It was with great pleasure that I accepted to write a few introductory remarks on Professor Leonidas Papakonstantinidis' remarkable work "WIN-WIN- WIN PAPAKONSTANTINIDIS MODEL".
I believe it will open new horizons in this very important and immense field, and perhaps be applied in other International Relations domains. As experts indicated, "the Papakonstantinidis 'win-win-win model' is-or, maybe- an extension of the 'win-win model'; based –not only-on when each side of a dispute feels they have won, but even more the two sides feel that their own community has also won.

Leonidas A. Papakonstantinidis, Professor Emeritus, University of Peloponnesus,GR Academian (International Mariinskaya Academy-IMA) Honorary Professor UBL, University, Indonesia

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the win-win-win papakonstantinidis model

Leonidas Papakonstantinidis
Sandy Aziz

Social Bargaining: the win-win-win papakonstantinidis model

Theory and applications

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SOCIAL BARGAINING: The win-win-win papakonstantinidis model

Theory and Practice

2020

This BOOK is the result of a joint work coming from 7 persons , who presented their contribution, either in a whole text or in abstract form

Especially is the work of:

Leonidas A. Papakonstantinidis

Sandy Aziz

Stephen Ternyik

Anastos Dimitropoulos

Vasilis Spokos

Sarantos Malapanis

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We live together but we feel alone

PART OF THE BOOK-1

Local Development based on the sensitization process and the social bargaining : A win-win-win alternative approach

Leonidas A. Papakonstantinidis[1]

Preface

It was with great pleasure that I accepted to write a few introductory remarks on Professor Leonidas Papakonstantinidis' remarkable work "WIN- WIN- WIN PAPAKONSTANTINIDIS MODEL", which was presented very successfully by distinguished personalities in the conference room of the European Parliament Office in Athens, and I enjoyed listening to their praising comments on his pioneering project.

Regarding his new "WIN WIN WIN" project, although I am not a per se specialist in Economics, owing to my background in International Relations and to an extent in Macroeconomics, I can only say that his model is very impressive and promising, and considering the laudable comments by the distinguished experts-rapporteurs in the Athens Office of the European Parliament presentation, I believe it will open new horizons in this very important and immense field, and perhaps be applied in other International Relations domains.

As experts indicated, "the Papakonstantinidis 'win-win-win model' is-or, may be- an extension of the 'win-win model'; based –not only-on when each side of a dispute feels they have won, but even more the two sides feel that their own community has also won, in the context of a social contract between them (moral contract, beyond the strict interpretation of the Law: that's the limit of the sensitization process toward the absolute social cohesion-the "angel's point".

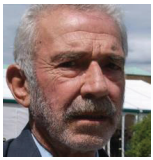
Panayotis I.Karafotias

Professor of International Relations (UIINDY,NYC)

Former Head of the United Nations Office for Greece, Cyprus, Israel

[1] Professor Emeritus in Political Economy-University of Peloponnesus GR, Visiting Professor - the Indian Institute of Information Technology (IIIT) Bhagalpur, INDIA, Honorary Professor- University of Bandar-Lampung (UBL) INDONESIA

BRIEF BIO:



Dr. Leonidas A. Papakonstantinidis, Professor Emeritus, University of Peloponnese, Academian (the International Mariinskaya Academy, IMA), RU, Honorary Professor, University of Bandar-Lampung (UBL), Indonesia. Visiting Professor –Indian Institute of Information Technology (IIIT)-Bhagalpur, India

Ex. Full Professor POLITICAL ECONOMY, Regional and Local Development of the Local Government Department, , 3-times President of the Department (2001-2004), (2004-2007) (2011-2013) and Dean of the Economics and Management School (2007 -2008)

Lawyer and Economist with Master in Regional (II. 9.29), Rural Development (B) Doctorate in Local Development since 1989 served as member of the Agricultural Bank (Senior Advisor on European Affairs, Head of the Local Development Office (1991-2001) , a member of the European Centre for Public Enterprises (CEEP) as General Rapporteur of the regional Affairs Committee, member of the "Green Team» GREEN TEAM European Commission (Commission-DG VI), member of the Committee of European Experts on rural tourism, rapporteur for the Community Initiative Leader (1989) and negotiator for the national file of the EU Initiative, titled L.E.A.D.E.R in Brussels (on 02.02.1992

He introduced the rural tourism concept in Greece (1980) - see at" GTP 7/94, He worked on the EU Meditewrranean Global Programs (MGP) , in particular on the idea of the development integrated small village programs(1985-1989) and from there in the «L.E.A.D.E.R development philosophy" (EU Commission) (1989) Also, pioneered the establishment of the first Women of Rural Cooperatives. Introduced and imposed in the international literature, practice and programs, the concept of "local development based on identity" and the sensitization process (the "Intermediate Community" and from there the construction of a new Methodology called "win-win-win papakonstantinidis model".

He introduced (Visby University SW 2002,Aug 14) the "win-win-win papakonstantinidis model

In particular, the "win-win-win papakonstantinidis model" "transfer the "focus of social choice" from voting (Arrow, 1951) to bargaining (Nash, 1950), and from competition (win-loose, or even win-win) in a a 3-D process (sensitization) towards the limit-up of the absolute cooperation

Written work 224 *Uploaded in ACADEMIA*	*Articles in Journals (92)*	*92*
	World conferences presentations(51)	*51*
	Books33	*33*
	Training material (35)	*35*
	Drafts (8)	*08*
	Book reviews (5)	*05*
	TOTAL (224)	*224*

Awards	♦ *The Greek Evergetes (Benefactors)'s Golden Metal "...for diffusing Greek Values, by the win-win-win approach in the world* ♦ *TOYP [The **T**en **O**utstanding **Y**oung **P**ersons, of the World], JCI* *Years 1982,1983,1984* *North-South Cooperation JCI-UNESCO Program* ♦ *SENATOR JCI-69411* ♦ *Honorary Teaching :* 1. *Centre for Economic and Social Development (CESD) / Baku Azerbaijan, 12/006 Doc,Φεβρουάριος 6, 2012-m* *IKY Scholarship* 2. *Klaipeda Business School, Lithuania / Λιθουανία (2012/ Φεβρουάριος* 3. *"Member of the International Editorial Board " "Applied Research Review" (N. Delhi India) / 2008* ♦ ♦ *RESEARCH LEAP: top 25 most downloaded articles, 2017*

	♦ *INTERNATIONAL JOURNAL OF INNOVATION AND ECONOMIC DEVELOPMENT": In recognition of the publication of the paper entitled "Marketing Gaps And Intersections, Between Education And Social Practice: The "Win-Win-Win Papakonstantinidis Model" And The High Risk Ethical Priorities HREP* ♦ *Papakonstantinidis- Barbarousi: (2018) A bargaining solution analysis for local government decision: From territorial to behavioral Community-the win-win-win papakonstantinidis situation Case study: the Greek Case- International Journal of Innovation and Economic Development (IJIED) in the RESEARCH LEAP base (distinguished)* ♦ ♦ *"Honorary Professor" by the Bandar-Lampung-Dept. Economics* ♦ *Awarded by the "Solutions for the Present and the Future" prize, by the Bandar-Lampung-Dept. Economics 20-09-2018, for the win-win-win papakonstantinidis model's applications* ♦ *NEB and the Hellenic Benefactors' Association award for the win-win-win conceptualization* ♦ *Papakonstantinidis- Barbarousi: (2018) A bargaining solution analysis for local government decision: From territorial to behavioral Community-the win-win-win papakonstantinidis situation Case study: the Greek Case- International Journal of Innovation and Economic Development (IJIED) in the RESEARCH LEAP base (distinguished)* ♦ ♦ *honorary golden board: The Greek Benefactors Association AND the New Economic Bargain (NEB) World Network 25-10-2019* ♦ *golden metal " win-win-win" - **NEB** , (25-10-2019)* ♦ *Academian, Mariinskaya Academy, since 2019* ♦ ***NETWORK** "Brilliant Minds in Australia Introduction" / North Carolina (Raleigh), SUSAN HASTY (Business Consulting · Management Consulting · Finance Consulting · Pricing Strategy · Brand Consulting · Marketing Consulting), 2019-12-18*

