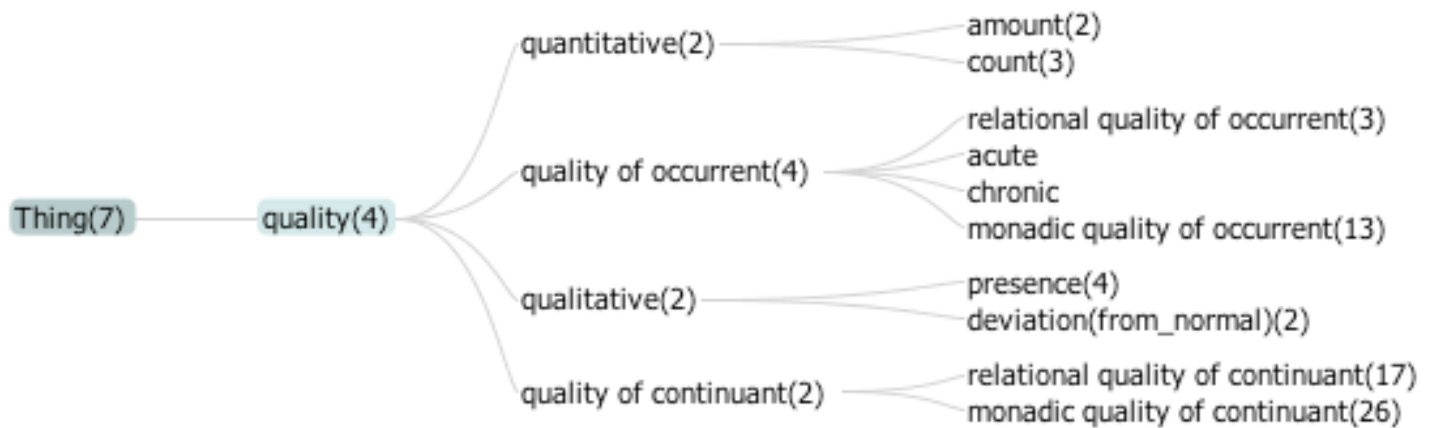


PATO Top level



monadic quality of continuant: A quality of continuant which inheres in a single-bearer.

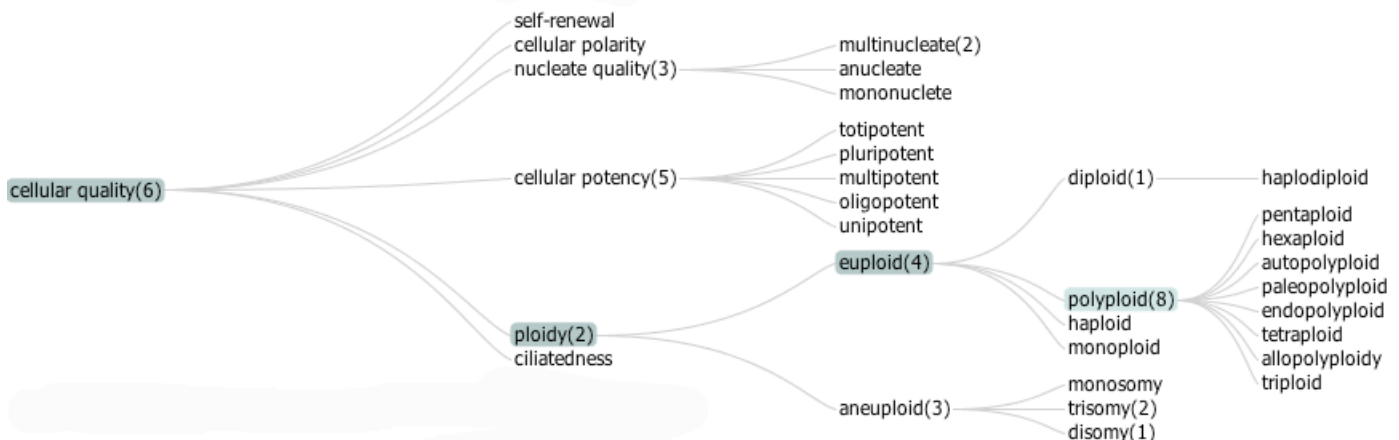
monadic quality of occurrent: A quality of occurrent which inheres in a single-bearer.

quality of continuant: A quality which inheres in a continuant.

quality of occurrent: A quality which inheres in an occurrent.

relational quality of continuant: A quality of continuant which inheres in multiplicity of bearers.

