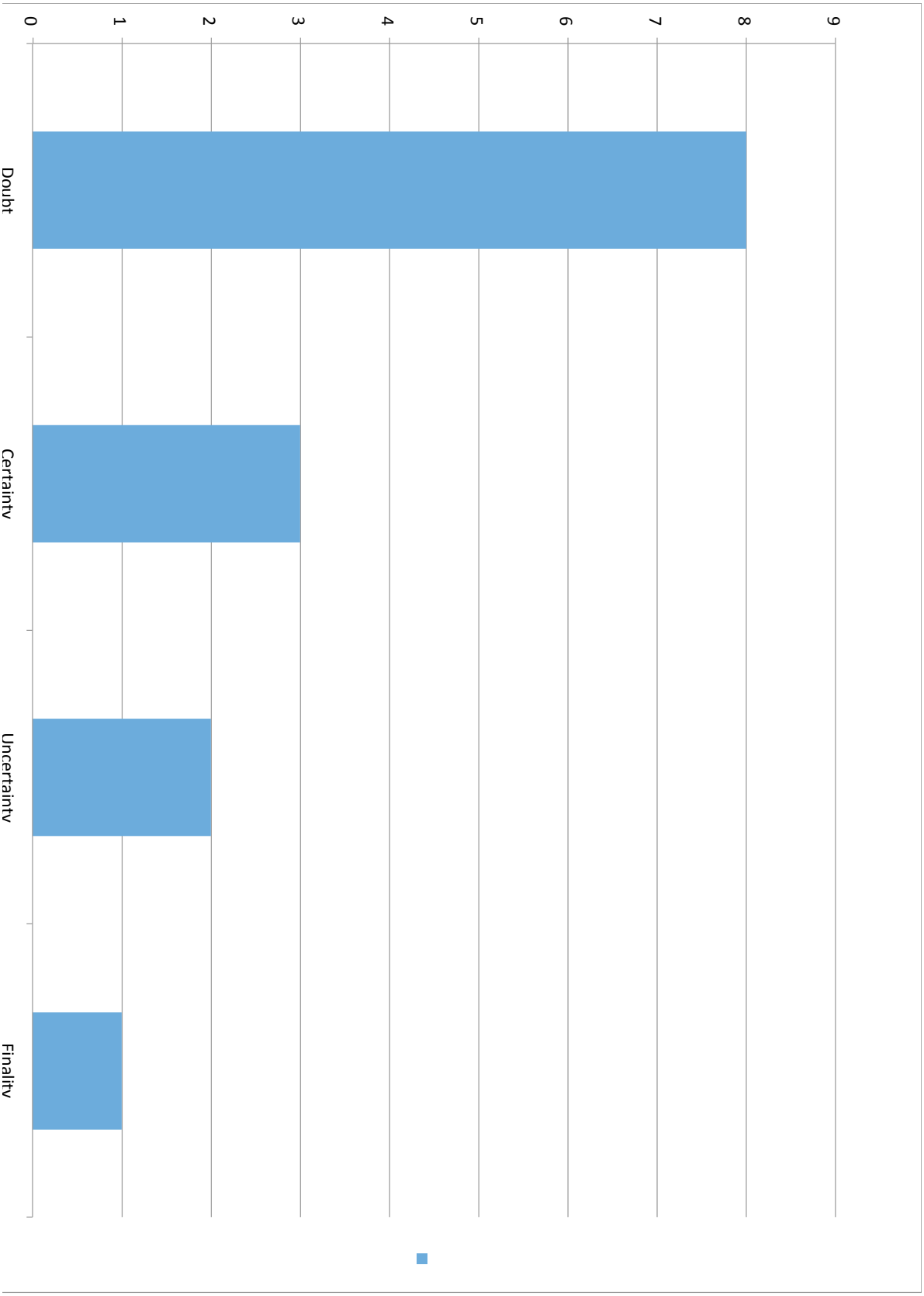


Chart IV-B **DMT experience lived impressions of credibility/incredibility**

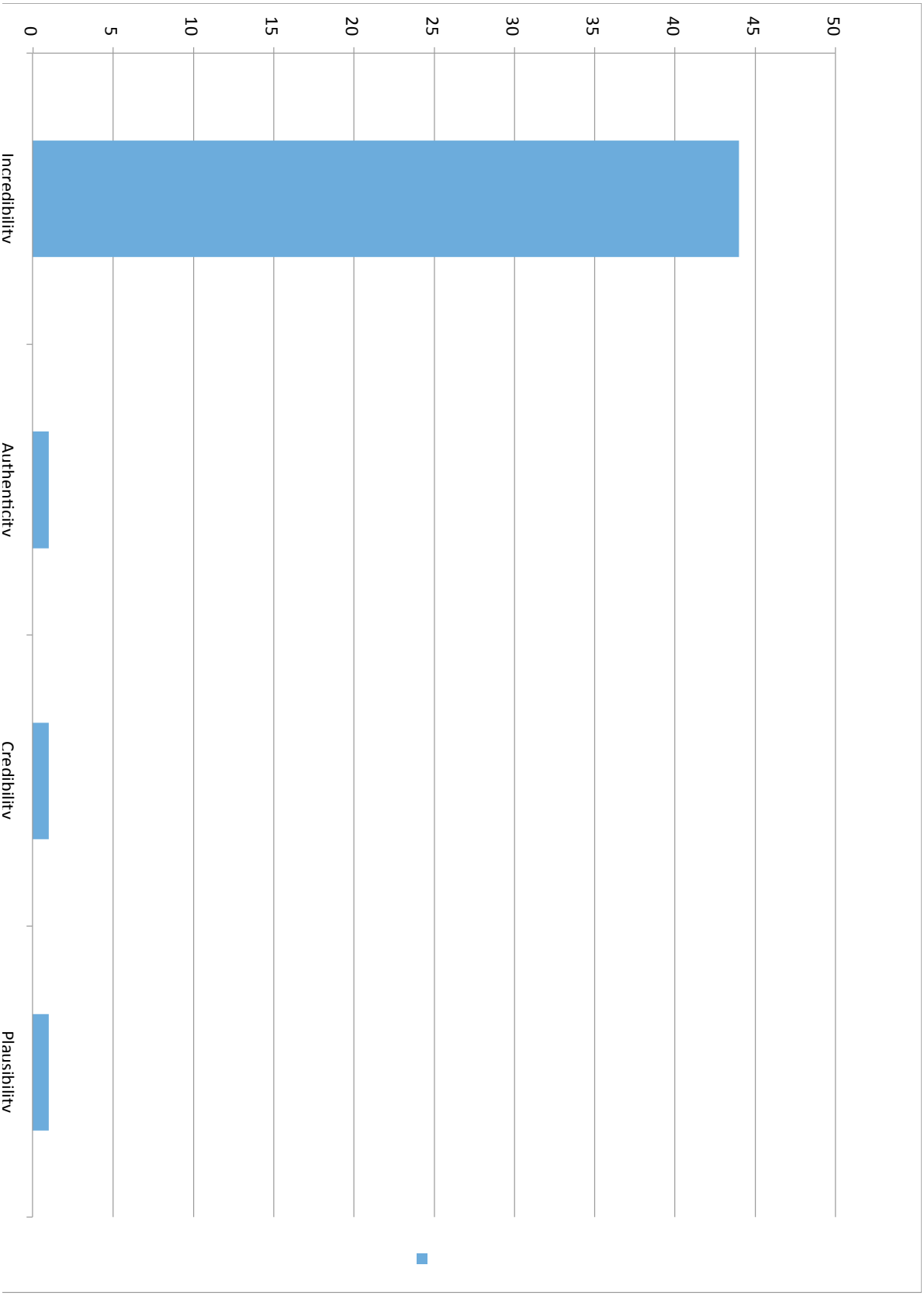


Chart IV-C **DMT experience lived impressions of comfort/discomfort**

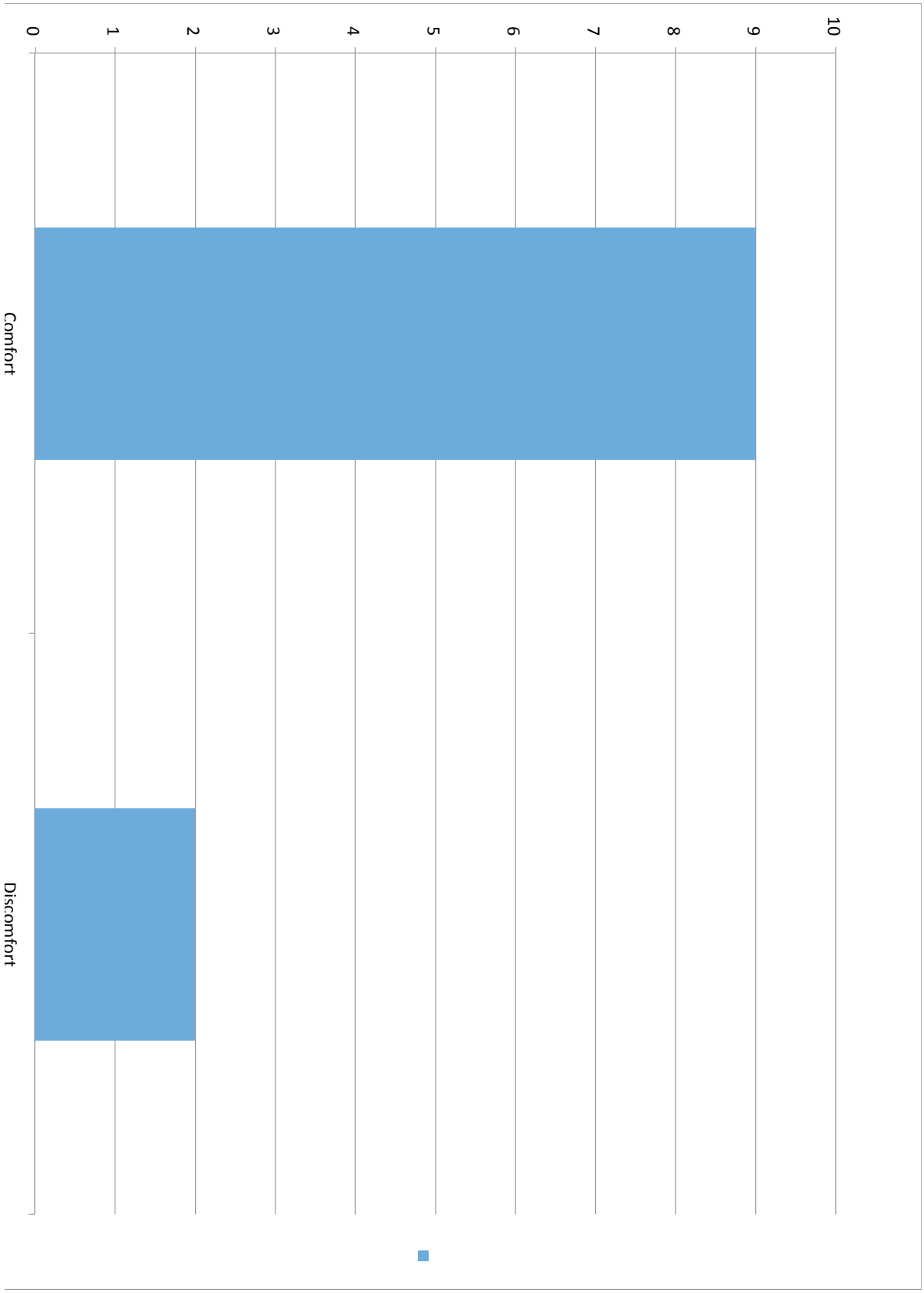


Chart IV-D **DMT experience lived impressions of complexity/simplicity**

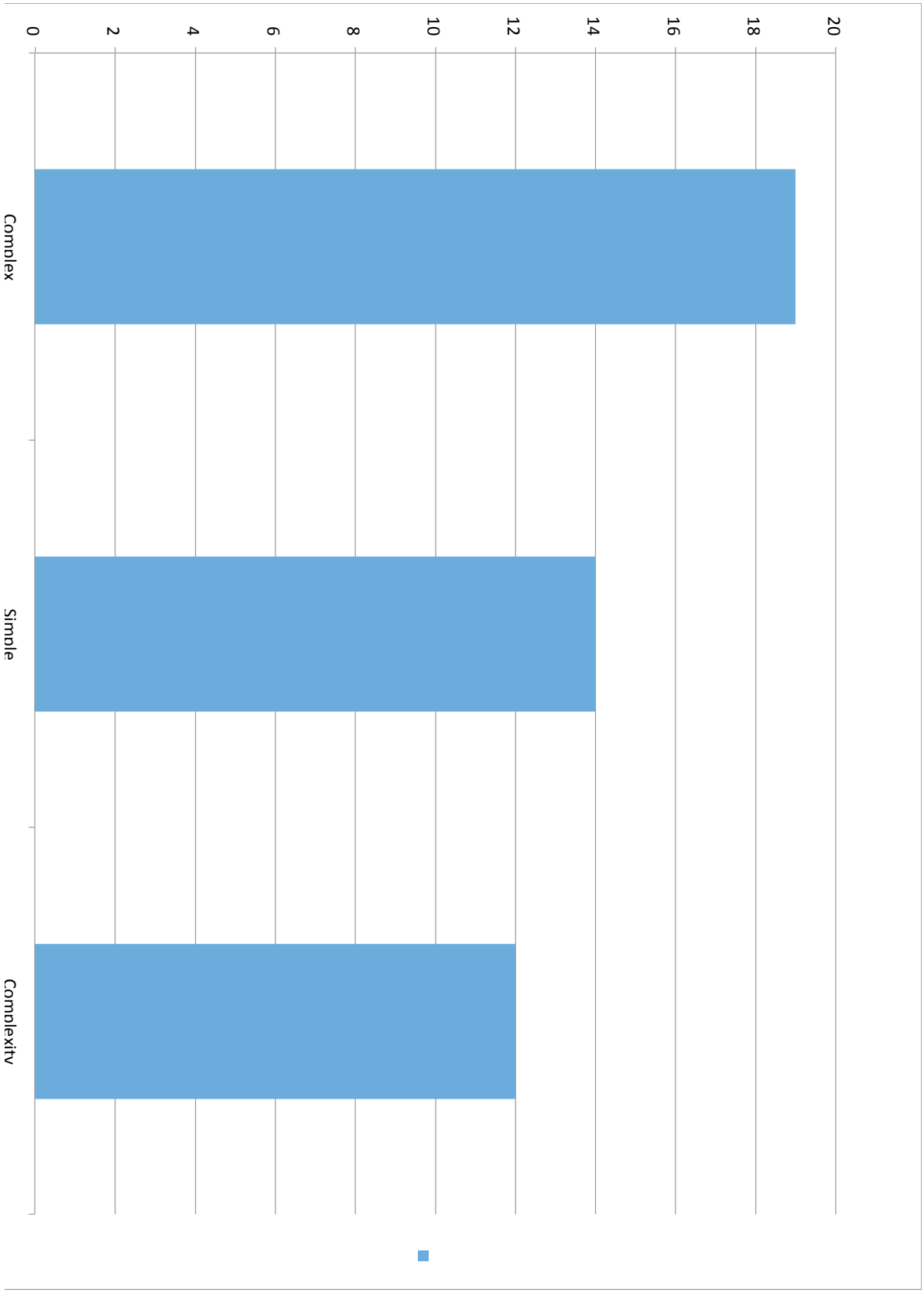


Chart VI-A

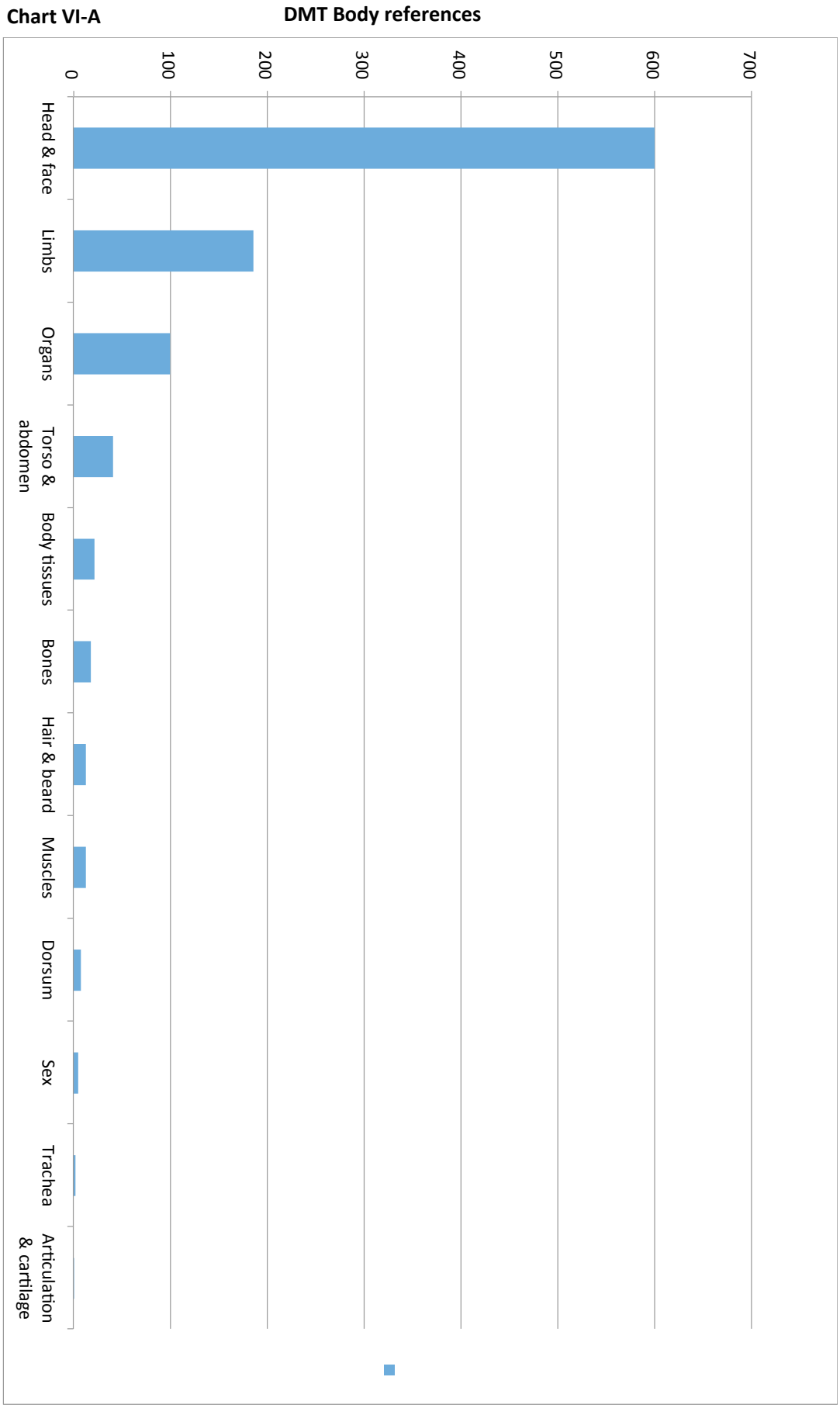

DMT Body references
0
100
200
300
400
500
600
700
Head & face
Limbs
Organs
Torso & abdomen
Body tissues
Bones
Hair & beard
Muscles
Dorsum
Sex
Trachea
Articulation & cartilage