	♦ ***Golden Metal- EVERGETES [E.E.E]*** ♦ ***Golden Metal of the Mayor of Katerini town*** ♦ ***The golden Key, Mesaia Milia Community*** ♦ *Honorary Citizen* 1. *Tegea –Peloponnesus* 2. *Milia, Pieria* 3. *Nafpaktos* 4. *Kasteli Chania* 5. *Malevrio, Lakonia* 6. *Orestiada-Thrace* 7. *Salonica-Cultural Branch-Chalivopoulou* 8. *Olympia- Elia* 9. *Xanthi-Stavroupoli*

ABSTRACT

This part of the book addresses the proposed "win-win-win papakonstantinidis model" as an extension to the Nash' 3-pole Solution in the frame of any bargaining, based on the disagreement d_i *and/or the threat point:* $t_i, ..(\ i = the.bargainer\ )$

The paper-in fact-is a proposal on the decision maker scientific field, towards the "sensitized community, using the "disagreement (or threat) point, in order to produce new sensitization oriented policies

Bargaining is ubiquitous in real life. Any reaction, from baby crying, up to international discussions, "bargaining" is the main process, toward agreement or disagreement It is a major dimension of political and business activities. It appears at the international level, when governments negotiate on matters ranging from economic issues (such as the removal of trade barriers), to global security (such as fighting against terrorism) to environmental and related issues (e.g. climate change control). What factors determine the disagreement point of negotiations? What strategies can help reach an agreement? How the threat point affects the discussion ongoing? What the sensitization process may be in the decision making field? How the sensitization process could be proposed, so that to affect the local development process? Finally, what a "social bargaining" could be proposed in the capitalist west type world? What a "social bargaining" is?

This paper addresses these questions by focusing on the Nash' bargaining problem and its perspective to negotiations, proposing at the same time the "win-win-win papakonstantinidis model" as an extension of this problem's solution

Key words: *the win-win-win papakonstantinidis model, disagreement point, (and/or threat point), "social bargaining", sensitization process, community as the third pole, local development, Pareto Efficiency, expected payoffs, -knowledge creation*

INTRODUCTION

Over the last decades, researchers try to find out new forms of the capitalist values, over the hard competition, the respect, the solidarity, the motivation of the endogenous local development, the huge disparities between DC and LDC countries under the pressure of reasons, as for example,

- ✓ *wars,*
- ✓ *refugees and immigrants*
- ✓ *the social movements,*
- ✓ *disappointed citizens*
- ✓ *Poverty*
- ✓ *Unemployment*
- ✓ *Inflation……*

……..

It is obvious that Humanity is in the midst of a spin, without a light at the end of the tunnel

It seems that a huge wave of storming have a heavy impact all over the world, either rich or poverty, either live in the north hemisphere, or in the south hemisphere,

OBJECTIVES

In particular,

- *to highlight the "SENSITIZATION ability" that everyone of us either relates to refugees, or in countries, whether in claiming or even in our daily transactions It is time to stop looking only personal interest or "individual defense"*
- *to realize the collecting, classifying and comparing the theoretical material from various sources on the functioning of Social Welfare Function (SWF), towards building a strong case with logical and coherent arguments, towards the one Triple Pole (A-B-COMMUNITY) Equilibrium (TPE), different from N.E, that leads to the Social Bargaining Solution" (SBS) and coincide with the "optimal" Community Collective Choice (CCC) in order to create a highly versatile tool, "the win-win-win papakonstantinidis model" of well-formed formulas (wffs),*
- *To prove that a "social wellbeing" is within our grasp*

- *To create a highly versatile tool, "win-win-win papakonstantinidis model" able to adapt or be adapted to many different functions or activities, by well-formed formulas (wffs), thus contributing in changing the 2-pole (black –white) perception, in a three pole [0,01,1] welfare cognition,*
- *to document the necessity and usefulness of the "win-win-win" based on incompatibilities of five classical theorems and 4 theories, as each of them exclude others*
- *To find a base-role for the third win (=the Community) in any bargain between 2*

HYPOTHESIS:

BEHAVIOR Hypothesis:

1. Development (especially local development) may be considered as the behavioral output trends in the bargain (Papakonstantinidis,2007)

2. Public involvement in local development The process is achieved by five (5) easy stages (steps), i.e. information, sensitization, participation, involvement and partnership in it main version (Arnstein Sh 1969) This process influences the behavior in the bargain

3. There is an interaction between behavior and bargain. There is no bargain without behavior. There is no behavior without bargain (Papakonstantinidis, 2011)

4. Interact with each of the 3 behavioral poles other within the bargain

5. All individuals are indifferent between any two Probability distributions over social states –Pareto efficiency (Pareto V, 1916 & Stiglitz Joseph, E, 1987

6. Conversion of a given behavior could be realized by using the same conflict rules that push the PAC members in converging their behavior (Reynolds Cr.1999) In fact, it's NEW local sensitized behavior to absolute cooperation

7. Conditions of Conflict behavior are developed in the frame of the "Instrumental Rationality" in a Common Knowledge environment Rationality

8. "Sensitization" as a form of knowledge / information should be taught, thus influencing the PAC 3-ple power poles (Papakonstantinidis, 1996, 1999, 2002, 04)

9. Behavioral analysis should be broached in close correlation with the suggested "win-win-win papakonstantinidis model" and its usefulness respect of local communities' management and development (Herbert Simon 1955), The domination effort of one over the others in a continuous conflict among them, has the profit maximization, as basic incentive (Spais G 2012 April)

10. Each of them (PAC) is "Buyer" and "Seller" of the same need (tourism) on the others, simultaneously Each side, seeks to maximize its profit (different view)
11. Oligopoly (Duopoly-Triopoly) is considered as a "simultaneous game" of best responses concerning the rural local tourism, due to the owners possibility offering differentiated services (Cournot Aug. 1838/1897)Payoffs Utility function's prices (by its probabilities) are used to define the Nash Equilibrium (NE) and the Harsanyi Refinement (Harsanyi, J. 1967)

12. Triopoly equilibrium, is assumed as the intersection point of "best responses" in 3D space

13.. The contradiction between the utility of individual and welfare economics, is given but not definitive (Sen A, 1984 vs Arrow K, 1950)

14. Market forces are assumed to be based on instant Reflection Individual (mixed) strategies among the three (PAC) members (Nash J, F, 1950)
15. Equilibrium is achieved on that point, on which none of the PAC members has anything to gain by changing only his own strategy unilaterally (Nash, J.F, 1950) Market and behavior are set by the 3 "local development actors- (3 local power poles, i.e (local) People, (local) Authorities and the Consumers(of local services) – PAC)Market –behavior system depends on interactive relations among 3 local power's poles (PAC), in the frame of bargaining best response

……..

Nash solution; presupposes;

John Nash proposed that:

- *a solution should satisfy certain axioms:*

1. *Invariant to affine transformations or Invariant to equivalent utility representations*
2. *Pareto optimality*
3. *Independence of irrelevant alternatives*
4. *Symmetry*

- *Nash proved that the solutions satisfying these axioms are exactly the points which maximize the following expression:*

- *One more, for the win-win-win model is the ultimatum game-3 actors interactive*

DEFINITIONS

Pareto efficiency[2]

Pareto efficiency or Pareto optimality is a state of allocation of resources from which it is impossible to reallocate so as to make any one individual or preference criterion better off without making at least one individual or preference criterion worse off. The concept is named after Vilfredo Pareto (1848–1923), Italian engineer and economist, who used the concept in his studies of economic efficiency and income distribution[3].

A Pareto improvement is a change to a different allocation that makes at least one individual or preference criterion better off without making any other individual or preference criterion worse off, given a certain initial allocation of goods among a set of individuals. An allocation is defined as "Pareto efficient" or "Pareto optimal" when no further Pareto improvements can be made, in which case we are assumed to have reached Pareto optimality.

"Pareto efficiency" is considered as a minimal notion of efficiency that does not necessarily result in a socially desirable distribution of resources: it makes no statement about equality, or the overall well-being of a society. It is simply a statement of impossibility of improving one variable without harming other variables in the subject of multi-objective optimization[4]

The Pareto index is a measure of the inequality of income distribution[5].