Cellular Qualities (monadic quality of continuant)



diploid: The exact number may be one or two different from the $2n$ number and still be classified as diploidy (although with aneuploidy). Nearly all mammals are diploid organisms, although all individuals have some small fraction of cells that are polyploidy.

mononucleate: A nucleate quality inhering in a bearer by virtue of having one nucleus.

autopolyploid: A polyploidy quality inhering in a bearer by virtue of containing chromosomes derived from a single species.

nucleate quality: A cellular quality inhering in a bearer by virtue of its number of nuclei.

endopolyploid: A polyploidy quality inhering in a bearer whose chromosome number has been increased by endomitosis and for which the degree of ploidy is proportional to the number of times that endomitosis has taken place.

monoploid: A ploidy quality inhering in a bearer by virtue of containing a single set of unique homologous chromosomes.

cellular potency: A cellular quality inhering in a bearer by virtue of having the capacity to differentiate into any mature cell type.

ploidy: A cellular quality defined by the number of homologous sets of chromosomes in the nucleus or primary chromosome-containing compartment of the cell, each set essentially coding for all the biological traits of the organism.

mosaic trisomy: A trisomy quality inhering in a bearer where extra chromosomal material exists in only some of the organism's cells.

triploid: A polyploidy quality inhering in a bearer by virtue of containing three homologous sets of chromosomes.

aneuploid: A ploidy quality inhering in a bearer by virtue of containing a non-integral multiple of the monoploid number, due to extra or missing chromosomes.

unipotent: Unipotent cells have the quality of self-renewal which distinguishes them from non-stem cells.

cellular polarity: A cellular quality inhering in a cell by virtue of its anisotropic intracellular organization.

paleopolyploid: A polyploidy quality inhering in a bearer by virtue of having an ancient polyploid ancestor.

pluripotent: A cellular potency quality inhering in a bearer by virtue of having the ability to form all cell types.

disomy: For diploid organisms, such as humans, it is the normal condition, whilst for organisms that are normally triploid or above, disomy is an aneuploidy.

ciliatedness: A cellular quality inhering in a bearer by virtue of having thin, tail-like projections extending outwards from the cell body.

totipotent: A cellular potency quality inhering in a bearer by virtue of having the capacity to form an entire organism.

anucleate: A nucleate quality inhering in a bearer by virtue of having no nucleus.

partial trisomy: A trisomy quality inhering in a bearer when part of an extra chromosome is attached to one of the other chromosomes, or if one of the chromosomes has two copies of part of its chromosome.

self-renewal: A cellular quality inhering in a bearer by virtue of having the ability to go through numerous cycles of cell division while maintaining the undifferentiated state.

trinucleate: A nucleate quality inhering in a bearer by virtue of having three nuclei.

polyploid: A ploidy quality inhering in a bearer by virtue of containing more than two homologous sets of chromosomes.

binucleate: A nucleate quality inhering in a bearer by virtue of having two nuclei.

euploid: A ploidy quality inhering in a bearer by virtue of containing an integral multiple of the monoploid number, possibly excluding the sex-determining chromosomes.

uniparental disomy: A disomy quality inhering in a bearer by virtue of containing two copies of the chromosome from one of the parents (with no contribution from the other parent).

oligopotent: A cellular potency quality inhering in a bearer by virtue of having the ability to form two or more cell types within one tissue type.

multinucleate: A nucleate quality inhering in a bearer by virtue of having more than one nucleus.

pentaploid: A polyploidy quality inhering in a bearer by virtue of containing five homologous sets of chromosomes.

hexaploid: A polyploidy quality inhering in a bearer by virtue of containing four homologous sets of chromosomes.

haplodiploid: A diploidy quality inhering in a bearer in which one of the sexes has haploid cells and the other has diploid cells.

haploid: A ploidy quality inhering in a bearer by virtue of containing a single set of homologous chromosomes.

tetraploid: A polyploidy quality inhering in a bearer by virtue of containing four homologous sets of chromosomes.

allopolyploidy: A polyploidy quality inhering in a bearer by virtue of containing chromosomes derived from different species.