Chart VI-B

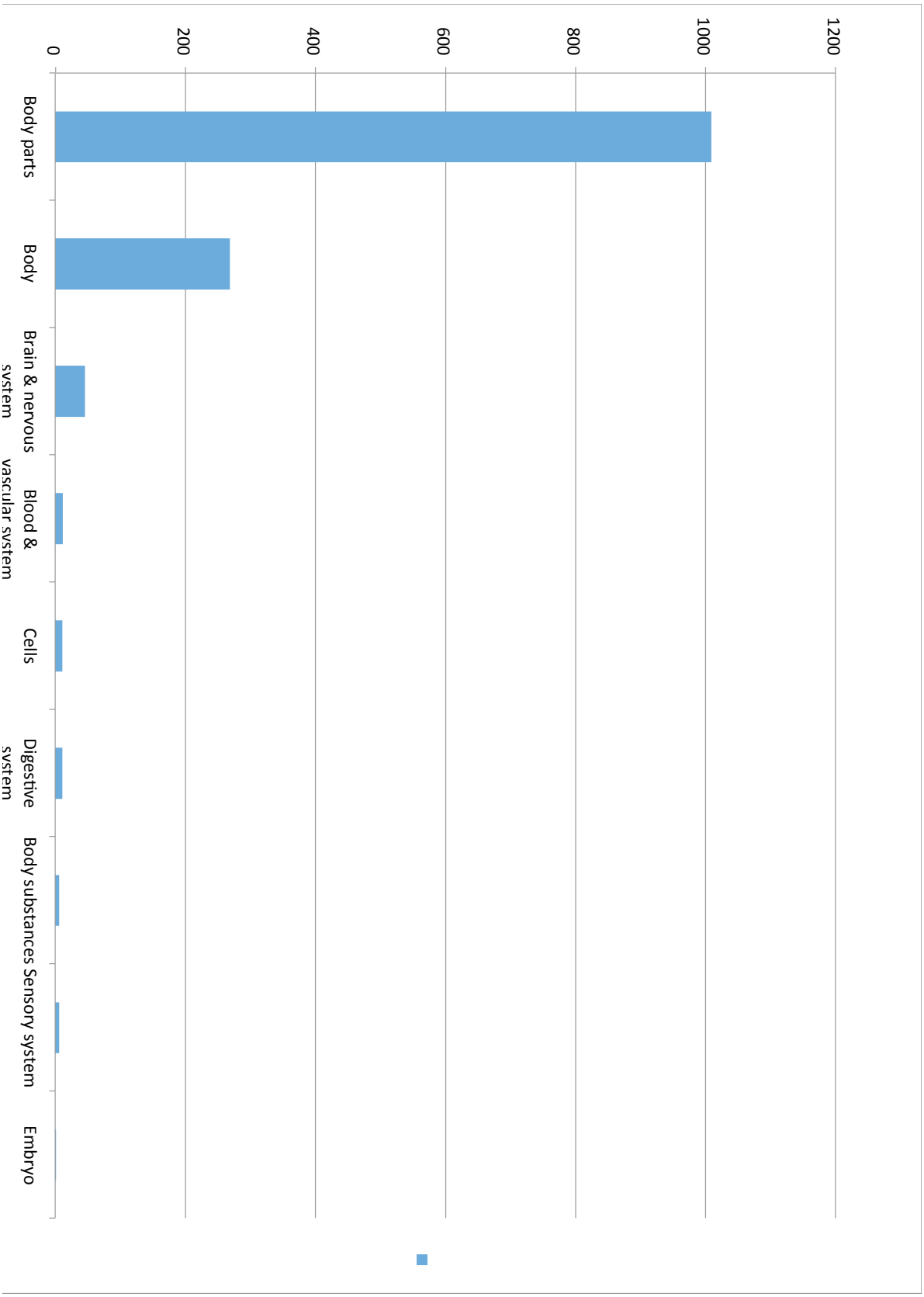

DMT Body parts
0
200
400
600
800
1000
1200
Body parts
Body
Brain & nervous system
Blood & vascular system
Cells
Digestive system
Body substances
Sensory system
Embryo

Chart VI-C

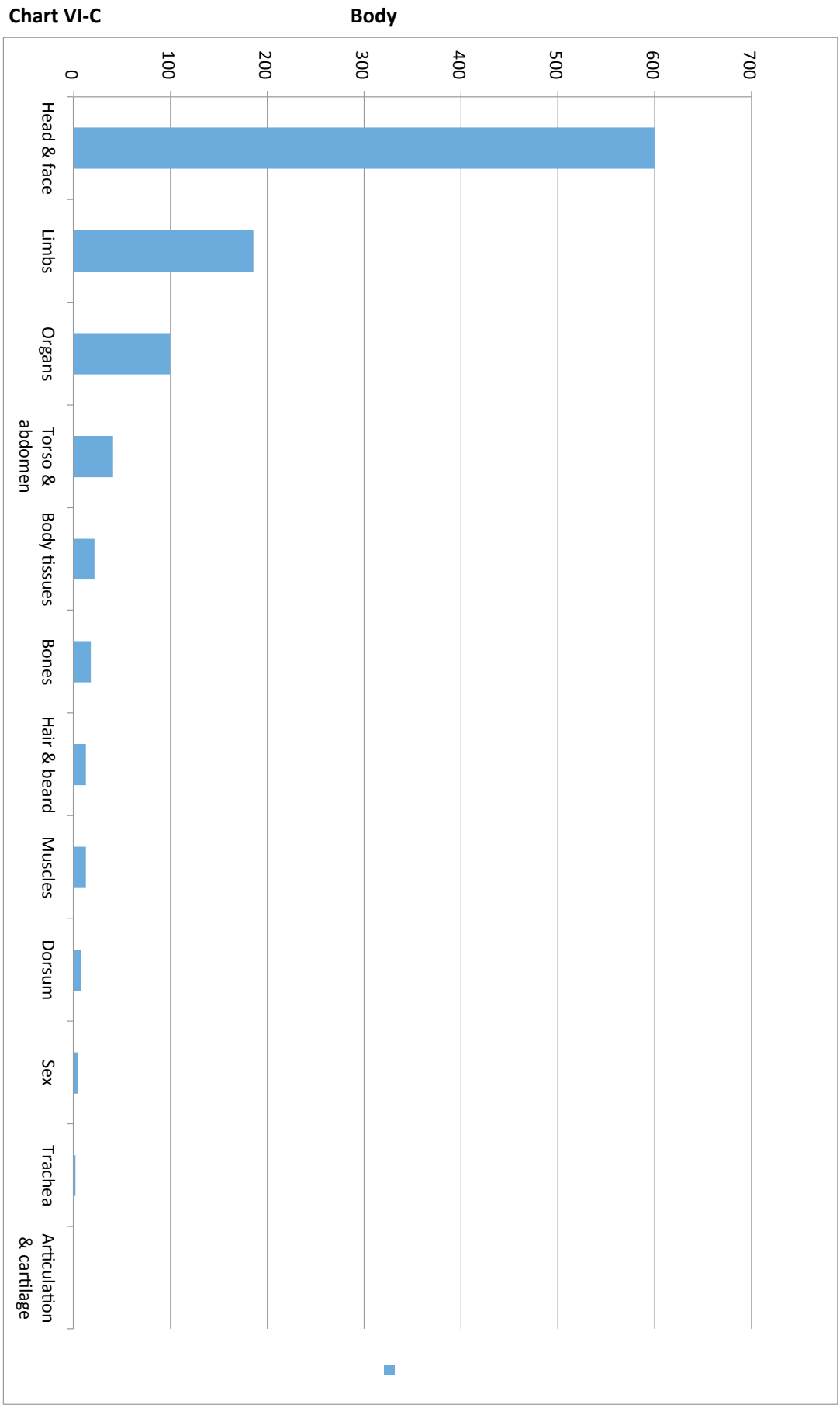

Body
0
100
200
300
400
500
600
700
Head & face
Limbs
Organs
Torso & abdomen
Body tissues
Bones
Hair & beard
Muscles
Dorsum
Sex
Trachea
Articulation & cartilage

Chart VI-D **Torso & abdomen**

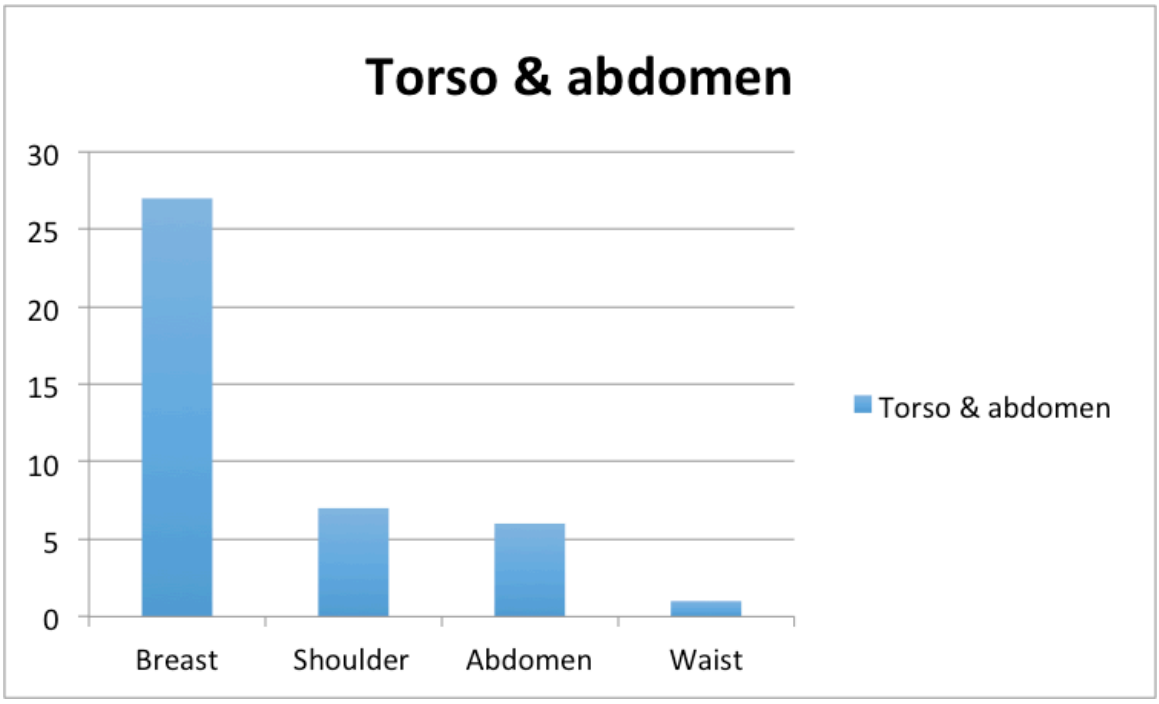


Chart VI-E

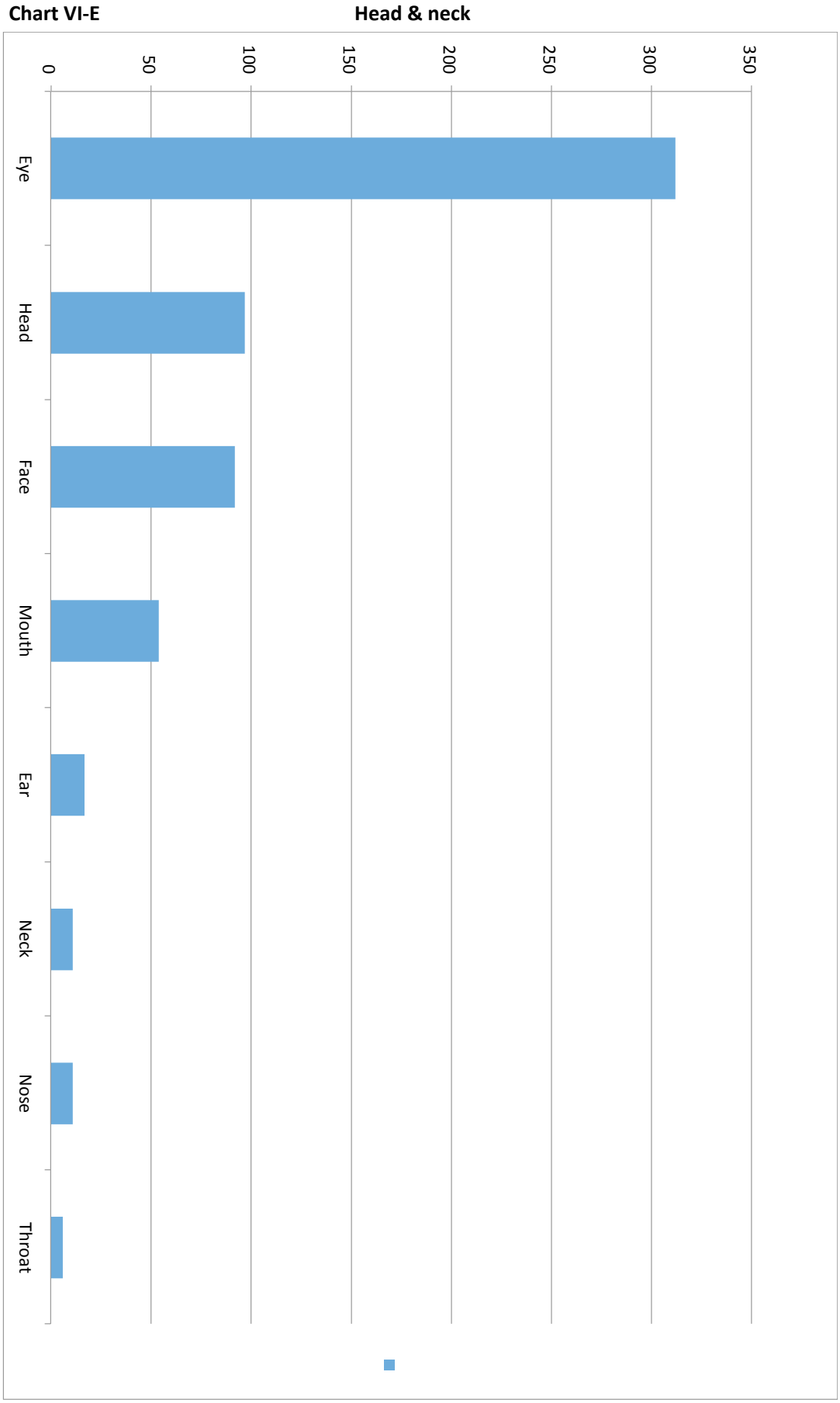

Head & neck
0
50
100
150
200
250
300
350
Eye
Head
Face
Mouth
Ear
Neck
Nose
Throat