He argued that in all countries and times, the distribution of income and wealth is highly skewed, with a few holding most of the wealth. He argued that all observed societies follow a regular logarithmic pattern:

$$\ell ogN = \ell ogA + m\ell ogx$$

$$N = population, with..wealth \succ x$$

$$A..and..m..are..const\partial ants$$

[2] Vilfredo Pareto. Manual of Political Economy 1906

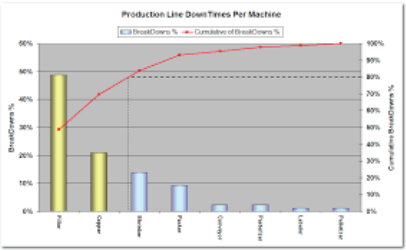
[3] Sen, A. (October 1993). "Markets and freedom: Achievements and limitations of the market mechanism in promoting individual freedoms" Oxford Economic Papers 45 (4): 519–541

[4]

- ✓ Pareto Front". www.cenaero.be Retrieved October 8, 2018.
- ✓ Sen, A. (October 1993). "Markets and freedom: Achievements and limitations of the market mechanism in promoting individual freedoms" Oxford Economic Papers. 45 (4): 519–541.
- ✓ Barr, N. (2012). "3.2.2 The relevance of efficiency to different theories of society". Economics of the Welfare State (5th ed.). Oxford University Press. pp. 46–49.
- ✓ Mas-Colell, A.; Whinston, Michael D.; Green, Jerry R. (1995), "Chapter 16: Equilibrium and its Basic Welfare Properties", Microeconomic Theory, Oxford University Press

[5]

- ✓ Vilfredo Pareto. Cours d'Économie Politique Professé a l'Université de Lausanne. Vol. I, 1896; Vol. II, 1897.
- ✓ Vilfredo Pareto. Les Systèmes Socialistes. 1902.
- ✓ Vilfredo Pareto. Manual of Political Economy. 1906.
- ✓ Vilfredo Pareto. Trattato Di Sociologia Generale (4 vols.). G. Barbéra, 1916.
- ✓ Vilfredo Pareto Sociological Writings, Praeger, 1966.
- ✓ M Vilfredo Pareto anual of Political Economy, Augustus M. Kelley, 1971 (translation of French edition from 1927).
- ✓ Vilfredo Pareto The Transformation of Democracy, Transaction Books, 1984.
- ✓ Vilfredo Pareto The Rise and Fall of Elites: An Application of Theoretical Sociology, Transaction Publishers, 1991



1. *Utility-Welfare Function*

1. *a utility*

In economics, utility function is an important concept that measures preferences over a set of goods and services. Utility represents the satisfaction that consumers receive for choosing and consuming a product or service[6].

Utility is measured in units called utils, but calculating the benefit or satisfaction that consumers receive from is abstract and difficult to pinpoint. As a result, economists measure utility in terms of revealed preferences by observing consumers' choices. From there, economists create an ordering of consumption baskets from least desired to the most preferred.

Understanding Utility Function

In economics, the utility function measures the welfare or satisfaction of a consumer as a function of consumption of real goods such as food or clothing. Utility function is widely used in the rational choice theory to analyze human behavior.

When economists measure the preferences of consumers, it's referred to ordinal utility. In other words, the order in which consumers choose one product over another can establish that consumers assign a higher value to the first product. Ordinal utility measures how consumers rank one product versus another.

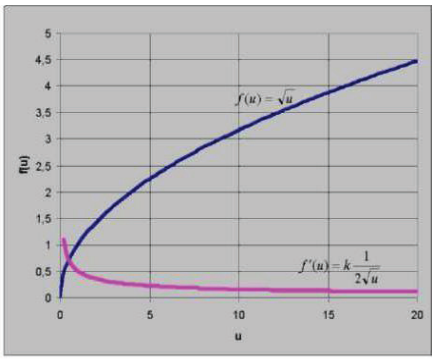
[6] https://www.investopedia.com/ask/answers/072915/what-utility-function-and-how-it-calculated.asp

Economists take the utility-function concept one step farther by assigning a numerical value to the products that consumers choose or choose not to consume. Assigning a value of utility is called cardinal utility, and the metric used to it is called utils.

For example, in certain situations, tea and coffee can be considered perfect substitutes for each other, and the appropriate utility function must reflect such preferences with a utility form of u(c, t) = c + t, where "u" denotes the utility function and "c" and "t" denote coffee and tea. Economists might conclude that a consumer who consumes one pound of coffee and no tea derives a utility of 1 util.

Within economics, the concept of utility is used to model worth or value. Its usage has evolved significantly over time. The term was introduced initially as a measure of pleasure or satisfaction within the theory of utilitarianism by moral philosophers such as Jeremy Bentham and John Stuart Mill. The term has been adapted and reapplied within neoclassical economics, which dominates modern economic theory, as a utility function that represents a consumer's preference ordering over a choice set. It is devoid of its original interpretation as a measurement of the pleasure or satisfaction obtained by the consumer from that choice.

Consider a set of alternatives facing an individual, and over which the individual has a preference ordering. A utility function is able to represent those preferences if it is possible to assign a real number to each alternative, in such a way that alternative a is assigned a number greater than alternative b if, and only if, the individual prefers alternative a to alternative b. In this situation an individual that selects the most preferred alternative available is necessarily also selecting the alternative that maximizes the associated utility function. In general economic terms, a utility function measures preferences concerning a set of goods and services. Often, utility is correlated with words such as happiness, satisfaction, and welfare, and these are hard to measure mathematically. Thus, economists utilize consumption baskets of preferences in order to measure these abstract, non quantifiable ideas.



Papakonstantinidis LA,2008

1. *b welfare economics*

Welfare economics is a branch of economics that uses microeconomic techniques to evaluate well-being (welfare) at the aggregate (economy-wide) level[7]

Attempting to apply the principles of welfare economics gives rise to the field of public economics, the study of how government might intervene to improve social welfare. Welfare economics also provides the theoretical foundations for particular instruments of public economics, including cost–benefit analysis, while the combination of welfare economics and insights from behavioral economics has led to the creation of a new subfield, behavioral welfare economics[8]

The field of welfare economics is associated with two fundamental theorems. The first states that given certain assumptions, competitive markets produce (Pareto) efficient outcomes;[9] *it captures the logic of Adam Smith's invisible hand*[10] *The second states that given further restrictions, any Pareto efficient outcome*[11] *can be supported as a competitive market equilibrium*[12]

Thus a social planner could use a social welfare function to pick the most equitable efficient outcome, then use lump sum transfers followed by competitive trade to bring it about[13]*Because of welfare economics' close ties to social choice theory, Arrow's impossibility theorem is sometimes listed as a third fundamental theorem*[14]

A typical methodology begins with the derivation (or assumption) of a social welfare function, which can then be used to rank economically feasible allocations of resources in terms of the social welfare they entail. Such functions typically include measures of economic efficiency and equity, though more recent attempts to quantify social welfare have included a broader range of measures including economic freedom (as in the capability approach).

[7] Arrow, Kenneth J. (1951, 2nd ed., 1963) Social Choice and Individual Values, Yale University Press, New Haven.

[9] Atkinson, Anthony B. (1975). The Economics of Inequality, Oxford University Press, London

[10] Atkinson, Anthony B. (2012). Optimum population, welfare economics, and inequality, Oxford University Press, London

[11] Pareto Vilfr. (1897) The New Theories of Economics," Journal of Political Economy, Vol. 5, No. 4, Sep. 1897.

[12] Atkinson, Anthony B. (1975). The Economics of Inequality, Oxford University Press, London

[14]

- Bator, Francis M. (1957). "The Simple Analytics of Welfare Maximization", American Economic Review, 47(1), pp. 22–59
- Calsamiglia, Xavier, and Alan Kirman (1993). "A Unique Informationally Efficient and Decentralized Mechanism with Fair Outcomes", Econometrica, 61(5),

GAME

In Theory of Games and Economic Behavior a theory of n-person games is developed which includes as a special case the two-person bargaining problem. But the theory there developed makes no attempt to find a value for a given n-person game, that is, to determine what it is worth to each player to have the opportunity to engage in the game. This determination is accomplished only in the case of the two-person zero sum game.

It is our viewpoint that these n-person games should have values; that is, there should be a set of numbers which depend continuously upon the set of quantities comprising the mathematical description of the game and which express the utility to each player of the opportunity to engage in the game.

We may define a two-person anticipation as a combination of two one- person anticipations. Thus we have two individuals, each with a certain expectation of his future environment. We may regard the one-person utility functions as applicable to the two-person anticipations, each giving the result it would give if applied to the corresponding one-person anticipation which is a component of the two-person anticipation. A probability combination of two two-person anticipations is defined by making the corresponding combinations for their components. Thus if [A, B] is a two-person anticipation and 0 ^ p ^ 1, then

VIA, B] + (1 - p)[C, D]

will be defined as

[pA + (1 - p)C, pB + (1 - p)D).

