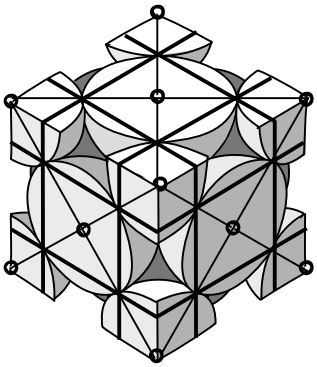
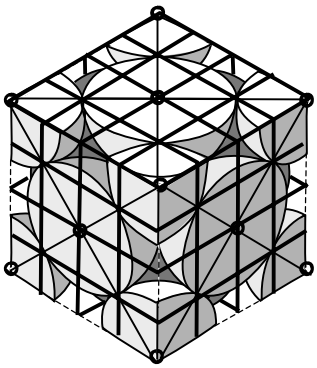
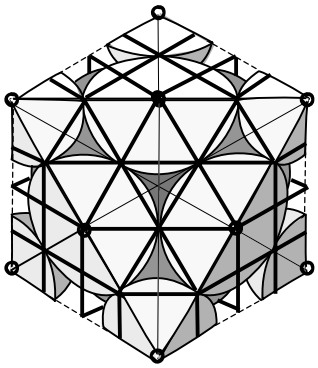


Primary lines of division of the cube are within the spheres.



Secondary lines of division. Four-frequency cube includes the spaces between spheres.



Four-frequency tetrahedron face shows the triangle grid in the 4-frequency cube to the order of 14 spheres.

Above. By connecting tangent points and center points of the spheres, all primary lines can be defined within cubic division. From this information each edge of the cube can be divided equally in 4 sections by bands of perpendicular parallel lines, using tangent and center points. Each square face is a division of 16 squares. The total cubic division is 4 x 4 x 4, or 4^3, 4 to 3 dimension; 64 cubic units. (6+4=10, the first tetrahedron fold in the circle). The diagonal of the cube shows the center/tangent point sphere connections.

When a corner of the cube is truncated, cut away corner-to-corner, the triangle face of one of the tetrahedra which forms the cube is revealed. This is another way to see how the square and the triangle are two different views of looking at the same spatial order of spheres. It is a matter of how one chooses to view and from which perspective we chose to draw information.

Below. Another way to view what is going on is to see a single layer of spheres pictured as circles packed one next to each other. This is the hexagon matrix of endless spheres. Each sphere is the center for 12 tangent spheres; each circle is the center for 6 circles around it. As each of that infinite number of circles/spheres expands like rubber balls at the same rate and time, they will fill the space between and form a cubic "all-space-filling" arrangement. That does not account for the boundary, which would be expanding rapidly in all directions of infinite possibilities. Cube packing is an abstract model for seeing the center space relationship between spheres. Using center points of spheres, tangent points, and the intervals, endless divisions of diverse individualized shapes and forms can be generated within the Whole circle/sphere context.

The spaces between the spheres reflect the same pattern of the spheres themselves. This reciprocal interaction is the in and out breathing of discrete transformation between the sphere and cube. Forms are specific, never fixed, and always connected. Separation is a choice of selective isolation from the greater matrix of spherical relationships.