Chart VI-F

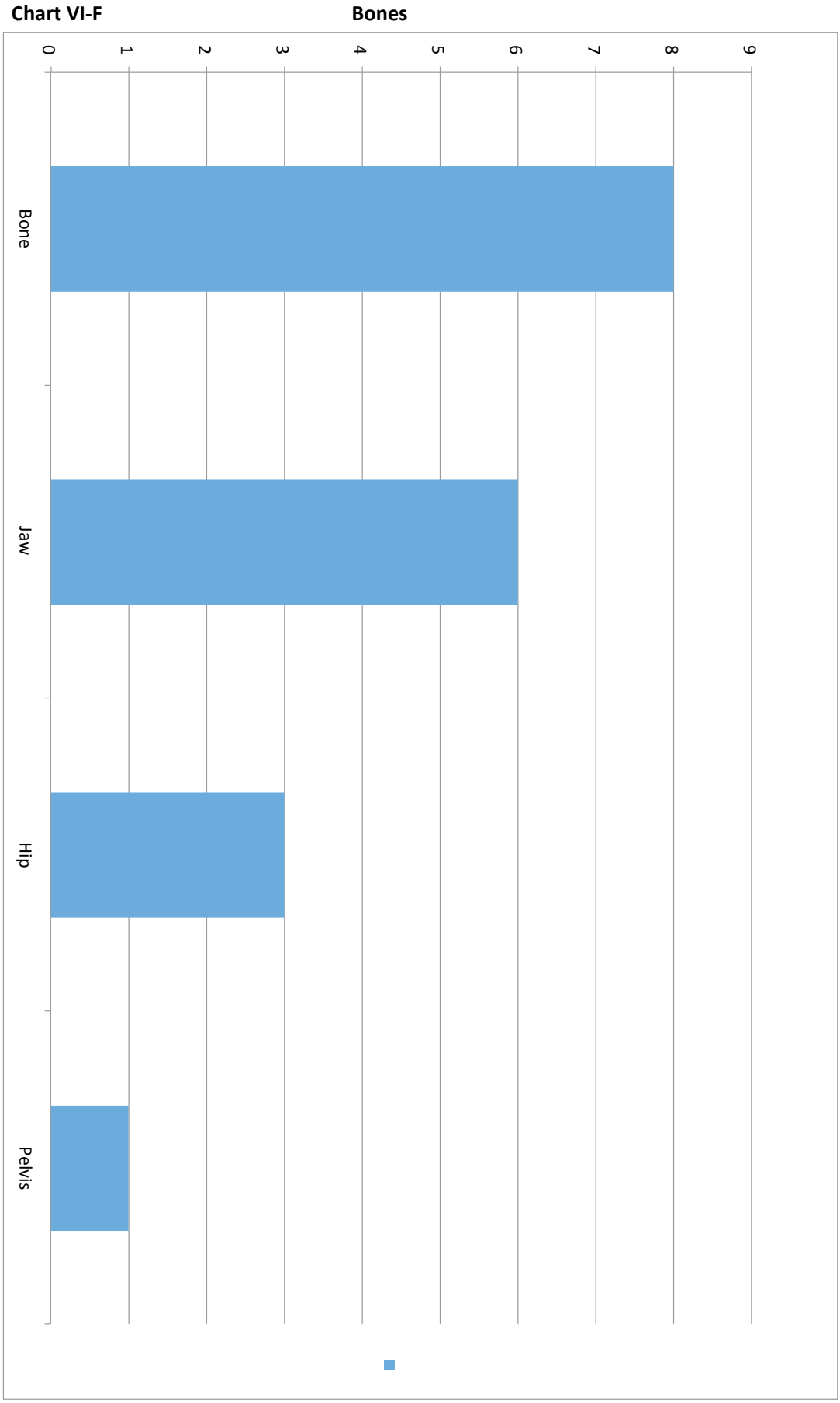


Chart VI-G **Head Vascular system references**

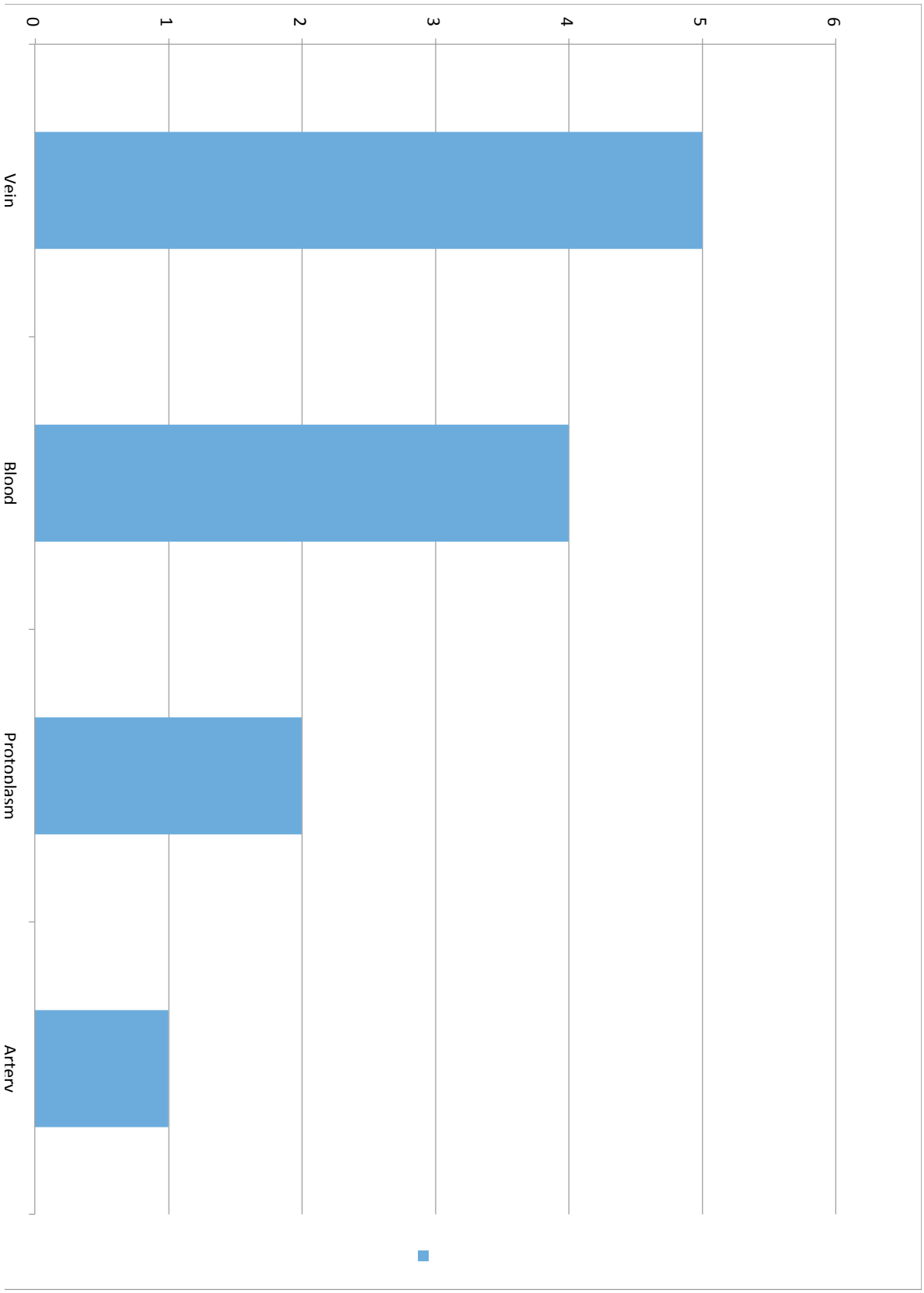


Chart VI-G **Tissues system**

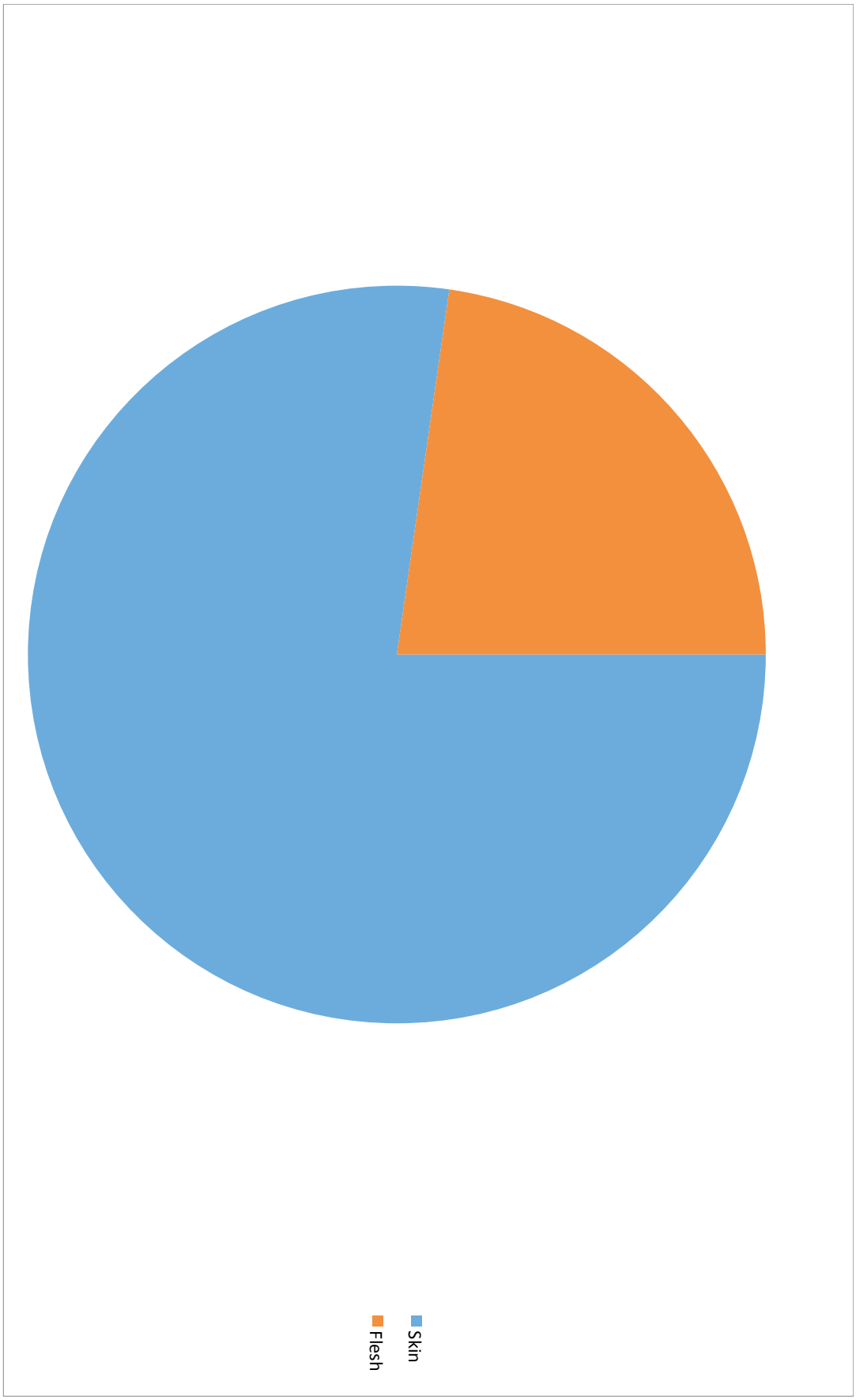


Chart VI-I

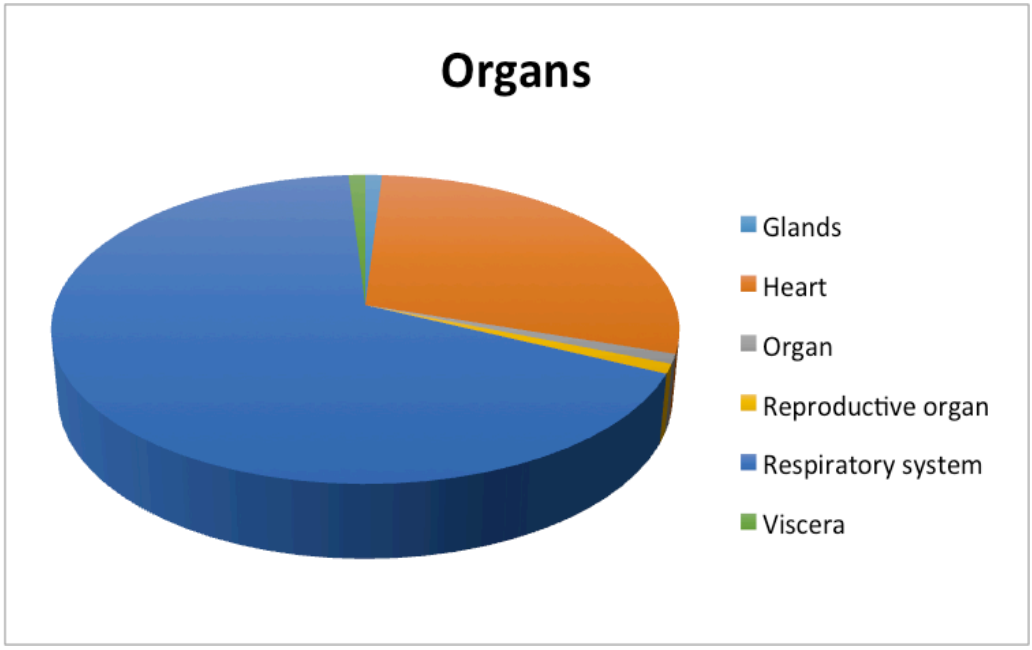


Chart VI-J

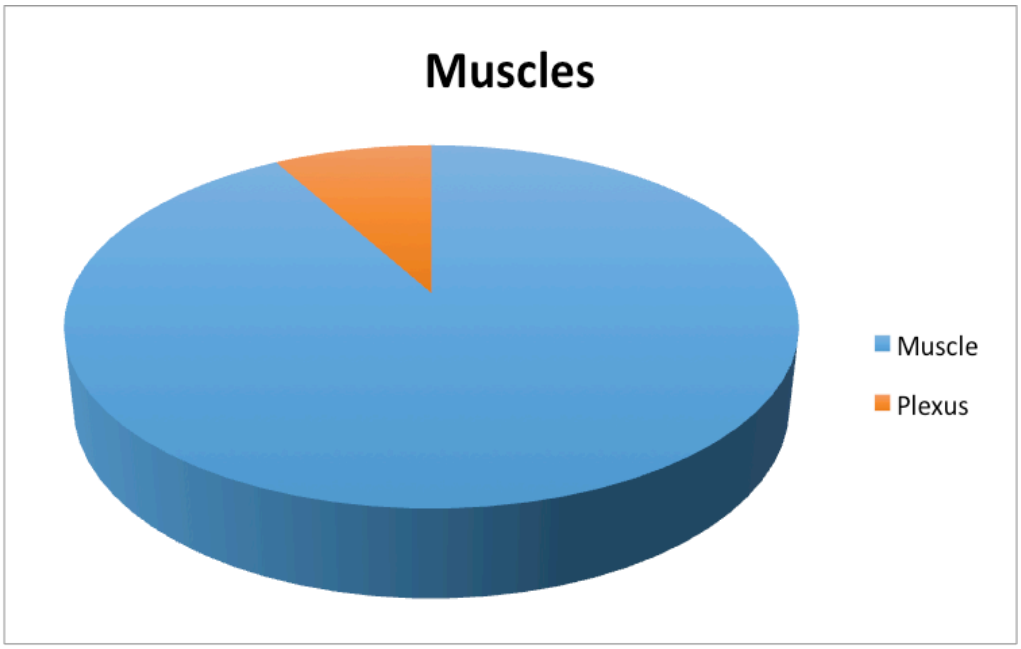


Chart VII-A

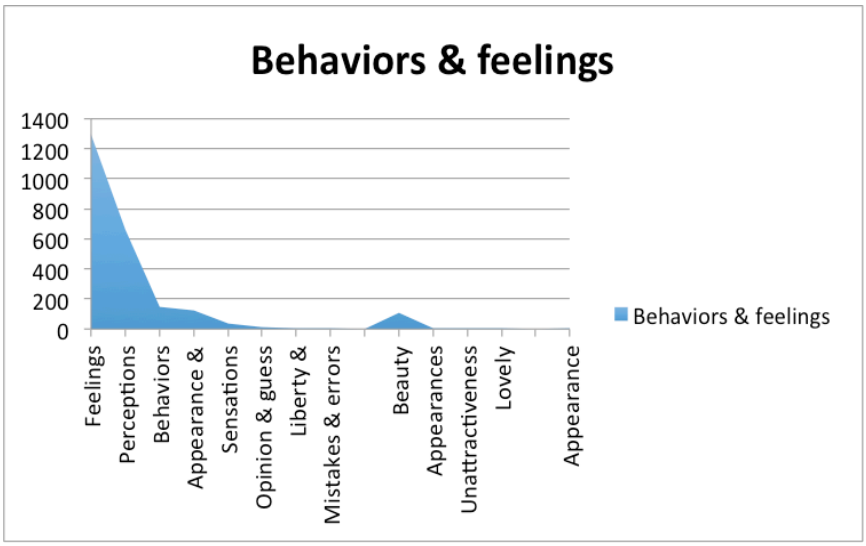


Chart VII-B

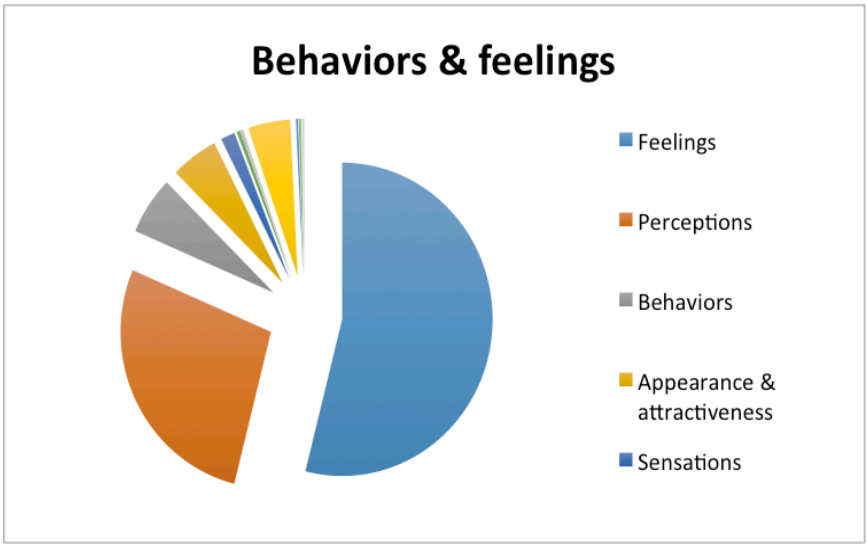


Chart VII-C

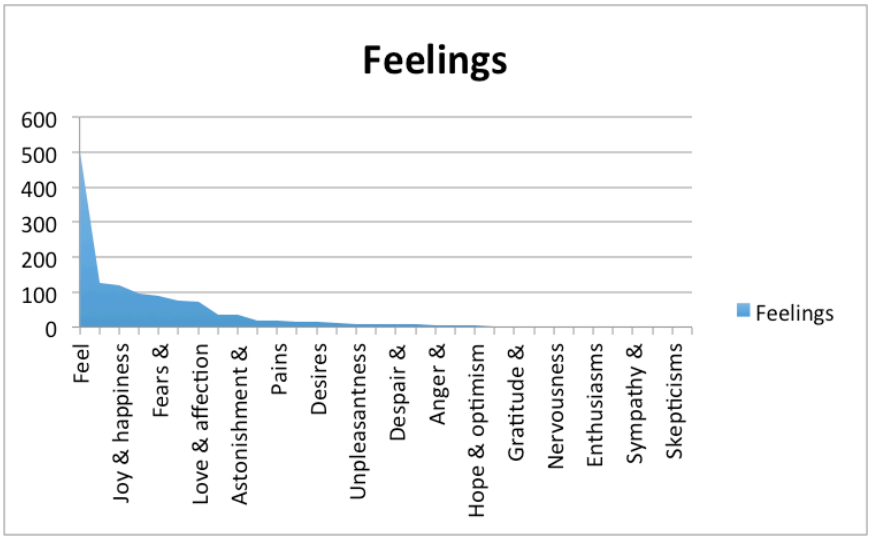


Chart VII-D **Behaviors references**

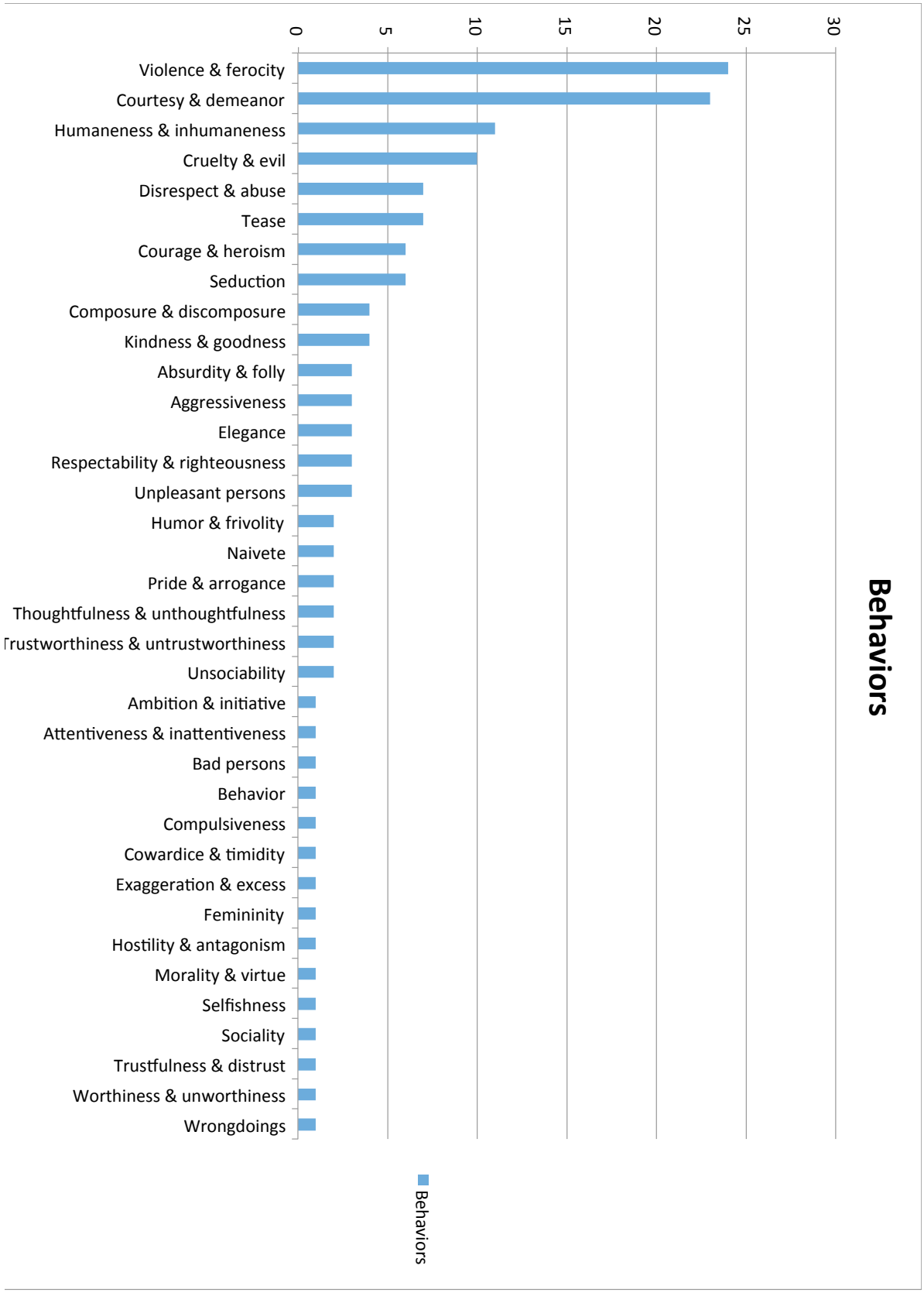


Chart VII-E