Clearly the one-person utility functions will have the same linearity property here as in the one-person case. From this point onwards when the term anticipation is used it shall mean two-person anticipation.

The concept of an "anticipation" is important in this theory. This concept will be explained partly by illustration. Suppose Mr. Smith knows he will be given a new Buick tomorrow. We may say that he has a Buick anticipation. Similarly, he might have a Cadillac anticipation. If he knew that tomorrow a coin would be tossed to decide whether he would get a Buick or a Cadillac, we should say that he had a \ Buick, | Cadillac anticipation. Thus an anticipation of an individual is a state of expectation which may involve the certainty of some contingencies and various probabilities of other contingencies. As another example, Mr. Smith might know that he will get a Buick tomorrow and think that he has half a chance of getting a Cadillac too. The J Buick, J Cadillac anticipation mentioned above illustrates the following important property of

anticipations: if 0 ^ p ^ 1 and A and B represent two anticipations, there is an anticipation, which we represent by pA + (1 − p) Z?, which is a probability combination of the two anticipations where there is a probability p of A and 1 − p of B.

By making the following assumptions we are enabled to develop the utility theory of a single individual:

1. *An individual offered two possible anticipations can decide which is preferable or that they are equally desirable.*

2. *The ordering thus produced is transitive; if A is better than B and B is better than C then A is better than C.*

3. *Any probability combination of equally desirable states is just as desirable as either.*

4. *If A, B, and C are as in assumption (2), then there is a probability combination of A and C which is just as desirable as C. This amounts to an assumption of continuity.*

5. *If 0 ^ p ^ 1 and A and B are equally desirable, then pA + (1 − p) C and pB + (1 − p) C are equally desirable. Also, if A and B are equally desirable, A may be substituted for B in any desirability ordering relationship satisfied by B.*

The Nash Equilibrium (NE)

In game theory, the Nash equilibrium, (named after the mathematician John Forbes Nash Jr., is a proposed solution)of a non-cooperative game involving two or more players in which each player is assumed to know the equilibrium strategies of the other players, and no player has anything to gain by changing only their own strategy.

Nash Equilibrium (NE) is a situation in which no player, given the strategies of other players as given, can improve his position by choosing an alternative strategy. Nash has shown that, for a very wide range of games of any number of players, there is at least a 1-point balance provided mixed strategies are allowed.

In terms of game theory, if each player has chosen a strategy, and no player can benefit by changing strategies while the other players keep their unchanged, then the current set of strategy choices and their corresponding payoffs constitutes a Nash equilibrium.

Stated simply, Alice and Bob are in Nash equilibrium if Alice is making the best decision she can, taking into account Bob's decision while his decision remains unchanged, and Bob is making the best decision he can, taking into account Alice's decision while her decision remains unchanged. Likewise, a group of players are in Nash equilibrium if each one is making the best decision possible, taking into account the decisions of the others in the game as long as the other parties' decisions remain unchanged[15]

In other words, Nash Equilibrium (NE) is a situation in which no player, given the strategies of other players as given, can improve his position by choosing an alternative strategy. Nash has shown that, for a very wide range of games of any number of players, there is at least a 1-point (Equilibrium) provided mixed strategies are allowed.

In a bargaining situation one anticipation is especially distinguished; this is the anticipation of no cooperation between the bargainers It is necessary to introduce assumptions about the nature of the set of points thus obtained. We wish to assume that this set of points is compact and convex, in the mathematical senses. It should be convex since an anticipation which will graph into any point on a straight line segment between two points of the set can always be obtained by the appropriate probability combination of two anticipations which graph into the two points. The condition of compactness implies, for one thing, that the set of points must be bounded, that is, that they can all be included in a sufficiently large square in the plane. It also implies that any continuous function of the utilities assumes a maximum value for the set at some point of the set.

We shall regard two anticipations which have the same utility for any utility function corresponding to either individual as equivalent so that the graph becomes a complete representation of the essential features of the situation. Of course, the graph is only determined up to changes of scale since the utility functions are not completely determined.

Now since our solution should consist of rational expectations of gain by the two bargainers, these expectations should be realizable by an appropriate agreement between the two.

88888888888888888888888888888888888

BARGAINING

[15] John Nash Non-Cooperative Games The Annals of Mathematics, Second Series, Vol. 54, No. 2, (Sep., 1951), pp. 286-295

TWO PERSON's BARGAINING THEORY[16]

Bargaining

"Bargaining is a type of negotiation in which the buyer and seller of a good or service debate the price and exact nature of a transaction. If the bargaining produces agreement on terms, the transaction takes place. Bargaining is an alternative pricing strategy to fixed prices[17]

Bargaining Theory

Bargaining theory is the branch of game theory dealing with the analysis of bargaining problems, in which some parties bargain over the division of certain goods. A solution to a bargaining problem means the determination of such a division. Examples of simple as well as more complex applications of bargaining theory to economic, political and social situations abound. Essentially, one may apply an axiomatic approach to bargaining problems, i.e., postulate some axioms concerning a potential solution, and then investigate its existence and properties resulting from the adopted axioms. One may also apply a different approach to bargaining problems, called the dynamic or strategic approach, which involves the representation of a bargain as a non-cooperative game and the investigation of solutions from among the equilibria of the game[18].

The Bargaining Problem (Nash Solution)

The two-person ***bargaining problem*** *studies how two agents share a surplus that they can jointly generate. It is in essence a payoff selection problem. In many cases, the surplus created by the two players can be shared in many ways, forcing the players to negotiate which division of payoffs to choose. There are two typical approaches to the bargaining problem. The normative approach studies how the surplus should be shared. It formulates appealing axioms that the solution to a bargaining problem should satisfy. The positive approach*

[16] "two person theory: two anticipations in one person-not "two persons"

[17]
- ✓ Sood, Suemedha. "The art of haggling". Retrieved 10 September 2016.
- ✓ Putthiwanit, C. & Santipiriyapon, S. (2015). Apparel bargaining attitude and bargaining intention (intention to re-bargain) driven by culture of Thai and Chinese consumers, Journal of Community Development and Life Quality, 3(1), 57-67

[18] https://www.coalitiontheory.net/research-areas/bargaining-theory

answers the question how the surplus will be shared. Under the positive approach, the bargaining procedure is modeled in detail as a non-cooperative game[19].

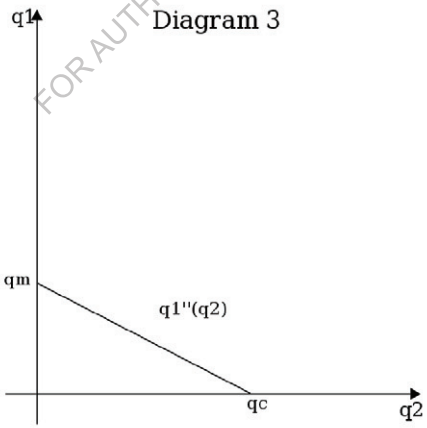
Cournot competition-Duopoly: the famous form of bargaining

Cournot competition is an economic model used to describe an industry structure in which companies compete on the amount of output they will produce, which they decide on independently of each other and at the same time. It is named after Antoine Augustin Cournot (1801–1877) who was inspired by observing competition in a spring water duopoly[20].

Cournot duopoly

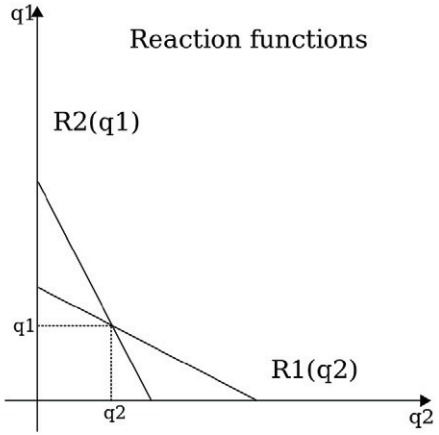
The result of choice of the player (A) depends on the choice of the other (B) "player" , his own expectation about payoff, as well as his own expectations about the choice of the player B (best response game)

Diagram 3



[19] John F. Nash, (1950) Econometrica, Volume 18, Issue 2 (Apr., 1950), 155-162.

[20] Antoine Augustin Cournot (1897). Researches Into the Mathematical Principles of the Theory of Wealth. Macmillan.