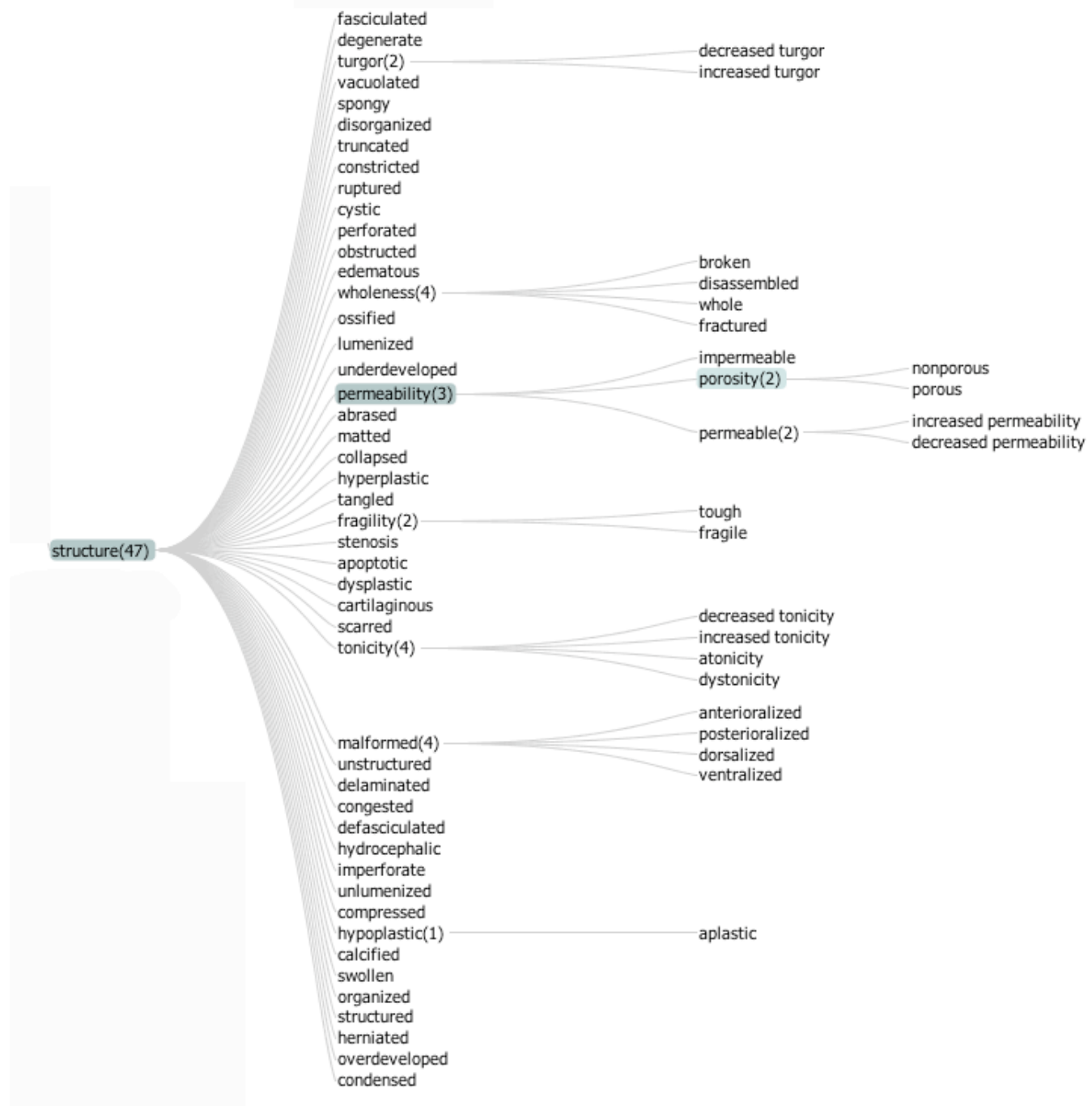
monosomy: An aneuploidy quality inhering in a bearer by virtue of containing only one chromosome from a

pair in a cell's nucleus.

trisomy: An aneuploidy quality inhering in a bearer by virtue of containing three, instead of two, chromosomes of a particular numbered type in an organism.

multipotent: A cellular potency quality inhering in a bearer by virtue of having the ability to form all cell types within one tissue type.