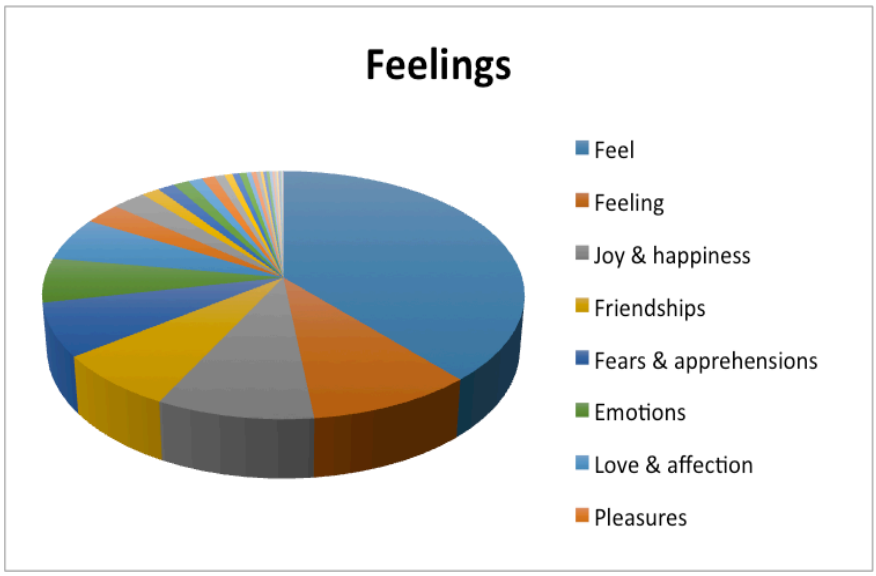


Chart VII-F

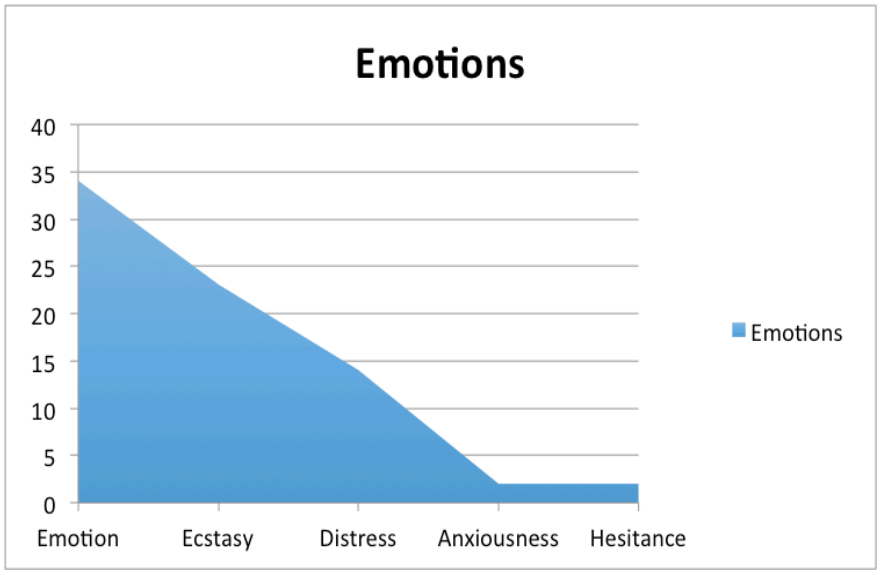


Chart VII-G

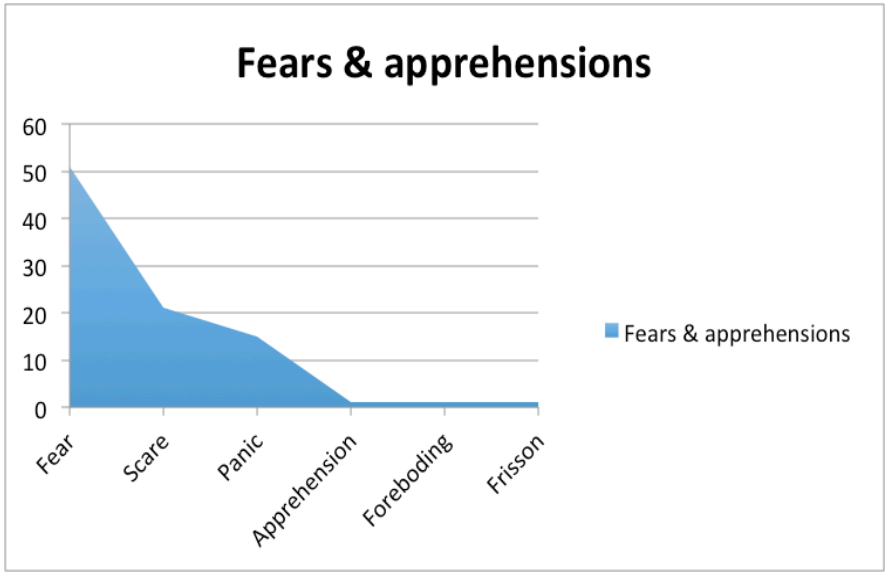


Chart VII-H

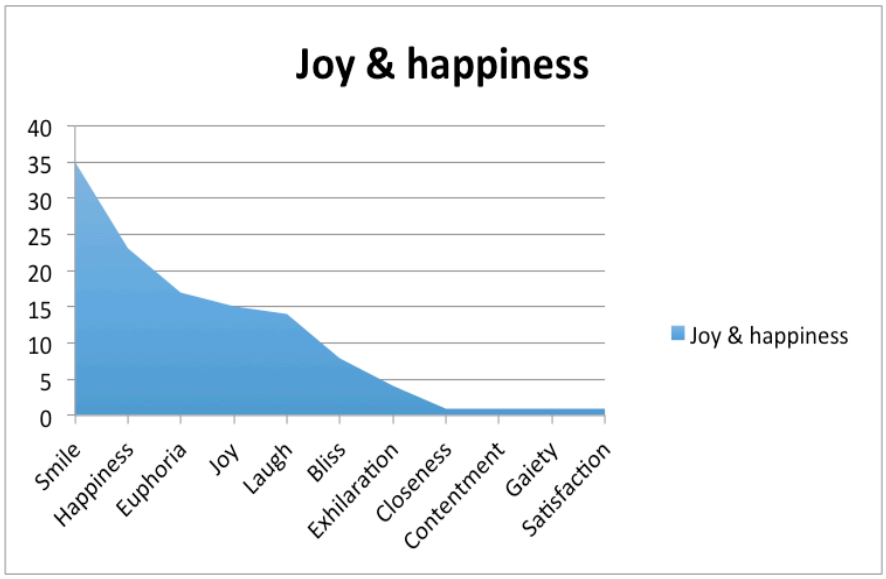


Chart VII-I

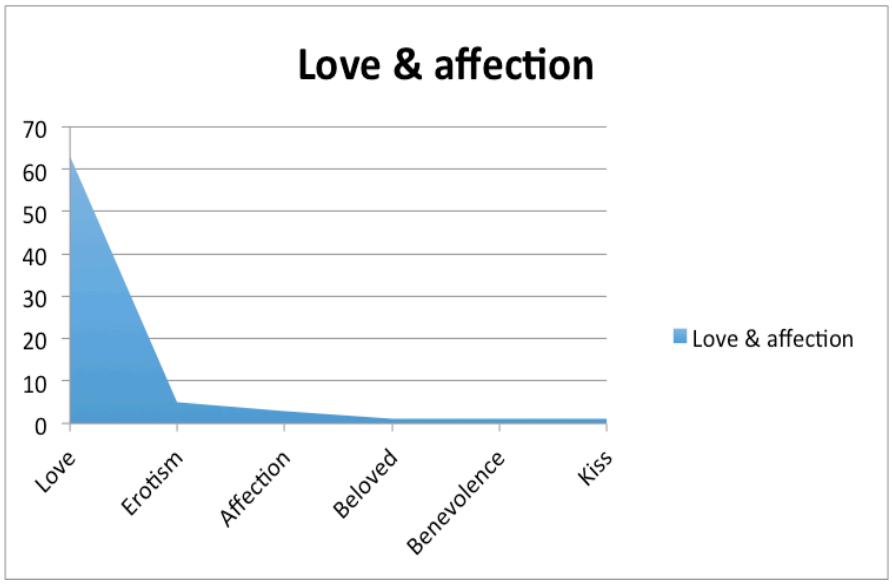


Chart VII-J

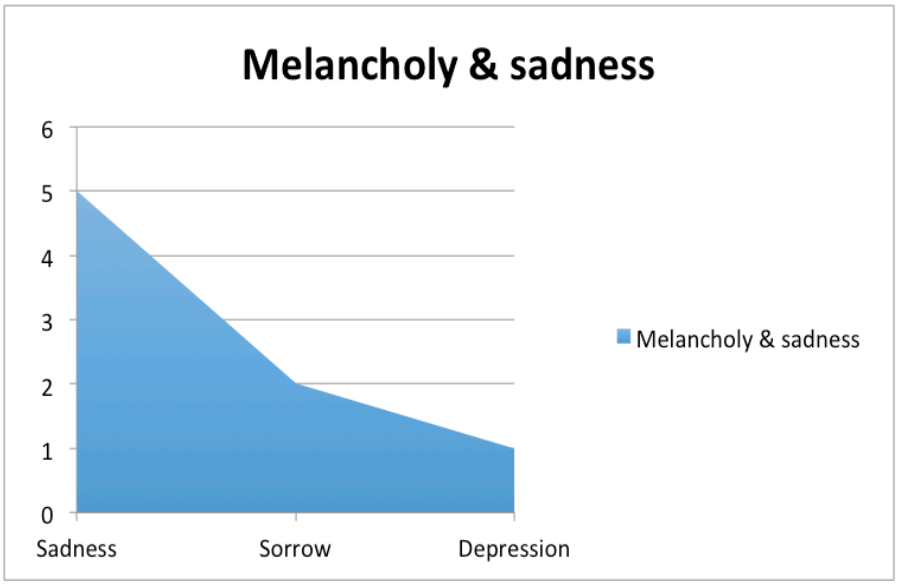


Chart VII-K

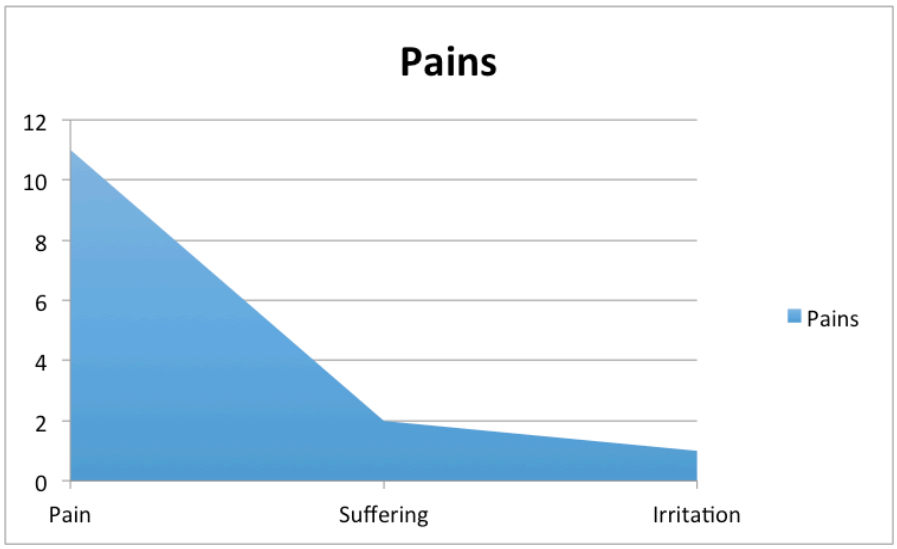


Chart VII-L

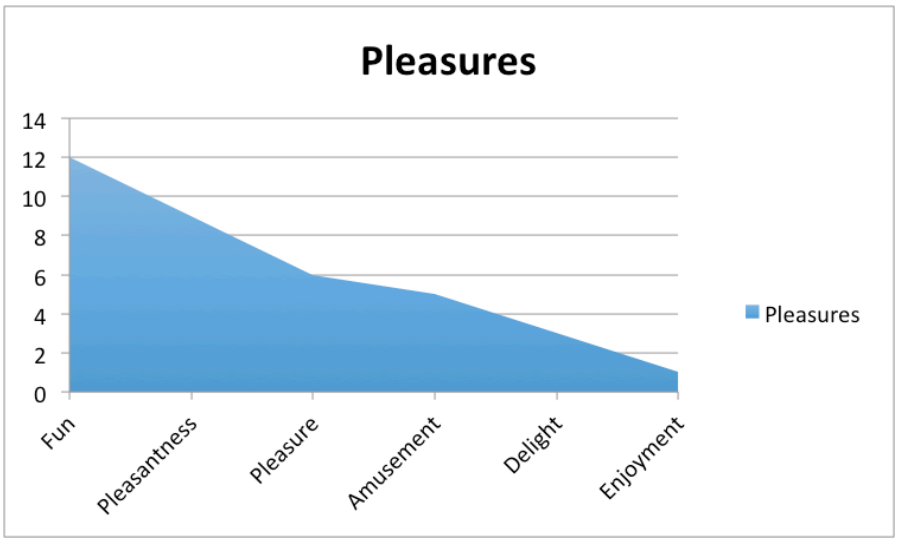


Chart VII-M

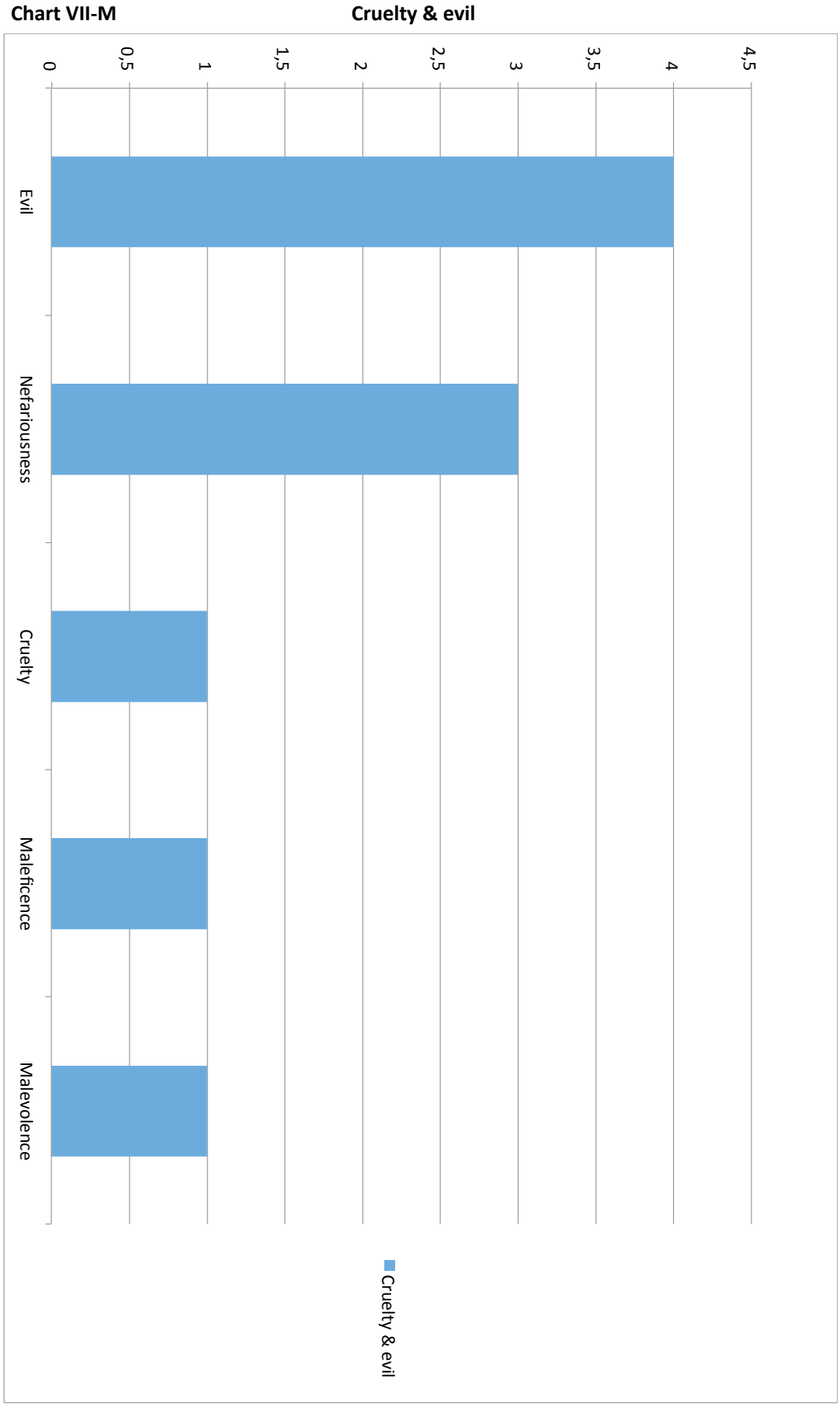

Cruelty & evil
0
0,5
1
1,5
2
2,5
3
3,5
4
4,5
Evil
Nefariousness
Cruelty
Maleficence
Malevolence
Cruelty & evil