……

It has the following features:

- ✓ *There is more than one firm and all firms produce a homogeneous product, i.e. there is no product differentiation;*
- ✓ *Firms do not cooperate, i.e. there is no collusion;*
- ✓ *Firms have market power, i.e. each firm's output decision affects the good's price;*
- ✓ *The number of firms is fixed;*
- ✓ *Firms compete in quantities, and choose quantities simultaneously;*
- ✓ *The firms are economically rational and act strategically, usually seeking to maximize profit given their competitors' decisions.*

An essential assumption of this model is the "not conjecture" that each firm aims to maximize profits, based on the expectation that its own output decision will not have an effect on the decisions of its rivals. Price is a commonly known decreasing function of total output. All firms know N *the total number of firms in the market, and take the output of the others as given. Each firm has a cost function* $c(i)q(i)$

Normally the cost functions are treated as common knowledge. The cost functions may be the same or different among firms. The market price is set at a level such that demand equals the total quantity produced

by all firms. Each firm takes the quantity set by its competitors as a given, evaluates its residual demand, and then behaves as a monopoly.

COURNOT EQUILIBRIUM-DUOPOLY

equilibrium..prices..will..be

$p_1 = p_2 = P(q_1 + q_2)$

this..implies..that..firm..1's..profit..is..given..by

$\Pi_1 = q_1(P(q_1 + q_2) - c)$

.....

the..profit..of..firm..i..is..therefore..given

$\Pi_i = P(q_1 + q_2) * q_i - C_i(q_i)$

the..best..response..is..to..find..the..value..of..q_i..that..maximizes..Π_i, given..q_j,..$i \neq j$

$$\frac{\partial \Pi_i}{\partial q_i} = \frac{\partial P(q_1 + q_2)}{\partial q_i} \bullet q_i + P(q_1 + q_2) - \frac{\partial C_i(q_i)}{\partial q_i} = 0..for...maximization$$

the..values..of..q_i...that...satisfy..this..equation..are..the..best..responses – NASH..EQUILIBRIUM

The curve $d_1(q_2)$[21] *is called firm 1's residual demand; it gives all possible combinations of firm 1's quantity and price for a given value of* q_2 .

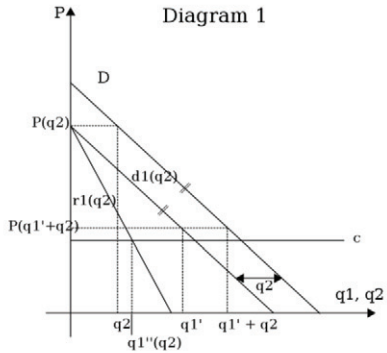
Calculate firm 1's residual demand: Suppose firm 1 believes firm 2 is producing quantity q_2 *.What is firm 1's optimal quantity? Consider the diagram 1. If firm 1 decides not to produce anything, then price is given by* $P(0 + q_2) = P(q_2)$

If firm 1 produces q_1' *then price is given by* $P(q_1' + q_2)$

More generally, for each quantity that firm 1 might decide to set, price is given by the curve $d_1(q_2)$.

The curve $d_1(q_2)$ *is called firm 1's residual demand; it gives all possible combinations of firm 1's quantity and price for a given value of* q_2

[21] It is corresponding to the disagreement point



Why is this important to companies and marketers? Very often, some people are deprived of common goods available to a higher economic class of consumers. Those who are being value deprived, used mud instead of soap; charcoal instead of toothpaste; having only one change of clothes instead of a wardrobe; no recourse to quality or even minimum education; not getting two square meals a day; having to work in someone's house and being deprived of an alternative future.

Many of these can be converted into opportunities; small bars of soap, sachet shampoo or tooth paste etc. Or products with fewer features and a lower price point. I will leave the reader to think through these.

Bargaining –graphic presentation

The Axioms of Nash[22]

John Nash used a brilliant axiomatic approach to solve this problem. He first came up with a list of properties an ideal bargaining solution function is expected to satisfy and then proved that there exists a unique solution that satisfies all of these properties. The following are the five axioms of Nash:

1. *Strong Efficiency*
2. *Individual Rationality*
3. *Scale Covariance*
4. *Independence of Irrelevant Alternatives (IIA)*
5. *Symmetry*

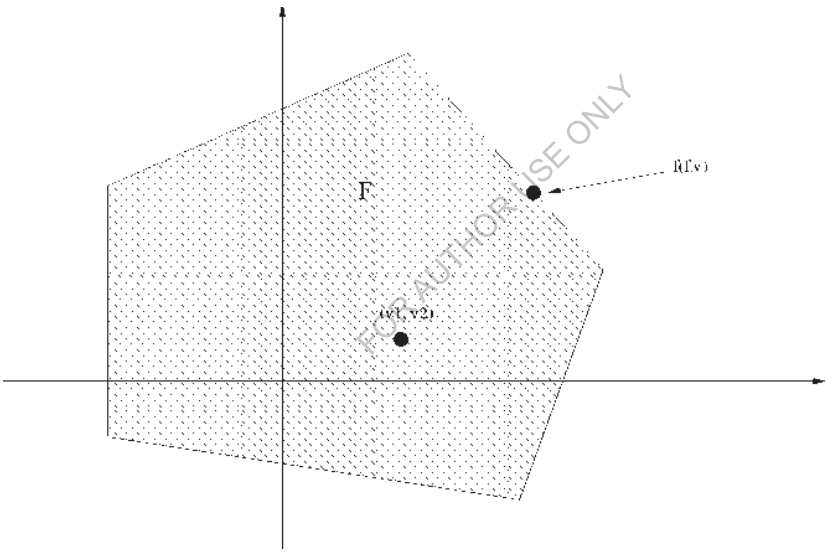


Figure 1: Illustrating strong efficiency and individual rationality

[22] Y. Narahari (October 2012) "COOPERATIVE GAME THEORY The Two Person Bargaining Problem" Department of Computer Science and Automation Indian Institute of Science Bangalore, India - Lecture Notes Game Theory

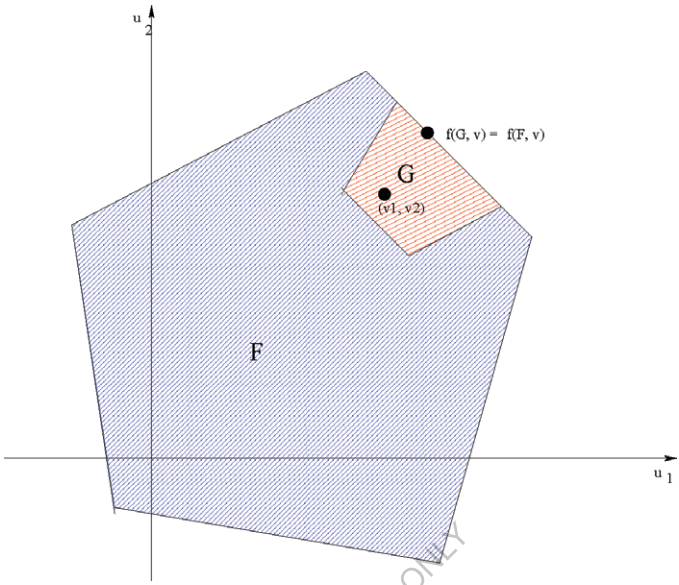
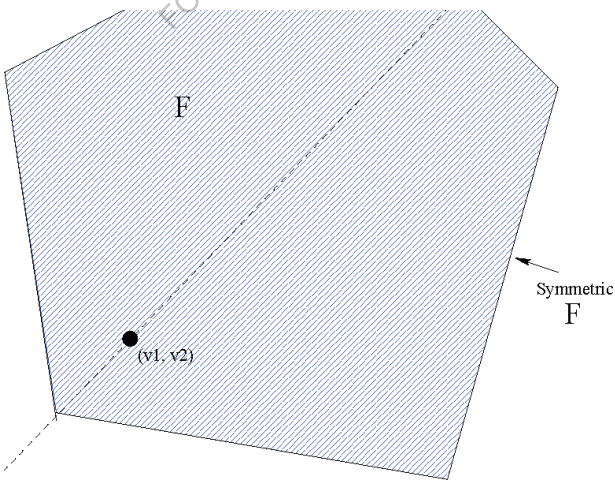