Structure (monadic quality of continuant)



abraded: A scraping away of a portion of a surface.

anteriorialized: A malformed quality in which the gross morphology contains only what are normally anterior structures.

aplastic: Lack of development of a tissue or an organ.

apoptotic: A structural quality inhering in a bearer by virtue of its undergoing apoptosis.

atonicity: A structural quality inhering in a bearer by virtue of its lack elastic tension that facilitate response to stimuli.

broken: A wholeness quality inhering in a bearer by virtue of being separated into two or more pieces.

calcified: A structural quality inhering in a bearer by virtue of being encrusted or impregnated with calcium carbonate.

cartilaginous: A structural quality inhering in a bearer by virtue of its consistence of cartilage or gristle.

collapsed: To break down; cave in.

compressed: Pressed tightly together.

condensed: Made to become thicker or more closely packed together.

congested: A quality inhering in a bearer by virtue of being blocked, clogged.

constricted: A structure quality inhering in a bearer by virtue of being drawn together or squeezed physically or by extension psychologically.

cystic: A structure quality in which a bearer entity contains membranous sacs containing gaseous, fluid or semi-solid material.

decreased permeability: A permeability which is relative low.

decreased tonicity: A tonicity which is relative low.

decreased turgor: A turgor which is relative low.

defasciculated: A quality inhering in a bearer by virtue of having a structure in which bundles, tufts, or close clusters have become separated.

degenerate: Structure which deteriorates or is lost over time.

delaminated: Lacking some outer layer.

disassembled: A wholeness quality inhering in a bearer by virtue of being taken apart into its constituent parts.

disorganized: Lacking organisation.

dorsalized: A malformed quality in which the gross morphology contains only what are normally dorsal structures.

dysplastic: Structure which exhibits abnormal development or growth.

dystonicity: A structural quality inhering in a bearer by virtue of its impaired elastic tension that facilitate response to stimuli.

edematous: A structure quality inhering in an entity by virtue of an excessive accumulation of extracellular fluid.

fasciculated: Growing in a bundle, tuft, or close cluster.

fractured: A wholeness quality inhering in a bearer by virtue of being broken or ruptured.

fragile: Easily damaged or destroyed.

fragility: A structural quality inhering in a bearer by virtue of its being damaged or destroyed.

herniated: Of or relating to a bodily structure that has protruded through an abnormal opening in the wall that contains it.

hydrocephalic: A structure quality inhering in an entity by virtue of an excessive accumulation of cerebral spinal fluid.

hyperplastic: Pertaining to or characterized by hyperplasia.

hypoplastic: Pertaining to or characterised by hypoplasia.

imperforate: A quality inhering in a bearer by virtue of having no opening.

impermeable: A permeability quality of being incapable of being permeated or pervaded by a liquid (as by osmosis or diffusion).

increased permeability: A permeability which is relative high.

increased tonicity: A tonicity which is relative high.

increased turgor: A turgor which is relative high.

lumenized: Structure which has a lumen.

malformed: Abnormally or faultily formed.

matted: Twist together or entwine into a confusing mass.

nonporous: A quality of being incapable of admitting the passage of gas or liquid through pores or interstices.

obstructed: To block or fill (a passage) with obstacles or an obstacle.

organized: Having organisation.

ossified: A structural quality inhering in a bearer by virtue of being hardened by the deposition of calcium, into bone.

overdeveloped: Being developed to excess.

perforated: Having a hole or holes, especially a row of small holes.

permeability: A structure quality of being capable of being permeated or pervaded by a liquid (as by osmosis or diffusion).

permeable: A quality of being capable to be permeated or pervaded by a liquid (as by osmosis or diffusion).

porosity: A permeability quality of admitting the passage of gas or liquid through pores or interstices.

porous: A quality of being capable of admitting the passage of gas or liquid through pores or interstices.

posteriorialized: A malformed quality in which the gross morphology contains only what are normally posterior structures.

ruptured: A quality inhering in a bearer by virtue of being broken open.

scarred: A quality inhering in a bearer by virtue of fibrous tissue that replaces normal tissue destroyed by injury or disease.

spongy: Resembling a sponge in elasticity, absorbency, or porousness.

stenosis: A structure quality inhering in a bearer by virtue of being abnormally constricted or narrowed.

structured: Having distinct structure.

swollen: A structure quality inhering in a bearer by virtue of transient abnormal enlargement, not due to cell proliferation.

tangled: Complicated and difficult to unravel.

tonicity: A structural quality inhering in a bearer by virtue of its elastic tension that facilitate response to stimuli.

tough: A quality inhering in a bearer by virtue of its ability to withstand great strain without tearing or breaking.

truncated: Terminating abruptly by having or as if having an end or point cut off.

turgor: The rigid state of fullness of a cell or blood vessel or capillary resulting from pressure of the contents against the wall or membrane.

underdeveloped: Not adequately or normally developed.

unlumenized: Structure which has not formed a lumen.

unstructured: Lacking distinct structure.

