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Pythagorean Mathematical Idealism and the Framing of Economic and Political Theory

S. Todd Lowry

Professor Emeritus, Department of Economics, Washington and Lee University, Lexington, VA 24450 USA
(lleech@comcast.net)

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Abstract. The Greek culture evolved in the shadow of two dominant and sophisticated economies: the Chaldeans (Babylonians), with their strong arithmetical and administrative culture and the Egyptians, who contributed a geometric orientation. In the shadow of these two traditions, the Pythagoreans and Plato assimilated a mystic perspective of an ideal world of mathematics. Later Greeks developed a system of fair division that absorbed an arithmetic dyad. Aristotle analyzed two- party isolated exchange using the harmonic proportion introduced by the Pythagoreans whose " ideal types " influenced later market perspectives. These traditions informed modern regulated political, legal and economic institutions.

Key words: Pythagoras, Plato, Xenophon, Aristotle, Boethius, rational numbers, irrational numbers, hedonic calculus, harmonic proportion, dyad, Fibonacci series, fair division, bargaining, isolated exchange, theory of friendly numbers, number ladder, the divided line, bounded universe, sacred ratio, Golden Number, divide and choose, administration of justice, justice in exchange, international trade theory, pentagram, dodecahedron