Figure 3: Independence of irrelevant alternatives



SYMMETRY

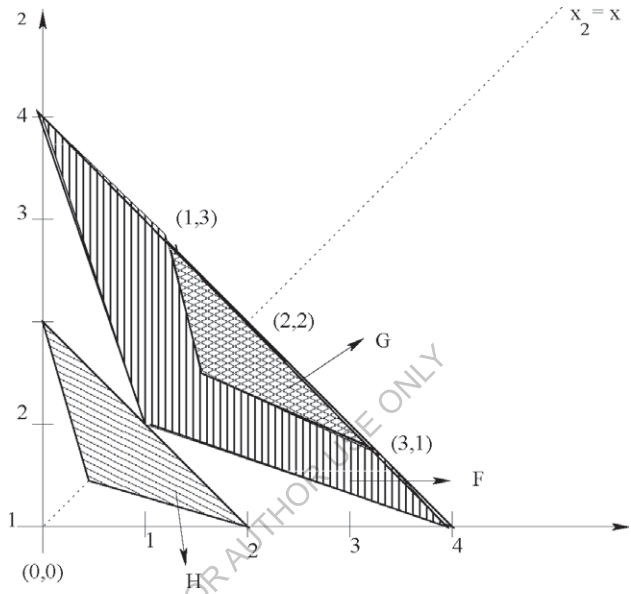


Figure 5: An example to illustrate Nash axioms 4.1 Proof for Essential Bargaining

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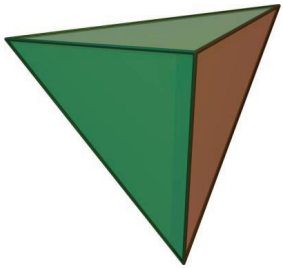
PART II

APPROACHES



A. Disagreement Point

Definitions

The disagreement point d *is the value the players can expect to receive if negotiations break down*[23]*. This could be some focal equilibrium that both players could expect to play. This point directly affects the bargaining solution, however, so it stands to reason that each player should attempt to choose his disagreement point in order to maximize his bargaining position. Towards this objective, it is often advantageous to increase one's own disagreement payoff while harming the opponent's disagreement payoff (hence the interpretation of the disagreement as a threat). If threats are viewed as actions, then one can construct a separate game wherein each player chooses a threat and receives a payoff according to the outcome of bargaining. It is known as Nash's variable threat game*[24]*.*

[23]

- Zeuthen, Frederik (1930). Problems of Monopoly and Economic Warfare.
- Nash, John (1953-01-01). "Two-Person Cooperative Games". Econometrica. 21 (1): 128–140.
- Rubinstein, Ariel (1982-01-01). "Perfect Equilibrium in a Bargaining Model". Econometrica. 50 (1): 97–109.

[24] Nash, John (1950). "The Bargaining Problem" Econometrica **18** (2): 155–162

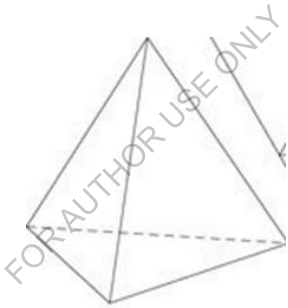
Disagreement point

The disagreement point $d = (d_1, d_2)$ *is the value the players can expect to receive if negotiations break down. This could be some focal equilibrium that both players could expect to play. This point directly affects the bargaining solution, however, so it stands to reason that each player should attempt to choose his disagreement point in order to maximize his bargaining position.*

Equilibrium Analysis

Strategies are represented in the Nash demand game by a pair (x, y) $x...and...y$ are selected from the interval $[d, z]$ is the disagreement outcome and z is the total amount of good. If:

$x + y...is..equal..to...or..less..than...z...the...1st...player..recieves...x..and...the...2nd...y$
$otherwise...both...get...d...often...d = 0$



A

In bargaining theory, a "disagreement point" or "threat point" is the policy which is implemented if no agreement is reached. Typically, it is bad for both sides, but may be worse for one. The disagreement point has a profound impact on the outcome of negotiations, even if it never comes to pass. (In theory-land, say in Nash or Rubinstein bargaining, there is never disagreement, but the threat of disagreement is a crucial determinant of the outcome.)

Analysis

The two person bargaining problem consists of a pair (F, v) *where* F *is called the feasible set and* v *is called the disagreement point.*

- F *, the feasible set of allocations, is a closed, convex subset of* R^2
- *The disagreement point* $v = (v_1, v_2) \in R^2$ *represents the disagreement payoff allocation for the two players. It is also called the status-quo point or the default point. This gives the payoffs for the two players in the event that the negotiations fail. It may be noted that v is invariably chosen to belong to the feasible set* F *though it is not a mandatory technical requirement.*
- *The set* $F \cap \{(x_1.x_2) \in R^2 : x_1 \geq v_1; x_2 \geq v_2\}$ *is assumed to be non-empty and bounded.*

Justification for the Assumptions

- F *is assumed to be convex. This can be justified as follows. Assume that the players can agree to jointly randomized strategies (correlated strategies). Consequently, if the utility allocations* $x = (x_1, x_2).and..y = (y_1, y_2).are..feasible...and...0 \leq a \leq 1$

then the expected utility allocation $ax + (1 - a(1-a)\, y$ *can be achieved by planning to implement* x *with probability* a *and to implement* y *with probability* $(1-a)$

- F *is assumed to be closed (that is, any convergent sequence in F will converge to a point that belongs to F). This is a natural topological requirement. If we have a sequence of allocations belonging to* F *and the limiting allocation does not belong to F, then we have an undesirable situation that is not acceptable.*
- *The set* $F_n \{(x_1.x_2) \in R^2 : x_1 \geq v_1; x_2 \geq v_2\}$ *is assumed to be non-empty and bounded. This assumption implies that there exists some feasible allocation that is at least as good as disagreement for both players, but unbounded gains over the disagreement point are not possible. Both these requirements are reasonable.*

Utility and disagreement (threat) functions: the win-win-win equilibrium

Introduction

Players develop their strategies in any interactive decision, behavior, thinking and living

Basically, there are two interactive actions¨

A. people form behaviors within the bargain based on personal, family, moral and even knowledge

B. People are gradually acquiring more permanent behaviors, ethical, transactional customs, from the Bargain, gradually passing on their thinking. For this reason we are referring now to the market society[25] and not the market of the society, that means a market integrated into society

- *During the bargain, individuals develop ethics and generally behavior that influence their life*
- *At any bargain, disagreement (or threat) point has a crucial role:*

  i. *in a market society, disagreement point* d *is the value the players can expect to receive if negotiations break down*

  ii. *in a social bargain, disagreement point* d *denotes the value the players can expect to receive if negotiations break down AND the frames of the 2 bargainers' ethics*

$$players..A...and....B....strategies\,/\,choices$$
$$(each..of\,...them,..with..his\,/\,her...own..DISEGREEMENT..POINT..d_1,\ d_2$$

$$Social..behavior: DISAGREEMENT.(or...threat)..POINT..$$
$$beyond...individual...disegreement...$$

$$(u(x)-u(d))..and$$
$$(v(y)-v(d))....players, A, B..try..to..\max\,..x..and..y$$

$$\max..power...=..\max U_A \backslash U_B = \max U_A \times U_B \Rightarrow \frac{d}{du} f = 0$$

$$.....\max(u(x)-u(d))(v(y)-v(d))$$

[25] A society based around a market economy, especially one in which political and economic life are dominated by ideas of individual freedom and self-interest. https://www.lexico.com/en/definition/market_society

Analysis

- ✓ *In all bargains, there is usually a set S of alternative outcomes and both parties must agree on some element of this set. Once an agreement is reached, the negotiation ends and both sides can get their respective returns. If they do not reach an agreement, the result is usually the status quo. So if (t1, t2) are the odds of a point of disagreement, then the interesting part of S consists of those outcomes that give both sides odds greater than those of the odds. So we can define a trading problem as follows*
- ✓ *A two person bargaining problem (or game) consists of two people or players 1 and 2, a set S of alternative outcomes, and a utility function u1 on S for each player i, so that:*

$$u_1(s) \geq t_1 \ldots u_2(s) \geq t_2, \ldots, \forall s \in S$$

Suppose that

$u(x),..v(y).C(z).are..utility..function,..of..the..b\arg ainers, A-B..ande..the..COMMUNITY..(C)$

AND

$u(d_1),..v(d_2),..C(d_3)..are..their..disagreement-or..threat-functions$

then,

$$u(x)-u(d_1)$$
$$v(y)-v(d_2)$$
$$C(z)-C(d_3)$$

form..a..new..function..of..differences..i.e....