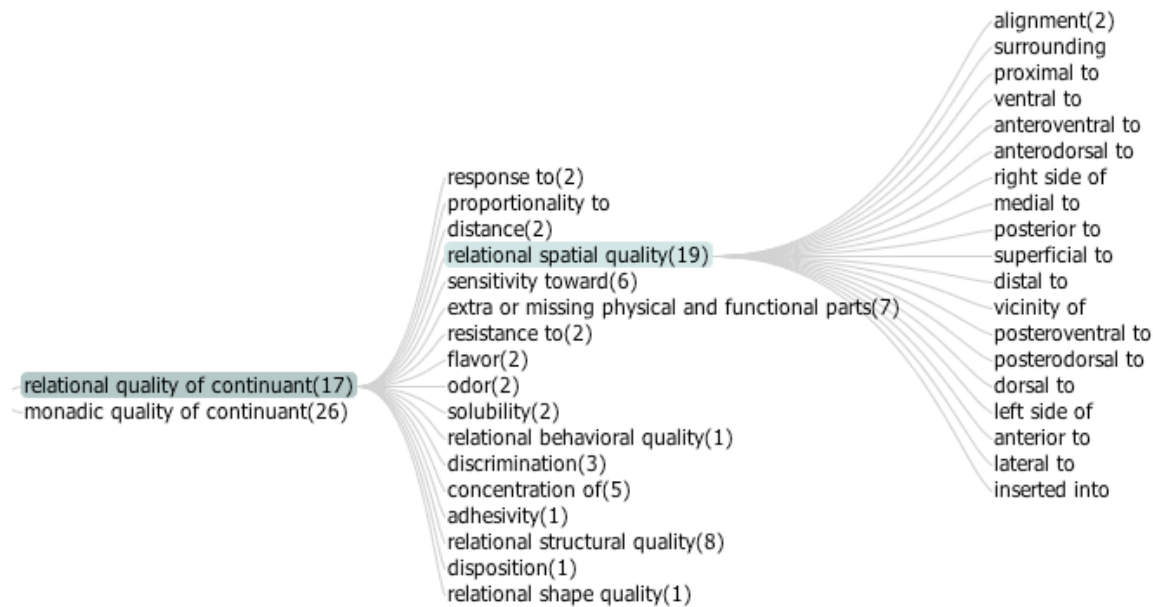
vacuolated: A structure quality in which cytoplasm contains fluid filled cavities.

ventralized: A malformed quality in which the gross morphology contains only what are normally ventral structures.

whole: A wholeness quality inhering in a bearer by virtue of including all its components.

wholeness: A structural quality inhering in a bearer by virtue of whether it includes all its components.

Relational Spatial Quality (relational quality of continuant)



alignment: A relational spatial quality inhering in a bearer by virtue of its spatial positioning with respect to an additional entity.

anterior to: A relational spatial quality where on entity is located toward the front of an organism relative to another entity.

anterodorsal to: A relational spatial quality in which an entity is located toward the front and upper surface of an organism relative to another entity.

anteroventral to: A relational spatial quality in which an entity is located toward the front and abdomen of an organism relative to another entity.

distal to: A relational spatial quality where on entity is located further from a more centrally located entity.

dorsal to: A relational spatial quality where on entity is located toward the back or upper surface of an organism relative to another entity.

inserted into: A relational spatial quality in which the bearer entity becomes joined together with an additional entity.

lateral to: A relational spatial quality where on entity is located toward the side relative to another entity.

left side of: A relational spatial quality where on entity is located on left side of from the a another entity.

medial to: A relational spatial quality where on entity is located toward the middle relative to another entity.

posterior to: A relational spatial quality where on entity is located toward the rear of an organism relative to another entity.

posterodorsal to: A relational spatial quality in which an entity is located toward the rear and upper surface of an organism relative tonanother entity.

posteroventral to: A relational spatial quality in which an entity is located toward the rear and abdomen of an organism relative to another entity.

proximal to: A relational spatial quality where on entity is located more centrally than another entity.

right side of: A relational spatial quality where on entity is located on right side of a another entity.

superficial to: A relational spatial quality where on entity is located external to another entity.

surrounding: A relational spatial quality where on entity is extended on all sides of another entity simultaneously.

ventral to: A relational spatial quality where on entity is located toward the abdomen of an organism relative to another entity.

vicinity of: A relational spatial quality where on entity is located near in space in relation to another entity.