Chart VII-N

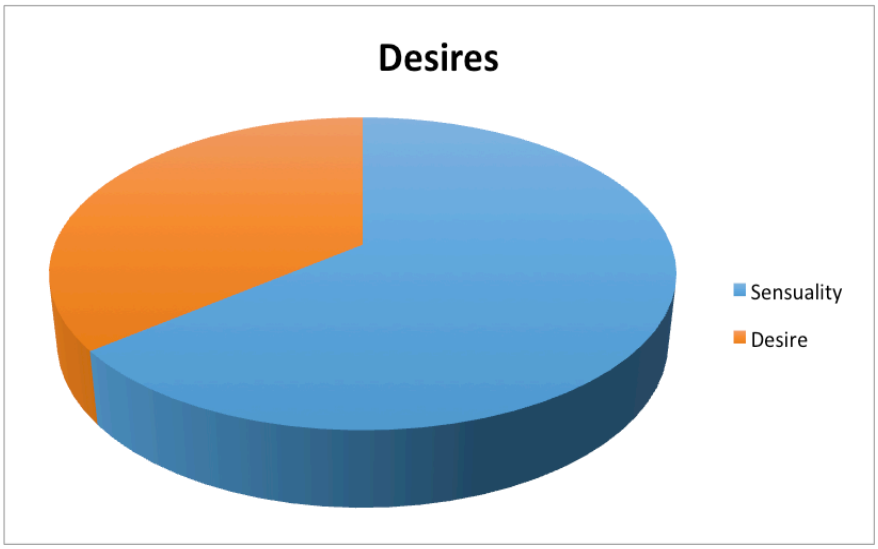


Chart VII-O

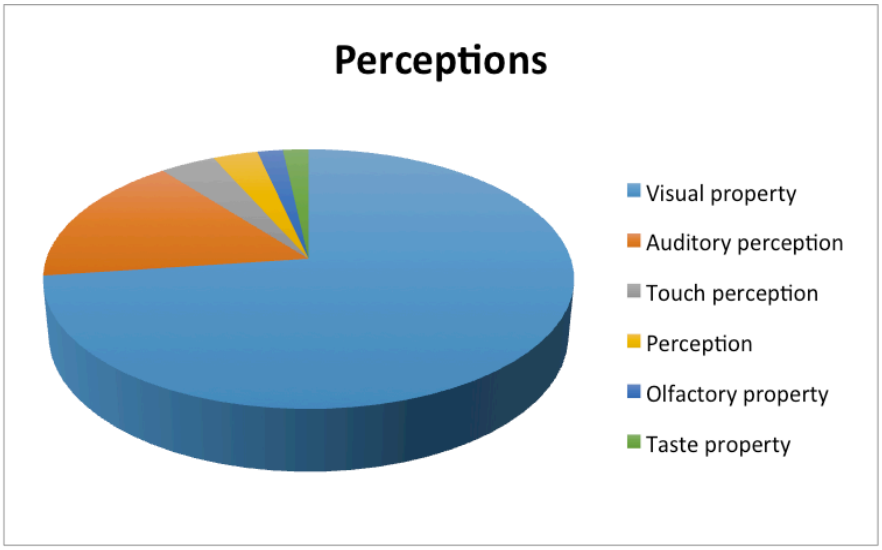


Chart VIII-A

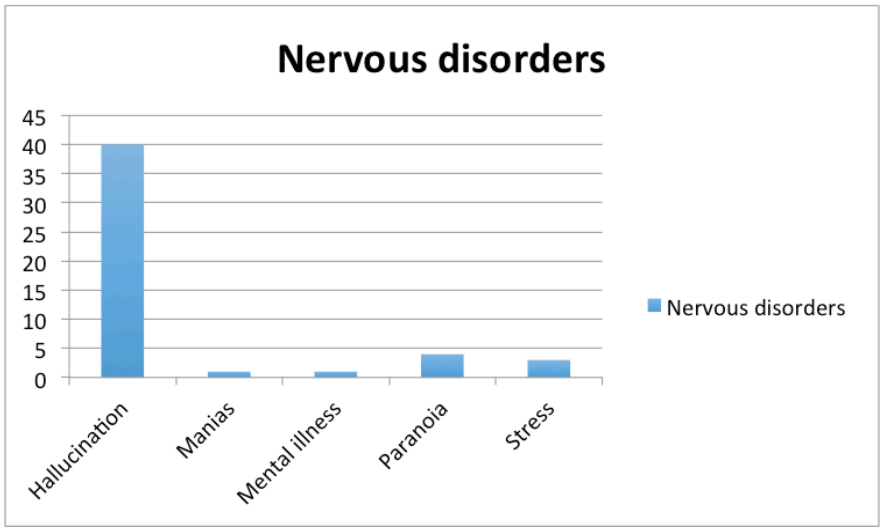


Chart VIII-B

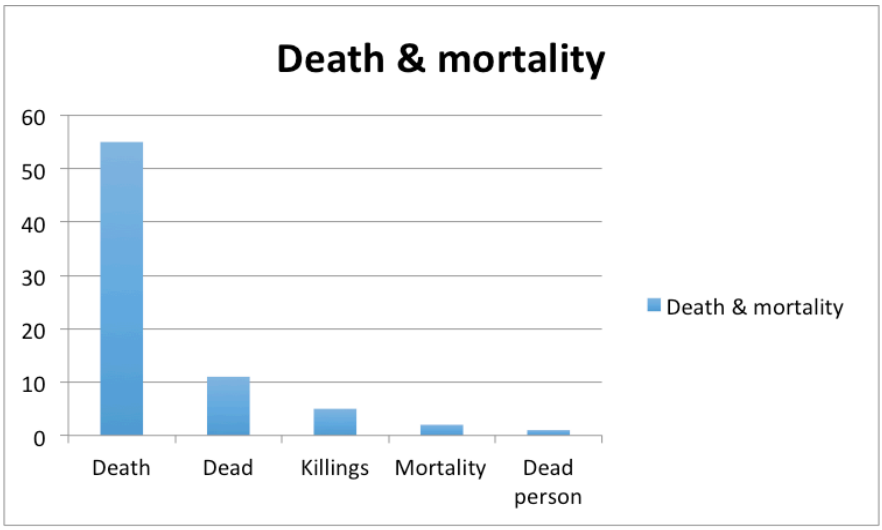


Chart IX-A

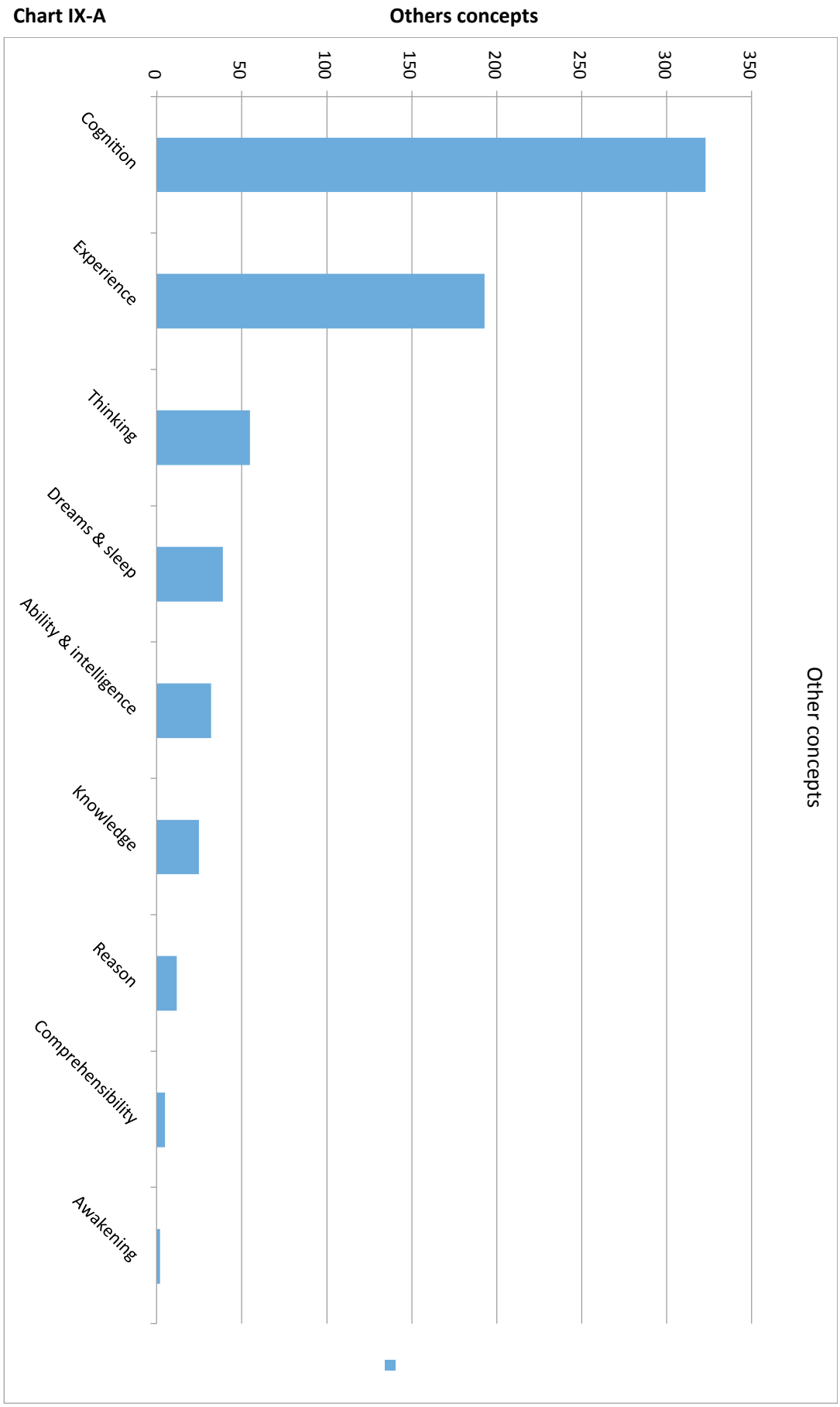

Others concepts
0
50
100
150
200
250
300
350
Cognition
Experience
Thinking
Dreams & sleep
Ability & intelligence
Knowledge
Reason
Comprehensibility
Awakening
Other concepts

Chart IX-B **Action/act**

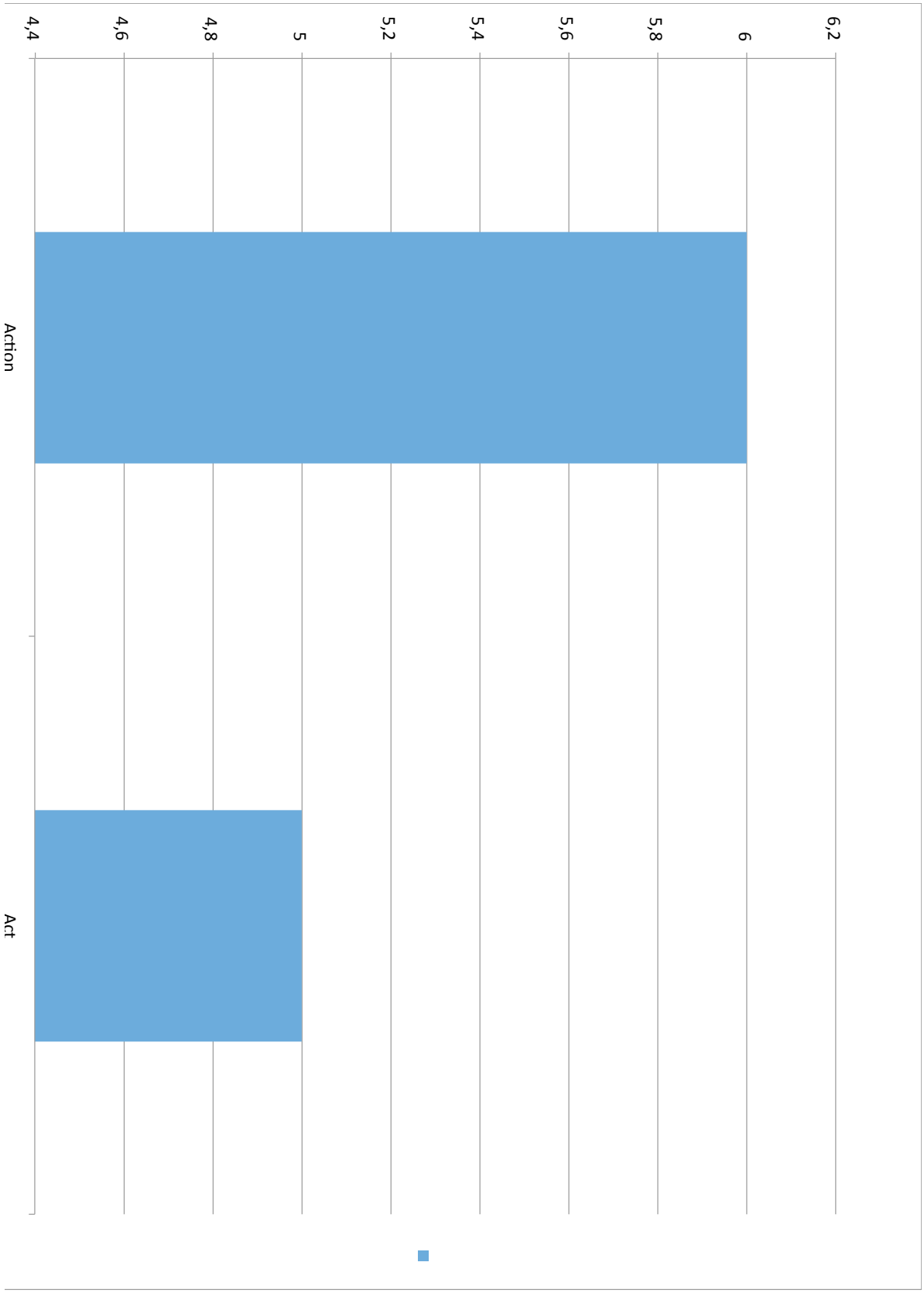


Chart IX-C

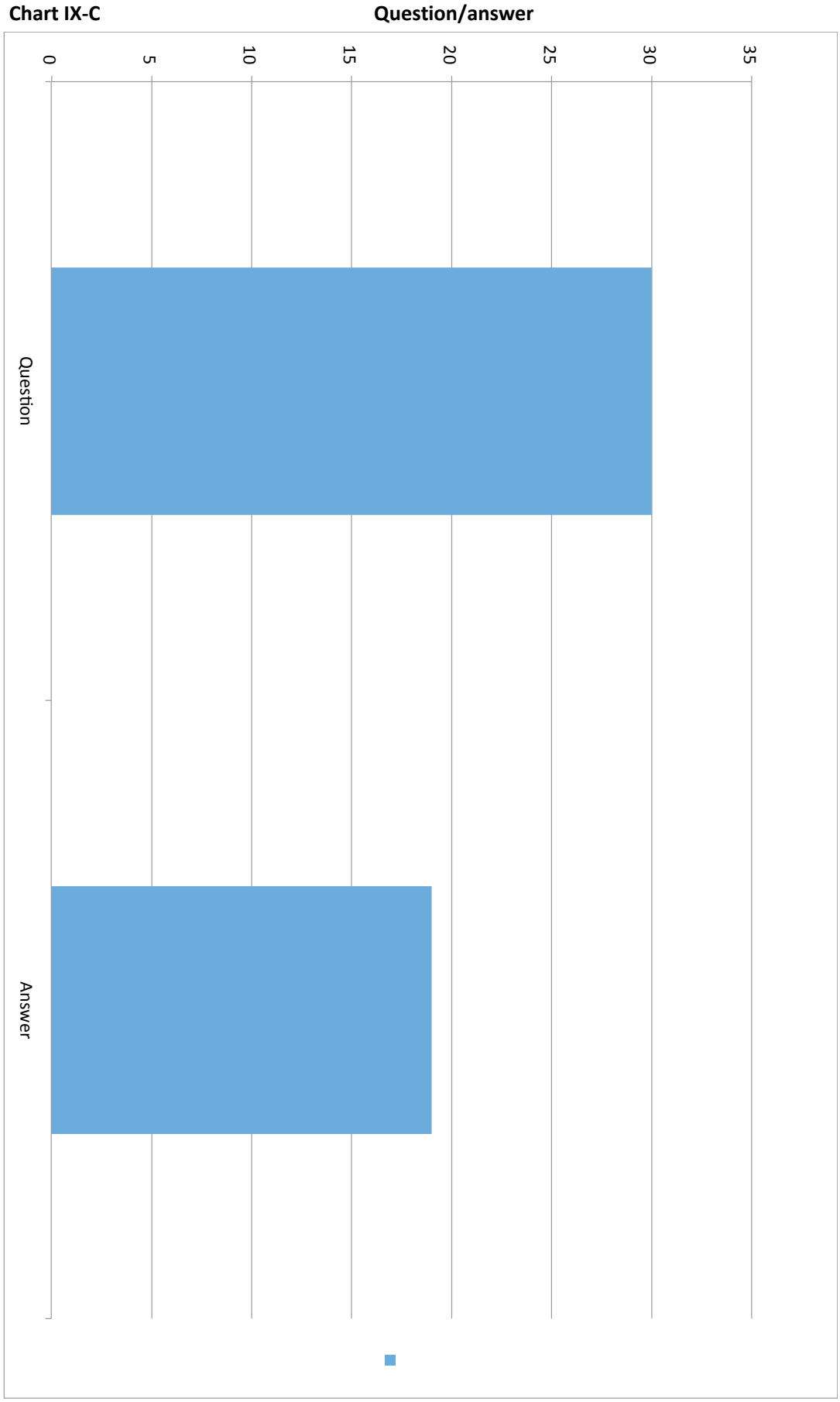


Chart IX-D

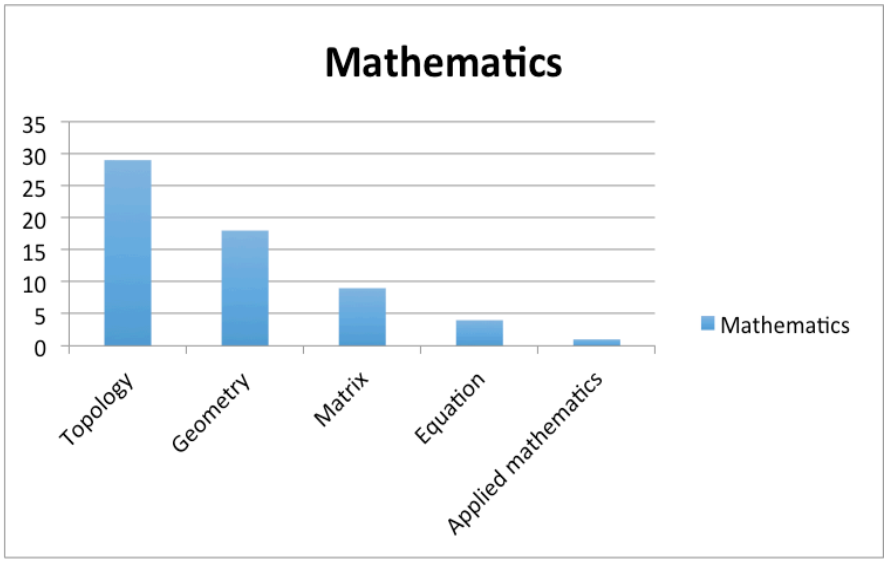

Mathematics
35
30
25
20
15
10
5
0
Topology
Geometry
Matrix
Equation
Applied mathematics
Mathematics