$$u(\delta_1), v(\delta_2),..C(\delta_3)$$

- ✓ *Each of them defines the margin between utility (or grade of satisfaction) AND their disagreement point*

$$\text{In the case of} \quad \begin{array}{l} \ldots \\ u(\delta_1)=0 \\ v(\delta_2)=0,.. \\ C(\delta_3)=0 \end{array} \quad \text{that means}$$

$$\begin{array}{l} u(x)-u(d_1)=0 \\ v(y)-v(d_2)=0 \\ C(z)-C(d_3)=0 \end{array}$$

that..characterize..unelasic…societies..
with..fixed..preferences..and..relations

- ✓ *In the case of* $u(\delta)\approx 0$*..or..near..to..a..fixed..price , (that means, the individual* I_u *will VETO at any time the result of the bargain does not exactly satisfy his/her own preferences) there is no room for social sensitivity, or even better, the* I_u *individual does not let any margin for "social bargaining"*
- ✓ *The farther away from the level of personal* $u(x),..v(y)$ *and the social satisfaction* $C(z)$ *the point of disagreement / threat of disruption to negotiations, far is the more degrees of freedom there are in the negotiation and the greater the probabilities of agreement.*
- ✓ *This is all the more so if the parties are three (including the Community as the third and catalytic power in the negotiation:*
- ✓ *a. the community works for both parties as a point of reference - eg the legal framework of the contracts*

  b. The community "requires" its own "satisfaction" which coincides with the satisfaction of the general population of the community

  c. overall satisfaction is divided into three and not two parties, so the hot decision-making pressure is less and more balanced

  d. New data are put on covering the "claims" and perspectives of the three-and not two-parties of the negotiation

  e. avoid collusion, which may be easier in negotiations between 2 and not the three parties

f. It is not accidental that powers in a democratic society are divided between legislative, executive, and judicial powers.

g the inclusion of the community in the win-win-win [as social cohesion, as a moral, as a culture, but also as a whole of its population] and not as a court, is based on its actual immediate interest which is the interest of many who may not are directly involved in the bargain

h. The tendencies that develop in such a trilateral negotiation thus form a "memory" state (something like court jurisprudence, or "good business ethics"): The difference here is that many forces are mobilized that shape a flexible behavior and not a strict relation established by case law

SOCIAL BARGAINING IN TERMS OF DISAGREEMENT[26] *3-ple equilibrium*

Ideal situation-the Angels' Moment

- ✓ *It is obvious that in a Democratic Society, must be*

$$\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \begin{matrix} u(x)-u(d_1)=m.ax \\ v(y)-v(d_2)=m.ax \\ C(z)-C(d_3)=m.ax \end{matrix} \Leftrightarrow \begin{matrix} u(d_1)=0 \\ v(d_2)=0 \\ C(d_3)=0 \end{matrix} \text{ the Angels MOMENT}$$

- ✓ *The maximum profit for the society is*

$$m\alpha x(u(x)-u(d_1))(v(y)-v(d_2))(C(z)-C(d_3))$$

Or, in threat terms:

$$m\alpha x(u(x)-u(t))(v(y)-v(t))(C(z)-C(t))$$

- ✓ *In a poetic expression, people have to set higher goals, in every interaction - negotiation so they can express their disagreement, at some point or threat point of stopping the negotiation*

[26] PAPAKONSTANTINIDIS LA , 2002

- ✓ *in an even more poetic expression, people must re-start dreaming of a better life again - one of the signs of globalization is to level everything for instant euphoria*
- ✓ *but so have people stopped dreaming ... Relationships, expectations, products and even lasting products (furniture-kitchens etc) and even the heads of state and government and relationships between them have all become instant (1)*
- ✓ *The deep wound of globalization is the conversion of everything from constant to instant*
- ✓ *People have to accept this "instant point", without history, future, and without dreams Ignatius Ramonet supports - and not unfairly – "…the past - present and the future has been squeezed into the instant now, the supreme moment of history …... all made by the wish factory*[27]*. "- 1000 cold "NO" for an emotional "YES" Buskalia*
- ✓ *Of course, every citizen has (at least theoretically the right of veto, a veto*

$$\forall u_i \in S_i .(u_i - t_i), \exists t_i^*, so..that....(u_1 - t_1) < (u_2 - t_2) < ... < (u_i - t_i^*)$$

$$t = veto, or..democracy..perception$$

Papakonstantinidis 2019

- ✓ *The more sensitized is someone to a stimulus (eg environment) as "less objections" (less friction) will have to those who formulate development policies, which means that the differences between the level of satisfaction (utility function) and the disagreement point (d, disagreement point, or threat point, are gradually smoothed out. The degree of satisfaction increases as the point of objection increases gradually*
- ✓ *The difference between cold rational and sensitized behavior and their mix to maximize the expected benefit to each and every one as he / she perceives determines the level of culture of a particular - local, basic - society*

  The social predisposition of Humans makes the above relationship possible and the aim is to minimize the absolute difference between cold rationality and sensitized behavior: For example, protecting the natural environment
- ✓ *It does not matter if we lose..1000 logical NO to an emotional YES… his life is endless .. always a winner*

Angels'..Society

$$MAX..(u_1 = t_1)(u_2 - t_2)(u_3 - t_3) \rightarrow [(u_1 - t_1)(u_2 - t_2)(u_3 - t_3)]' = 0$$

$$(u_1 - t_1) = MAX$$
$$(u_2 - t_2) = MAX$$
$$(u_3 - t_3) = MAX$$

$$u_i : utility..ex.pectation$$

[27] Ignacio Ramonet:

- 1989 : La Communication victime des marchands
- 1996 (Nouveaux) pouvoirs, Nouveaux maîtres du monde (French: New Powers, New World Masters)

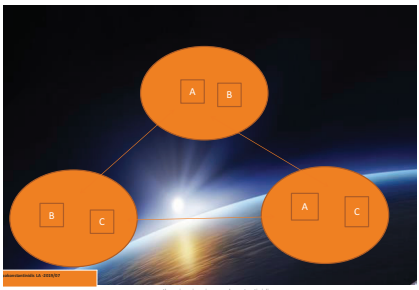
if ...u(x)..v(y)..C(z).....are..the...utility...functions...of ...A – B – C(community)..bar – geners,..then

$$\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \max\left(u(x)-u(d)\right)\left(v(y)-v(d)\right)\left(C(z)-C(d)\right)$$

must...be...the...overall...Social...Equilibriu m.....or...the..." Angels'.Moment.."

If ....u(x)−u(d)=0, and / or..v(y)−v(d)=0,...and / or....C(z)−C(d)=0,...then.....the. .multipication..product...will...be...also...ZERO.. .Otherwise, there...will...not..be..agreement....or.....SOCIAL...BARGAIN

At...any...case, the...(A – B)...BARGAINERS...and..the...Community... – as..the..3rd...player..in..the..BARGAIN in..the..form..of ....LAW, or, even..more..of ..the.." contract..social" (J.J.Rousseau,..1752) – ..must.." push"...their...own..." DISAGREEMENT...POINTS..as...far...as...possible – beyond...INDIVIDUAL EXPECTATIONS..so..to..m.aximise...their..own...profits....and..all...of ..them..to..m.ax..the..social..profit If ...this...will...hapen,...then...a...new...situation...will..be..resulted..even..in..dt..period : ..the..Angels"..Moment



Each of the three taking part in a bargain prevents possible collusion of the other two

Papakonstantinidis 2010

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B. THE SHARING PROBLEM APPROACH

The ultimatum game:

The ultimatum game is a game that has become a popular instrument of economic experiments. It was first described by Werner Güth, Rolf Schmittberger, and Bernd Schwarze: One player, the proposer, is endowed with a sum of money. The proposer is tasked with splitting it with another player, the responder. Once the proposer communicates their decision, the responder may accept it or reject it. If the responder accepts, the money is split per the proposal; if the responder rejects, both players receive nothing. Both players know in advance the consequences of the responder accepting or rejecting the offer[28]. The nascent field of neuroeconomics seeks to ground economic decision- making in the biological substrate of the brain. Ultimatum Game players have been used to investigate neural substrates of cognitive and emotional processes involved in economic decision-making. In this game, two players split a sum of money; one player proposes a division and the other can accept or reject this[29].