Chart X-A **Technologies**

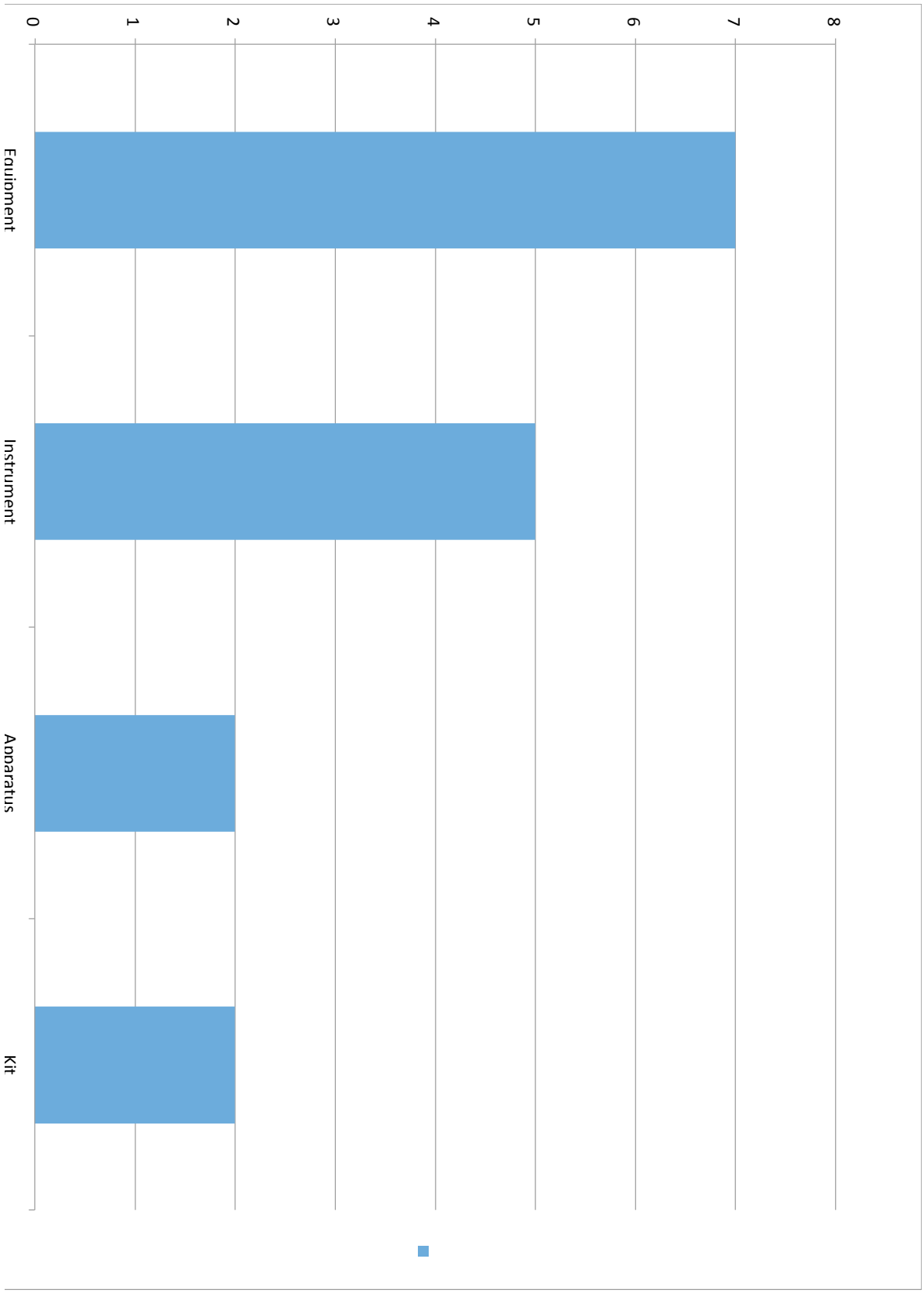


Chart X-B

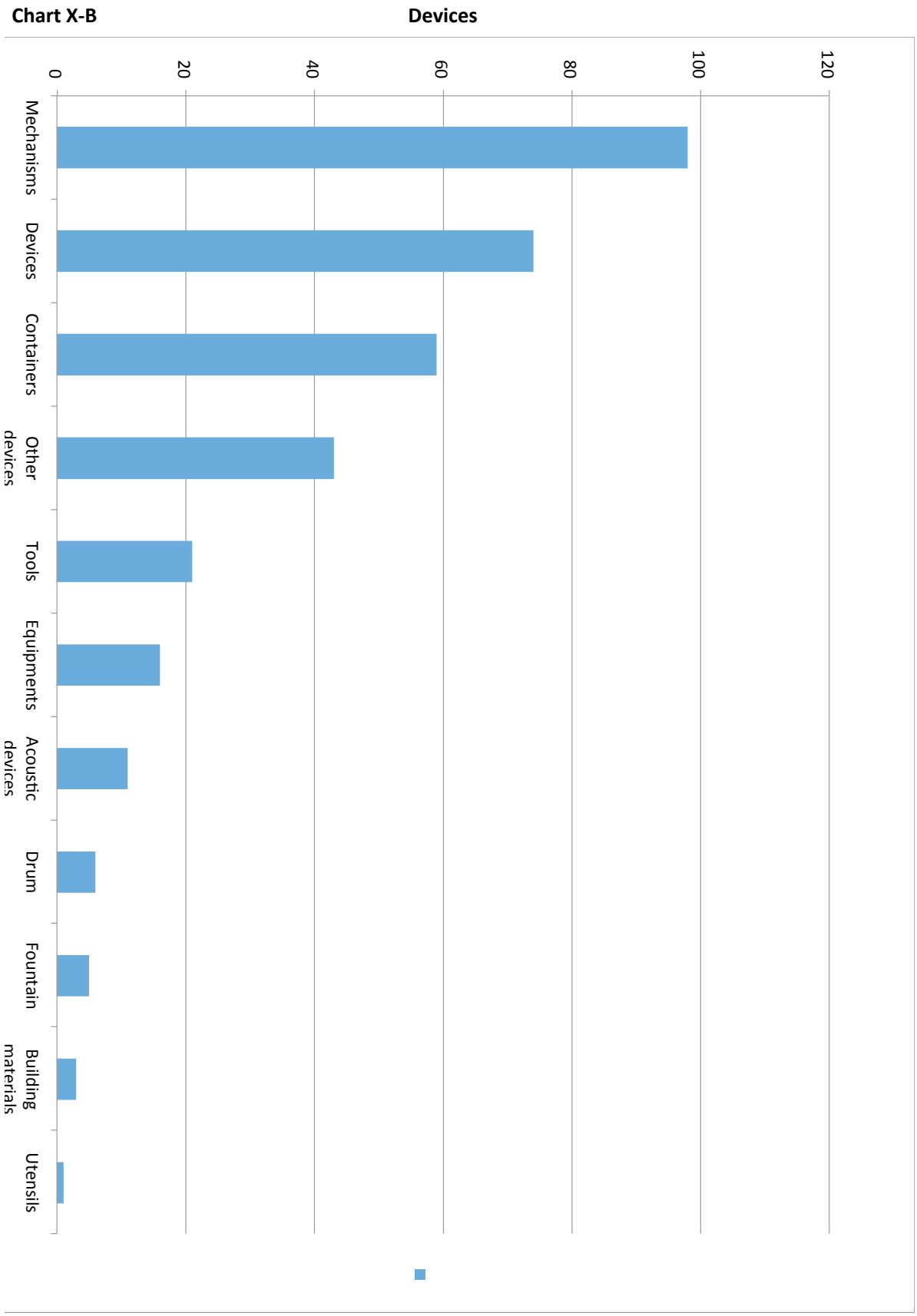

Devices
0
20
40
60
80
100
120
Mechanisms
Devices
Containers
Other devices
Tools
Equipments
Acoustic devices
Drum
Fountain
Building materials
Utensils

Chart XI-A **Imaginary beings**

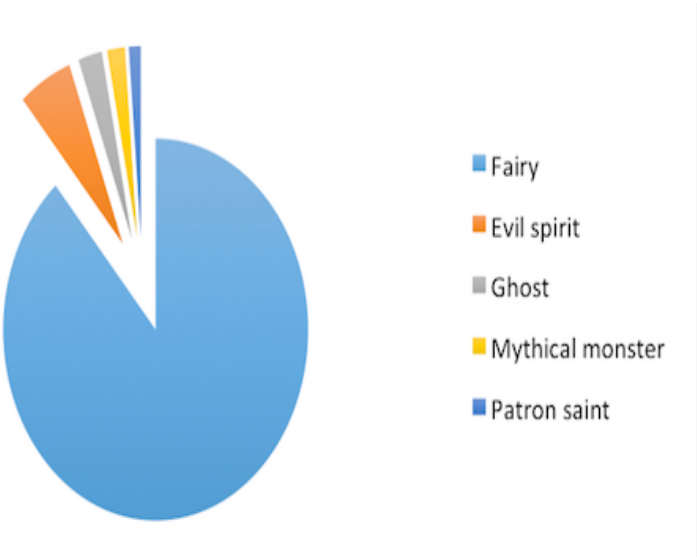


Chart XI-B **I**

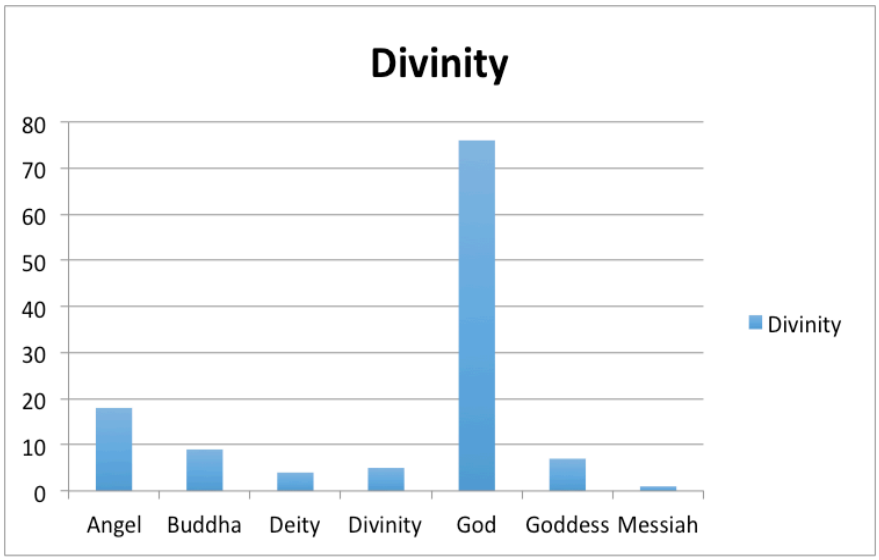


Chart XII-A

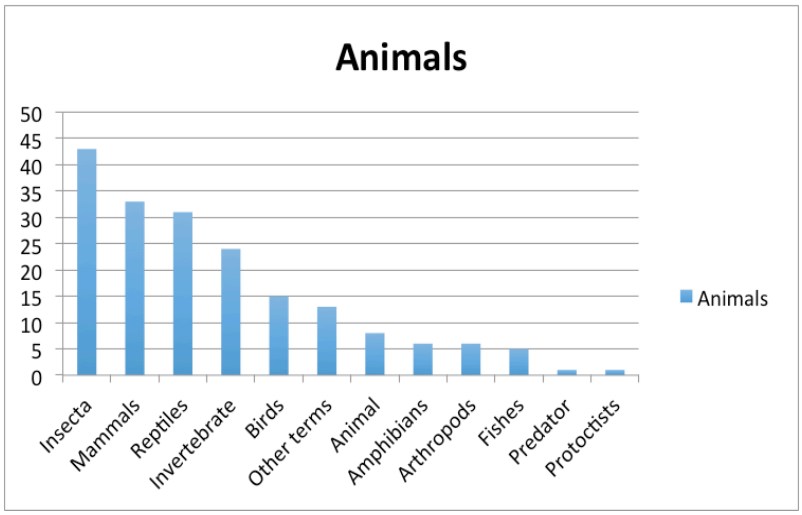


Chart XII-B

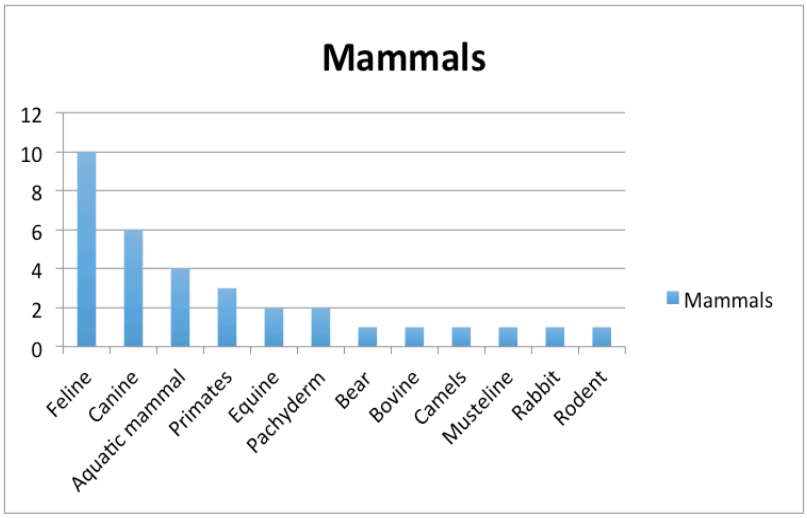


Chart XII-C

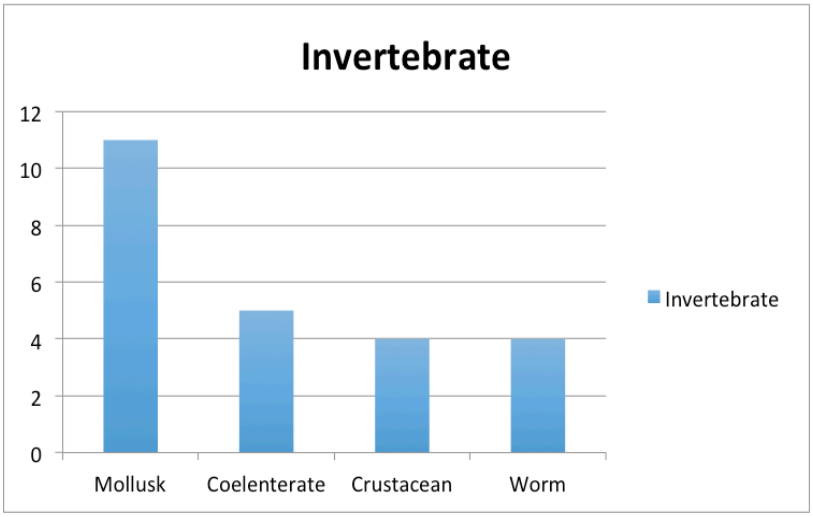


Chart XII-D

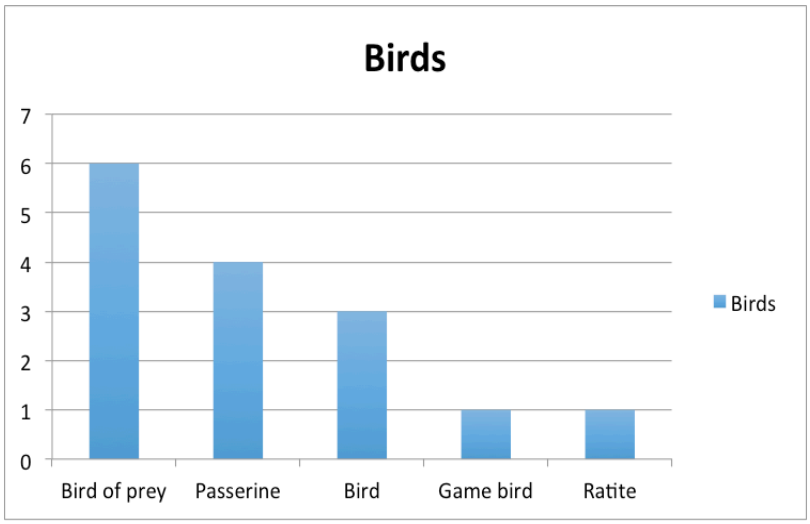


Chart XII-E

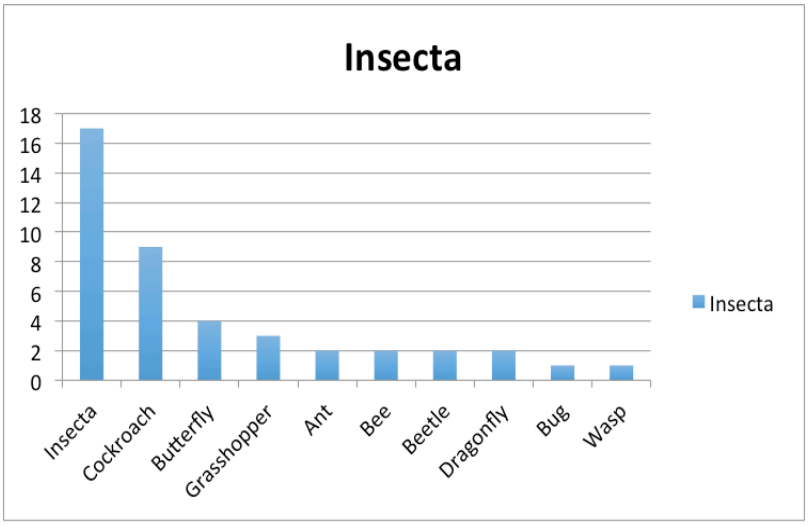


Chart XII-F

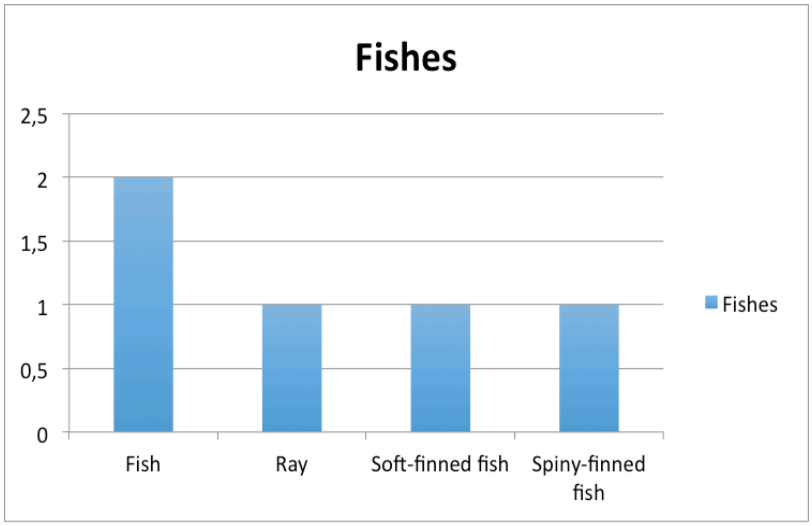


Chart XII-G

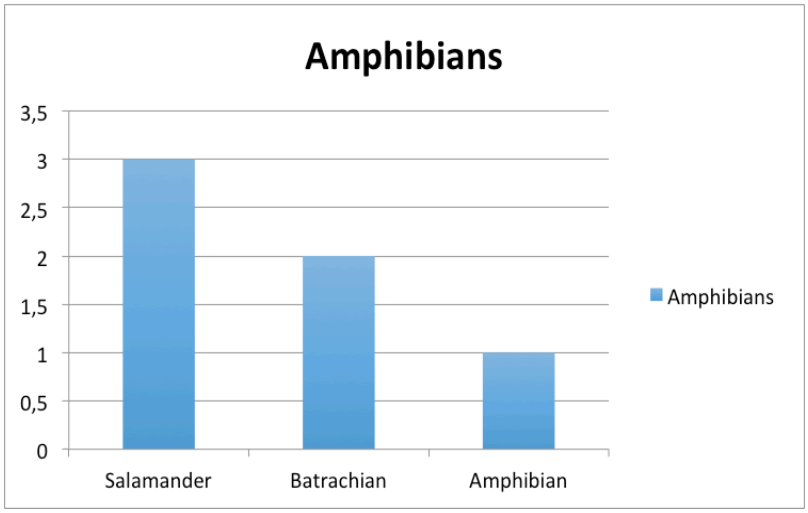


Chart XII-H

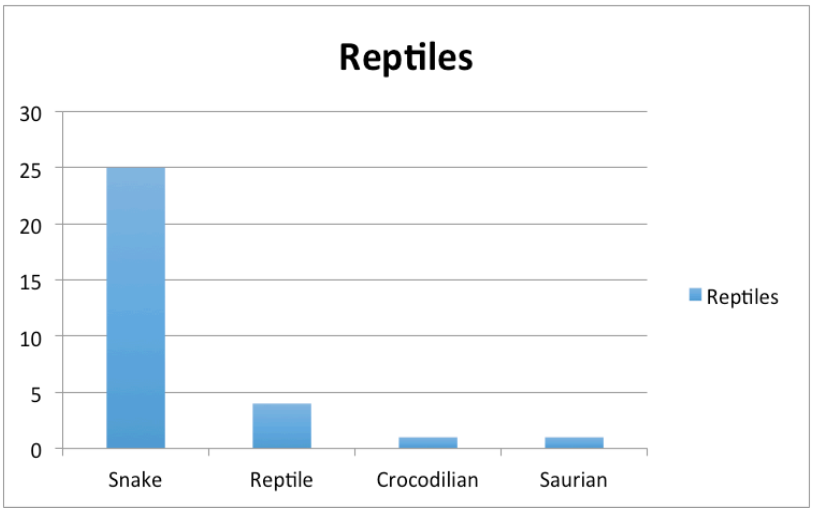


Chart XIII-A

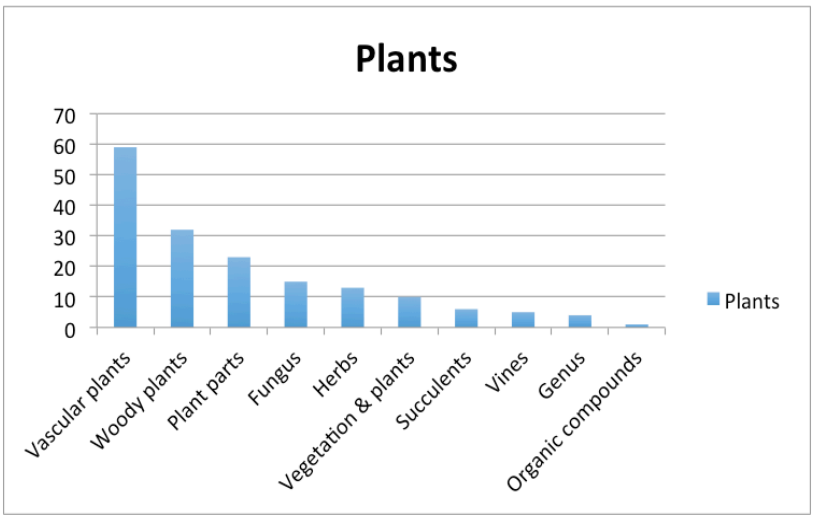


Table 1 **DMT spatio-temporal qualities (space-time, matter-texture)**

Tittle Time-space-matter	**Category Time-space-matter**	**Perceptual qualities**	**Mental representation spatio-temporal emergence**	**Affective, hedonic, cognitive, perceptive outcomes**
Candyland	Space	A cartoon version of reality	Unspecified	Enhanced open-eyed reality.
In between	Space	Unspecified	The world where you arrive before you break into hyperspace.	"One can be confronted with a heightened awareness of the tensions present in the body, or with daily problems one struggles with. Accepting these experiences and using them literally as a portal to hyperspace can still bring the traveller to hyperspace."
Folding rooms	Space	"Multidimensional spaces that certain entities often entangle, enmesh, and overlap travellers in. They actually seem to fold over & in on themselves and the observer *viscerally*... reaching behind and around one with their architecture."	During hyperspace journey	Unspecified
Bifurcations	Space	" A two path branch that can proceed into an infinite number of branches."	Unspecified	Experienced as a potential conceptual/visual alternative.
Evoluminate	Matter textures	Increasing light perception (see also central light)	Evolution of a situation towards more light	Unspecified
Jimjam	Matter textures	Squishy, goopy, sticky, stringy matter of hyperspace that anything can be created from. It is multicolored […].	In the hyperspace	Delicious
Schnörkel	Matter textures	"Various spirals, ornamentations, and filigree, objects doorways, balustrades, textiles […], everything that can be decorated. Generally not static, but rather	In hyperspatial areas	Unspecified

		being designed and redesigned in real-time by the travellers, the denizens of hyperspace, or by themselves."		
Static pattern overlay (SPO).	Matter textures	"Static, slightly irregular monochromatic background patterns."	When there is entities	"Entities can communicate trough the producing of patterns." […] "You can blink or look away change your point of view and the same image persists!"
Central light	Matter textures	Intense like the sun.	Centrum / axis of hyperspace	"The light possesses an intelligence its perception is kinesioöptic. A sort of ontological bottom. In a religious paradigm, the traveller might interpret the Central Light as Buddha, Christ, Krishna or any other radiant and ultimate being in his or her religious paradigm."
Plasmati	Matter textures	"Similar to jimjam multicolored constantly shifting gel-goo of amazement, which decorates the space around everything."	"In the land of the elves."	Unspecified
"Planck time"	Time	Unspecified	"The smallest unit of time that can be mathematically described. When you feel time compressing in to smaller and smaller units, you are approaching Planck time."	Unspecified
Time travel	Time perception	Unspecified	Eternal time	"You sort of pop out of the normal flow of time, into a certain area where time is eternal. From there you can travel to any given point in the timeline and re-enter the timeline. There you can re-experience that specific timeframe, and sometimes finish unfinished business. "

Tittle Object	**Category Object**	**Perceptual qualities**	**Spatio-temporal emergence**	**Affective, hedonic, cognitive, perceptive outcomes**
Dimensional	Object	"Similar to a	"The elevator rises at great speed through	"The feeling of rising is

elevator	Transportation	terrestrial elevator, this is a small space that travellers can find themselves in."	a multitude of higher and extra dimensional spaces. At various intervals, it opens up on a new vista or room where one can choose to get out and interact, or stay in the elevator and continue to ascend."	often accompanied by the rising sound of the carrier wave."
Glass chrysanthemum	Object Spatial transition	Glass chrysanthemum	Doorway to hyperspace.	Unspecified
Gifts/presents	Objects gratification	Sometimes entities give gifts. These gifts can be sculptures, orbs, Faberge eggs, glyphs and many other things.	During hyperspace journey	Unspecified
Akashic book	Object Erudition	"Book in 3D written in light."	During the experience.	"Deep knowledge, omniscience, not transmitted by a written language."
Audio wind up/out	Sound-object	"Winding up sound', similar to an audio delay being fed back into itself which rate is increasing until it just becomes a buzz as it disappears. The sound is also highly resonant (i.e. chime or bell like)."	End of the experience	Telepathic
Carrier wave	Sound-object	"A ringing tone or vibration somewhat resembling a carrier wave. Sounds like a high-pitched tinnitus tone right out of the range of consensual reality hearing (maybe what a dog hears with a dog whistle) - sometimes steady state, sometimes warbling up and down, like a siren."	"Rising of one's vibratory rate to levels where access to hyperspace is possible."	"As the ringing sensation continues one can even feel that this vibration is resonating in every cell of the body."

Tittle Event	**Category event**	**Perceptual qualities**	**Spatio-temporal emergence**	**Affective, hedonic, cognitive, perceptive outcomes**
Condensation	Event	Unspecified	Condensation. "More often experienced before or after visiting hyperspace than during hyperspace, yet hyperspace may be seen	"Clusters a certain set of events into a synchronospheric condensation."

			as the ultimate synchonospheric condensation itself."	
Superposition	Event	Unspecified	Superposition	"The object seems to move and shift position when it is not observed. When people enter superposition, one can perceive them at two (or more) places at the same time. The 'normal' object seems to fall from our ontological map into a multidimensional state, where it starts being driven, pushed and ruled more by meaning and intention."
Breakthrough	Event	Ultra sharp edges and highly polished surfaces. Endlessly morphing and fractalizing details.	"Beyond time or space or known dimension."	"Inherently synaesthetic. A sense of extremely high energy and vibration as well as frantic activity. All One. Feels oddly familiar."
End of the line	Event	Similar to breakthrough often associated with the vision of the central light	After the breakthrough	"Absolute Point. The Alpha and the Omega of the universe and your entire existence. Then you are having at "the end of the line" type of breakthrough."
DMT fold	Event	Folding back into normal space.	After DMT experience	Unspecified

Table 2 **DMT Physical and affective states**

Tittle	**Category Physical and affective states**	**Perceptual qualities**	**Spatio-temporal emergence**	**Affective, hedonic, cognitive, perceptive outcomes**
Pre-flight anxiety	Anxiety state	Unspecified	"Just before lift-off into hyperspace."	"Anxiety. […] Many also report that this pre-flight anxiety diminishes shortly after entering hyperspace or upon returning from hyperspace."
Stuck in a loop	Rumination	Unspecified	Unspecified	"When your mind keeps repeating the same thoughts or events over and over again in a seemingly infinite loop."
Kinesioöptic	Orgiastic state	Light	Within the central light	"Body dissolution in the experience left with just the sensing of light. The body can sense-see the light." […] "Lumenorgastic: the orgastic-like experience that accompanies the perception of the central light."
Kalonkinesioöptic	Orgiastic state	Light	Within the central light	"Light that is kinesioöptical perceived communicates or transfers the ultimate beauty, mind blowing, jaw dropping, astonishing beauty." […] "Lumenorgastic: the orgastic-like experience that accompanies the perception of the central light."

Eschatothesia	State of anticipation	The personal lifting of the veil when entering hyperspace	When entering hyperspace	"Esthesia perception from the senses. It is the sensing of a future attractor towards which the dynamic system evolves over time. A feeling of some huge event in the near future we are approaching, the end of an aeon, a marker in time after which nothing will be the same."
The throat marble	Physical state	Unspecified	While visiting hyperspace	"Feeling as though you don't need to breathe. Also described as the feeling of a rolling ball trapped in the back of ones throat."
Hyperslap	Traumatic state	Unspecified	During hyperspace	"Traumatic, extreme negative trip. Punishment for some transgression on the part of the psychonaut. "[…] "Often it is due to repeatedly blasting off when one has not processed or integrated the previous lessons, or desperately trying to get past a shut-out (DMT experience where hyperspace simply will not open for you and if insisting it can lead to an hyperslap). "
Rainbow yawns	Physical state	Unspecified	During the comedown	"Yawning accompanied by an increase in visuals and great euphoria."
Exploring	State modified	Seeing sound and hearing colours	After returning From hyperspace	Synaesthesia phenomenon

Table 3 **DMT Archetypal bestiary of entities and beings**

Archangels	Entities "Very benign"	"Light beings entirely made of light. Details like facial expression are often hard to distinguish, because of their strong radiance." […] They are " Overviewing, ruling, initiating deeper and more complex levels of hyperspace."	"Levels of hyperspace" […] often connected to the central light."	Unspecified
Machine elves (Also sometimes named Tykes)	Entities	Unspecified	"In hyperspace. […] Machine elves seem to live in, and be part of, some kind of folding rooms."	Telepathic communication
Machine elves queen	Entities	Unspecified	"In thebreakthrough ."[…] End of the line."	Telepathic communication. "Seeing the Queen of the machine elves is akin to suddenly realizing that all the patterns and machine elves you have seen before are, in fact, her."
Mother goddess	Entities positive "[…] Caring, loving, caressing all pain and all tears."	"A huge, bright, female goddess. Might be identified with Isis, or Mother Mary, yet transcending identification with these earthly identifications. Bright, really bright light."	"Central light."	Telepathic communication "A kalonkinesioöptic experience with explicit female overtones."
Flirty fairies	Entities positive	"They resemble traditional fairies and often actually have wings. Flirty Fairies can appear more "nymphish" as well. They are fluid and	In hyperspace	Telepathic communication. Perception of nature

		transforming... slowly pulsing with light at times, but generally hold the form of beautiful women who are overflowing with beauty and joy... so much so that they can barely stay within their skins. They squirm and pose, bat their eyelashes, wink and play in a nearly burlesque fashion... often stripping for you. An interesting note about them is that they even do this for heterosexual women. In fact, it doesn't seem to be sexually motivated, but rather an expression or flowering of their essential beautiful nature.		beauty
Hyperspace jesters	Entities positive	They truly resemble medieval jesters and harlequins... however, they are not silly or foolish in any way. They tend to be hyper-intelligent […]. Often flashing hyperspace tarot cards at you which, on their own, can impart reams of information to you when you look at them."	In hyperspace	Telepathic communication
Geniuses or Genii	Entities negative "Disdainful, humbling."	They tend to be sitting in fanciful chairs and observe you with a much more dour and reproachful. […]. They tend to lean back with their head tilted somewhat disdainfully to the side, stroking their chin or fingering their noses slowly. If they decide they have energy for you, they will get out of their seats, and move lightning quick. Immediately appearing behind you, and wherever you turn your head or your attention, they will already be there. They seem to enjoy demonstrating how pathetic you are, and often answer your questions before you even ask them. Very humbling. Though they don't have horns necessarily, and are usually neon rainbow opalizing on ebony, rather than red... they do have something in common with popular conceptions of devils or the devil."	In hyperspace	Telepathic communication.
Circus ringleaders	Entities	They are very much like the archetypal circus ringleader... often with coat and tails and a ridiculously cool top hat to boot. They may even have a baton, wand or fancy cane they use to direct your attention to one or another of Hyperspace's awesome vistas or announce a show being put on for your entertainment. They are shamelessly promotional, but like the other natives of Hyperspace... they are also hyper-intelligent, telepathic, and frankly miraculous	In hyperspace	Telepathic communication.
Morphos	Entities positive "They tend to have vast awareness and consciousness's that contain peculiar and unique gems of wisdom."	Made from Jim and Jam space texture. […]This class of beings tend to have fairly unstable forms and can rise and subside out of the Jim Jam like waves. They are aware, though... and are capable of solidifying into phantastic forms if they so choose. These forms are often straight out of mythology only far more colourful and multi-dimensional."	In hyperspace	Telepathic communication.
Devas	Beings (plants or object)	"The Devas are living, often hyper-intelligent, beings that often resemble plants or objects more	In the hyperspace	Telepathic communication. They

		than they do what we might normally recognize as sentient beings. They can be very helpful and are always interesting to observe as they unfold, wiggle, transform & flower. An interesting note is that if they do unfold entirely for you."		seem to have erogenous zones like pistils and stamen, which can experience something akin to orgasm. Due to the telepathy inherent in hyperspatial contacts, the traveler is able to experience some of this cosmic ecstasy as well.
Dream wizards	Extra-dimensional beings "The most intelligent human being of all time is a rank idiot next to them."	"They inhabit monasteries, castles. […] Classic Gandalf types with far more trippy and cool robes."	Not in the hyperspace "Tangential realms. Sometimes it is akin to peeking out of mirrors in the Hyperspace."	Unspecified
Gods and Goddesses	Extra-dimensional beings Positive "They don't usually judge you, but rather have a kind-of infinite compassion."	"They resemble various cultural archetypal godheads. There are Hindu, Egyptian, Mayan, Celtic, African and plenty of un-recognizable types. They tend to be more sci-fi than you would imagine them from only reading sacred books."	Not in the hyperspace "Tangential realms. Sometimes it is akin to peeking out of mirrors in the Hyperspace."	Unspecified
Elementals beings	"Beings of a primal nature, often associated with one of the various elements. Fire, Water, Space, Earth, Air... there are sub-classes as well. Metal, Wood, Ice etc."		"Not in the hyperspace."	Unspecified
Aliens	ie. insectoids praying mantis, reptilians of various sorts, and more amorphous and nebulous intelligences.		"Not in the hyperspace tangential realms."	Unspecified
Angels	Local entities	They don't necessarily look like typical pop culture angels, but they can. They tend to emanate light and are often keenly watching the humans present. It seems as if some people actually do walk around	"Not in the hyperspace" […] "Somewhat	"You have to be vibrating at or near their frequency in order to perceive or interact

		with a couple guardian angels. But these guys often hang out in the background, and do not always make their presence known	easier to encounter if you are outdoors, but not necessary."	with them."
Spirits	Local entities	"Discorporate energy or emotional beings."	"[…] Often inhabit certain spaces and specific locales."	Unspecified
Ghosts	Local entities	Typically discorporate humans who might be lost or very intent on doing something specific	"[…] Often inhabit certain spaces and specific locales."	Unspecified
Ascended masters and Buddhas	Beings positive "[…] Their efforts actually support and uplift everything they contact... tonifying the world, so to speak."	"Enlightened beings. […] Their consciousness encompasses everything they observe, but they are usually fairly free of any desire or goal. Sometimes it seems that they are chanting or doing yoga and that	"[…] Hang about on clouds or other lofty vantage points and observe all things below them without any real intent or focus."	

Lists 1-7 created from Meyer 340 DMT reports (Emotaix-tropes scenario)

List 1 Imaginary being:

Faeries, elves, gnomes, dragon, hobgoblin, elf-music, elf-language, demons, elf like-clown, ghost, Santa Claus, leprechauns, gremlins, pixie elf -type entities, cloud-beings, self transforming machine-elf, pixies.

List 2 Creatures

Female creature reminding medieval witch, giant insect creatures, bipedal creatures about human size, orb like creature who would come close and then come together in formation, elf like creature in standard Irish elf costume complete with hats, a large creature like an octopus, creature with a mostly black face but with coloured features, giant creature, lobster, dwarf, android like creature, cartoon like creatures, red demon-like creature with a knobby bulbous head and bulging arms and fierce but non hostile eyes. Epiphyllum, creature-like children.

List 3 Entities

Voluptuous alien seductress, child entity, entity grinning wildly with two piercing eyes, self–replicating entities, the entities are large part machine things their surface are made from a grid/ matrix of flattened spheres, metallic in appearances, interior of entities is suffused cloud of light pulsing in synchronisation with its intent/ actions. Entity " tinkerbell-ike", entity made of stone with cherub like faces, pulsating entities, arachnid-crustacean entity, biologically fuelled machines with plants parts, pickpocket entities, entities with jocker faces, sensual female entities, entities who had comic –surgeon like appearances, fractal medusa.

List 4 imaginary places

Hell, heaven, inferno.

List 5 Spaces

Kindergarten space (playground idea), space station automaton, waiting room, celestial metropolis, temple, circus cathedral, church.

List 6 Divinities and Gods

Shaman, demigods, god, goddess, prophets, Christ, Hindu deities, guardian angels, Supreme Being, Buddha, religious person, angels, archangels, Egyptian falcon god Horus, monks, deity Ganesha, cherubs, jews, Muslims, Christians, dervish-like.

List 7 Animals

Medusa, camel, snakes, dragonfly, dog, dolphin, tiger, scarab, insect, butterfly, worm-snake, salamander, cat, bugs anaconda, millipedes, cuttle fish, predator chicken, carapace, octopus, clam shell, lion, puma, jellyfish, helix, bird, ants, lobster, bee, crocodiles, frog, eagle, mantis,monkeys, weavers, moth.

List 8 Plants

Chrysanthemum.

List 8 Sequencing of the DMT experience in the literature: two examples.

1- Peter Meyer sequencing into 3 levels of experience

- Level I: Pre-hallucinatory experience.

This stage is characterized by an interior flowing of energy/consciousness. It may be extremely intense. It may have a positive feeling content.

- Level II: Vivid, brilliantly colored, geometric visual hallucinations.

Here one is observing a patterned field, basically two-dimensional, although it may have a pulsating quality. One may remember having seen this before.

-Level III Transitional Phase a passage to the next level.

One may see or fly through a tunnel A veil, a membrane. There is a breakthrough to another world (or perhaps even a series of breakthroughs). Alternatively, it may also happen that the transition from Level II to Level III is abrupt, almost instantaneous, with no experience of transition.

-Level IV: Three-or higher-dimensional space, possible contact with entities this stage is characterized by the experience of being in an "objective" space, that is, a space of at least three dimensions in which objects or entities may be encountered. Sometimes the entities appear to be intelligent and communicating beings. This stage may be extremely energetic with an experience of everything happening incomprehensibly fast. Alternatively it may be relatively coherent. Travel is possible at Level III. One may, for example, assume the form and consciousness of a bird, and fly as a bird does.

2- **"*Agekalipso*" sequencing into 6 levels of experience.**

-1 Threshold: Change in ambiance, sharpening of all the senses picture quality switch from normal to HD: colour enhancement (colour contrast and finer grade of the pixels in high definition.

-2 Chrysanthemum: The texture of the Chrysanthemum tends to exhibit heptagonal_and trihetagonal tiling's surface saturated with a sort of textured fabric composed of intricate symmetrical relationships, bright colours, shifting edges and shimmering pulsing superposition patterns of harmonic linear waves of many different frequencies. The visual component of the Chrysanthemum is extremely harmonious, symmetric and beautiful in uncountable ways; such state has to be endogenously generated as a sort of harmonic attractor of your brain dynamics.

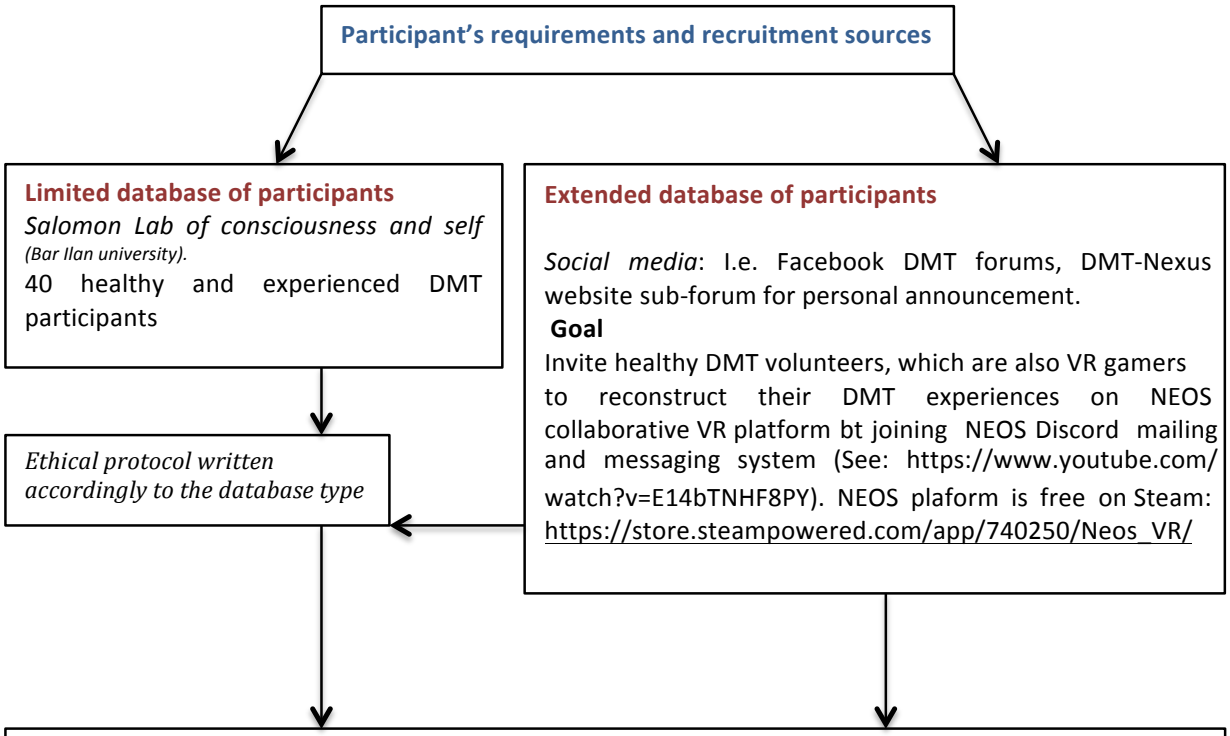
-3 Magic eye: Texture of an autostereogram. The world-sheet encodes the "semantic content" of the scene and is capable of representing arbitrary situations (including information about what you are seeing, where you are, what the entities there are doing, what is happening, etc.) As if seeing through a window. People often report that the worlds they saw on a DMT trip were all "made of the same thing". This can be interpreted as the texture becoming the surfaces of the world-sheet, so that the surfaces of the tables, chairs, ice-cream cones, the bodies of the people, and so on are all patterned with the same texture (just as in actual autostereograms). Magic Eye level scenes often include 3D geometrical shapes like spheres, cones, cylinders, cubes, etc. Complex translucid qualia crystals in three dimensions start to become a possibility. Tessellation of the experiential field

-4 waiting room: The transition between Magic Eye and waiting Room often looks like "finding a very complex element in the scene and using it as a window into another dimension". Feeling of total and complete synchronization of all senses into a unified synesthetic experience. The microstructure of the texture is constantly unfolding in new symmetrical ways and propagating the changes throughout the entire surface at a striking speed.

-5 Breakthrough (often represented as breaking through a membrane) Topological bifurcation start to happen uncontrollably. This may look like "multiple things happening at once" or "objects taking multiple non-overlapping paths at once in order to get from one place into another". The entities at this level feel transpersonal: due to the extreme curvature it is hard to distinguish between the information you ascribe to your self-model and the information you ascribe to others. Thus one is all over the place, in a literal topological sense. On a DMT breakthrough state one invariably "moves across vast regions, galaxies, universes, realities, etc." in a constant uncontrollable way.

-6 The dome.

DMT Project functional chart



Preliminary interview

*(*Form to be completed and sent to participants regular @ or NEOS @ system, estimated duration for completing the form 15mn.)*

Participant's details

Age, weight, height and gender.

Participants drug history

Total number of participants' DMT experiences. Participants Choice of the DMT experience they would like to reconstitute in VR according to the richness, robustness and intensity of the cognitive, affective and perceptual phenomenological components they best memorized.

Drug type: (DMT alone or mixed drugs) quantity and modalities of administration.

Context

Solitary /collectively, indoor /outdoor, remembered initial physical body position during the experience (i.e. sitting standing walking lying (prone /supine/ on the side…), and the mental states preceding the drug administration.

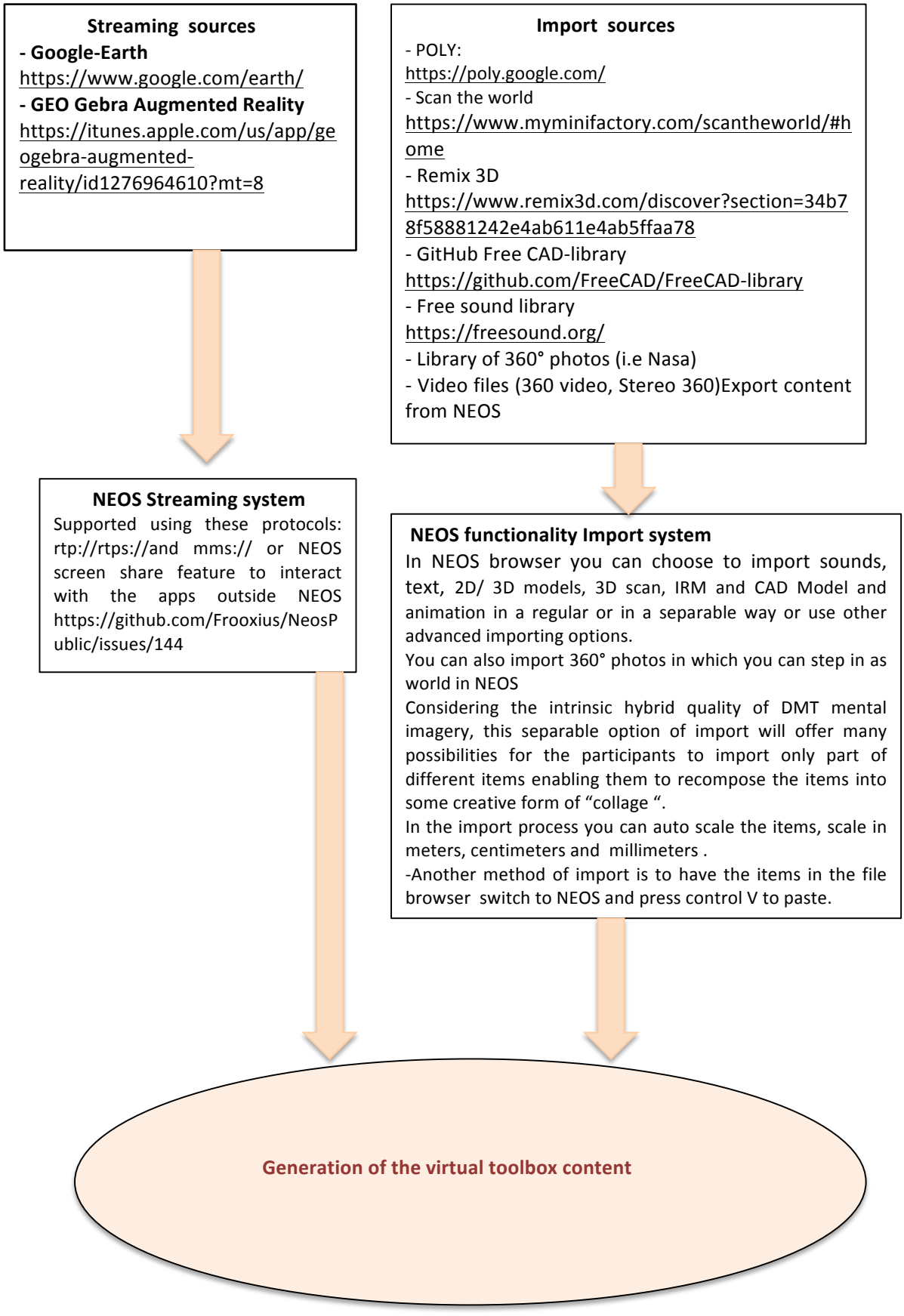
Experience number and order of sequences

Participants have to divide their experience into sequences and attribute a number for each sequence that indicate its chronological order of appearance within the experience. They will give a tittle or a name to each sequence that will reflects the sequence particular phenomenology.

Goal

Prebuilding in the menu of our computer generated scenario the number scenes of according to each participants sequencing.

Virtual Toolbox in NEOS system



Virtual toolbox content and properties

Virtual toolbox content

- ***Geneva wheel of emotion*** (GEW) adapted and made interactive to provide a tool for the participants emotions to self-report their emotion in NEOS virtual platform.

Mental imagery
(*Format in 2D/ 3D, 3D scan, IRM, 360° photo, video, gif).*
For mental imagery content See: Chart X-A Technologies; Chart X-B Devices; Chart XI-A Imaginary beings. Chart XI-B Divinity. Chart XII-A Animals; Chart XII-B Mammals; Chart XII-C Invertebrates; Chart XII-D Birds; Chart XII-E Insect; Chart XII-F Fishes; Chart XII-G Amphibians; Chart XII-H Reptiles; Table 1 DMT spatio-temporal qualities (space-time, matter-texture); Table 3 DMT Archetypal bestiary of entities and beings;

- ***Sound-object library*** (Neos video player)

- ***NEOS System of navigation*****:** *Fly, teleport, slide, grab model*

- ***NEOS Mirrors***
- ***NEOS and GEO Gebra Geometrical shapes***
-

Virtual toolbox properties

Modification possibilities:

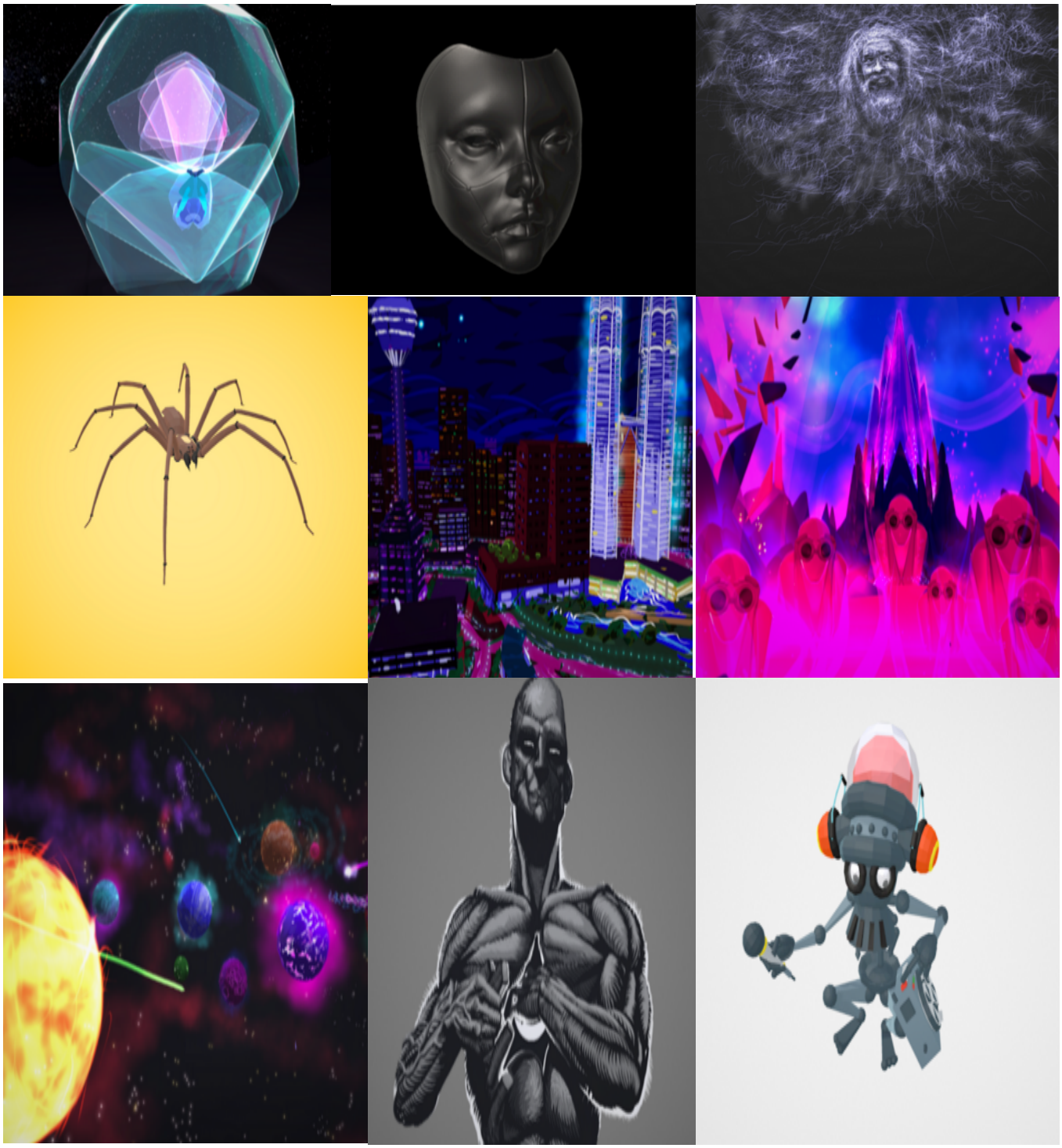
- ***Participants FOV*** (amplitude and depth).

- ***Material texture****:*
Colour, contrast, transparency/opacity; brightness/ darkness; consistency, focused/ blurred; macro/ micro *(possibility of using NEOS build in microscope asset.)*
- **Material Generation:** Duplication, mirroring, pixellisation, distortion, tessellation, fractalisation, " Evolumination", Symmetry, bifurcation.

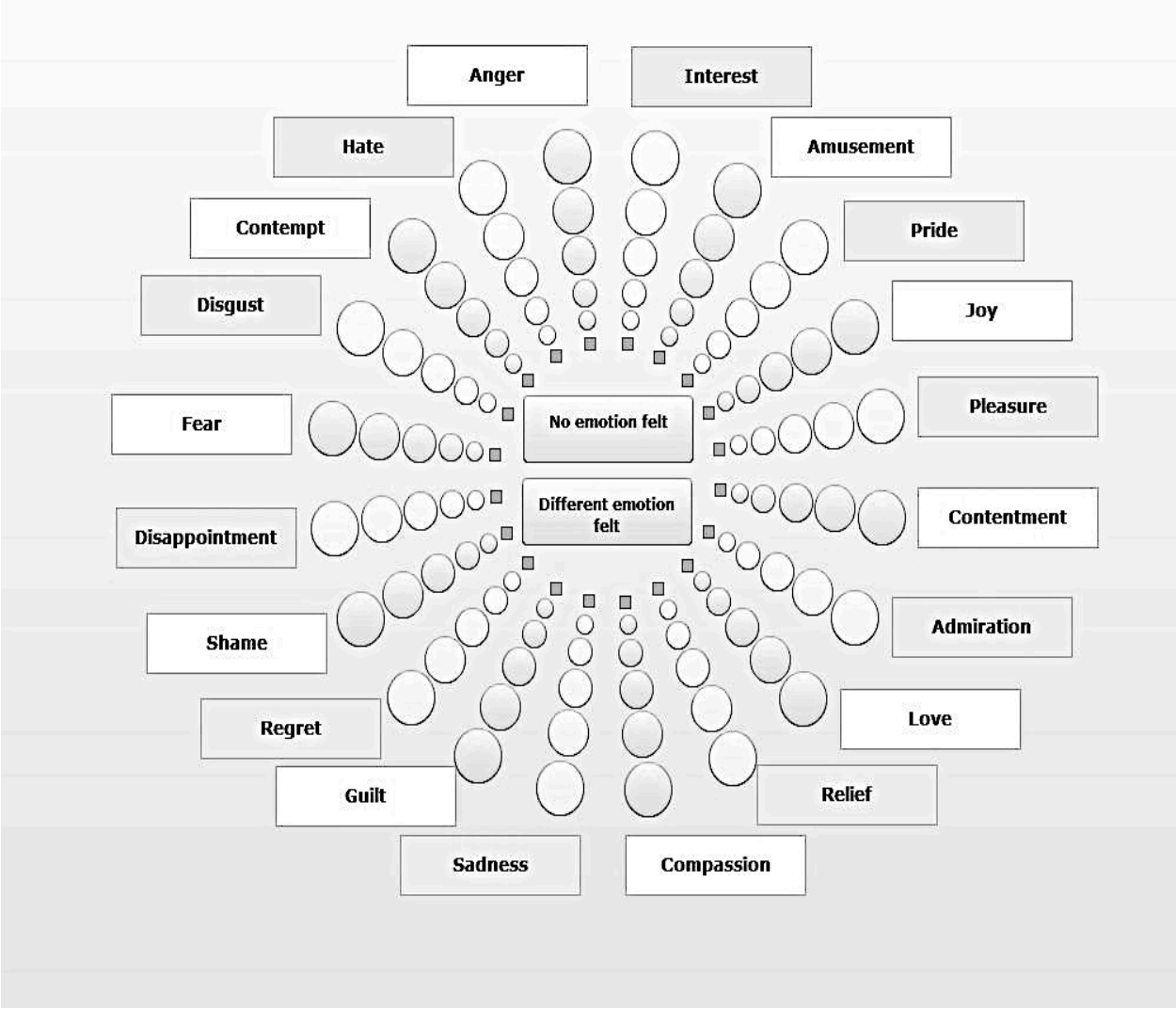
- ***Tool for participant control of their self-motion velocity*** using a script to implement velocity change parameters and acute accelerations/ deceleration in NEOS System of navigation.

-***Control of the mental imagery process of emergence*** (image formation speed, permanence/ stability) in the virtual scene.

Mental imagery examples (free assets Poly 3D)



The Geneva Emotion Wheel GEW (version 3.0)



Downloaded on
https://www.unige.ch/cisa/emotional-competence/home/research-tools/
(The GEW use is Unrestricted for researchers interested in self-report assessment of emotion)