The Sharing Process in an Ultimatum game

The study of any bargaining process is extremely hard, involving a multiplicity of questions and complex issues. As a consequence, the research literature in this field has not yet been able to develop a comprehensive

[28] Güth, W., Schmittberger, R., & Schwarze, B. (1982) An Experimental Analysis of Ultimatum Bargaining. Journal of Economic Behavior & Organization, 3, 367-388
[29] Sanfey, Alan G.; Rilling, James K.; Aronson, Jessica A.; Nystrom, Leigh E.; Cohen, Jonathan D. The Neural Basis of Economic Decision-Making in the Ultimatum Game

framework for analysis, and a number of theories have been proposed instead, each focusing on single aspects of the problem.

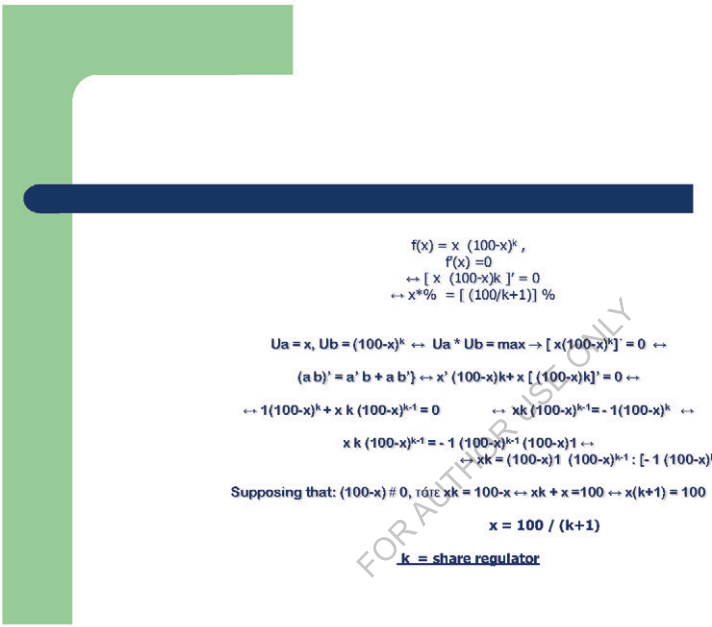
So, for instance, the issue of how to divide the payoffs from cooperation among the parties is traditionally addressed within cooperative bargaining theory, which makes, in turn, "beneficial" assumptions about which properties the equilibrium allocation should have, and does not explicitly address the question of which strategies will be adopted by the negotiators[30]*.In many real life situations, however, cooperation cannot be ensured, and binding agreements are not a feasible option. Therefore, the strategic choices of the actors involved in the bargaining process need to be explicitly modeled in order to determine the final outcome of the negotiation. Non-cooperative bargaining theory is more concerned with these situations and focuses on the bargaining procedures in the attempt to determine which equilibrium outcome will prevail in the absence of interventions.*

When multiple players are involved in the bargaining, there is the possibility that coalitions form. Traditional bargaining theory is not suitable for representing such situations because it is based on the assumption that only two possible outcomes can arise: the fully cooperative outcome and the fully Non-cooperative outcome, where respectively an agreement among all parties is reached and no agreement forms.

Share	*Share*	***Utility***	***Utility***	*Utility*
A	***B***	***A***	***B***	***AXB***
(%)	***(%)***			
100	*0*	*0*	*83*	*0*
90	*10*	*1*	*78*	*78*
80	*20*	*5*	*70*	*350*
70	*30*	*10*	*68*	*680*
60	*40*	*16*	*60*	*960*
50	*50*	*23*	*52*	*1196*
40	*60*	*31*	*50*	*1550*
30	***70***	***40***	***44***	***1760 (max)***

[30] Carlo Carraro, Carmen Marchiori and Alessandra Sgobbi (2005)ADVANCES IN NEGOTIATION THEORY: BARGAINING, COALITIONS, AND FAIRNESS World Bank Policy Research Working Paper 3642, June 2005

20	80	55	30	1650
10	90	70	18	1260
0	100	81	0	0



Non-cooperative coalition theory considers this interesting aspect of negotiation processes and, without making any assumption on the final result, analyzes the incentives that players may have to form coalitions, and how the incentives may affect the final outcome of the negotiation. The study of coalition formation is particularly important in bargaining contexts where positive externalities are present. In this case, due to players' incentive to free ride, it is quite unlikely that a 'grand coalition' will form; instead 'partial agreements' usually arise.

Finally, traditional models of negotiation have focused almost exclusively on the efficiency properties of both the process and the outcomes. Yet, as every day experience indicates, considerations other than efficiency play a crucial role in selecting which agreement will be reached – if any at all – and through which path. The theory of fair division focuses on processes and strategies that respond not only to Pareto efficiency, but also to equity, envy-freeness, and invulnerability to strategic manipulation[31].

[31] The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper

The "Sharing problem" in a Bargain [Utilities, Shares, strategies, decision- choices, behaviour, Final Agreement]

Having defined: (1) How information resulting from "knowledge creation /knowledge transfer" should contribute to what we call "social market" (2) How sensitization should be introduced to given information, as to turn it to an integrated information (Papakonstantinidis, 2006) (3) How "integrated information" should influence human behaviour during the bargain, or negotiations (4) How a human "social" behaviour could lead to a "new" perception of thinking or taking a decision, in the bargain (see at Calvert Randall, 1995, Berger, J 2005 Cinneide M. O' 1991, Coleman J 1988, Yitzak Samuel 1997, Bernheim Douglas B. 1984 (5) How socialization could influence human choices or winning strategies during the bargain, based on instant reflection (Nash) (6) How scientific thought could transfer the problem from "utilities" (personal perception") to pay-offs (objective perception = counting size) Harsanyi John(1973), then, the data of Table 2 may be transformed in a new set of data, as Table 3.

TABLE 3 (Papakonstantinidis Proposal)

Suggesting Sharing between "A , "B" and "C"

Share A (%)	***Share B (%)***	***Utility A***	***Utility B***	***Utility AXB***	***Share C (%)***	***Utility C***	***Utility AXBXC***
90	***4***	***1***	***71***	***71***	***6***	***1***	***71***
80	***13***	***2***	***70***	***140***	***7***	***2***	***280***
70	***22***	***5***	***68***	***340***	***8***	***3***	***1020***
60	***31***	***10***	***64***	***640***	***9***	***4***	***2560***
50	***40***	***16***	***60***	***960***	***10***	***5***	***4800 max***
41	***50***	***23***	***52***	***1196***	***9***	***4***	***4784***
32	***60***	***31***	***40***	***1240***	***8***	***3***	***3720***
23	***70***	***40***	***24***	***960***	***7***	***2***	***1920***

are entirely those of the authors.

14	***80***	***50***	***12***	***600***	***6***	***1***	***600***

(Papakonstantinidis Proposal)

Notes, as to explain the symbols:

- *"C" expresses the Community (an acceptable system value at local level), as the "third" or invisible part in the bargain. In real terms, it reflects the "confidence indicators", or, in other words, if and at which level each member of the Community trusts the other, during the bargain (H. Hans 1997)*
- *The less shares for A+ B the more share for " C" part*
- *Utility is a personal matter: Utility units are not compared to each other. They express the fear of breaking down the agreement*
- *If "A" needs more the "agreement" than the payoff, then he should be ready to accept any form of agreement.*

Utility function: Law of diminishing marginal returns (or costs)

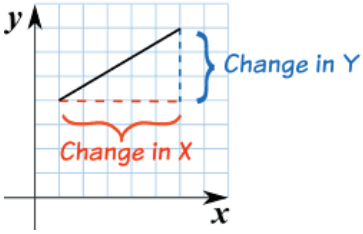
We start from an economic-math principle: the law of diminishing marginal returns goes by a number of different names, including law of diminishing returns, principle of diminishing marginal productivity and law of variable proportions. This law affirms that the addition of a larger amount of one factor of production, while all others remain constant, identified by the Latin term "ceteris paribus," inevitably yields decreased per-unit incremental returns.
Two ***"concepts"*** *for the utility:*

1. ***The cardinal utility concept:*** *is concerns the idea of a measured quantitatively, like length, height, weight, temperature, etc*

2. ***The ordinal utility concept:*** *expresses the utility of a commodity in terms of 'less than' or 'more than' in individual scale of preferences*

As each tries to maximize his/her own utility function (the "personal ordinal", not been measured as the cardinal) knows that more and more quantities over a point that he/she maximizes his/her satisfaction in personal terms, the less satisfaction from these more and more quantities. ***The derivative of a function*** *of a real variable measures the sensitivity to change of a quantity (a function value or dependent variable) which is determined by another quantity (the independent variable). Derivatives are a fundamental tool of calculus.*

From this "RULE" a crucial condition happens:



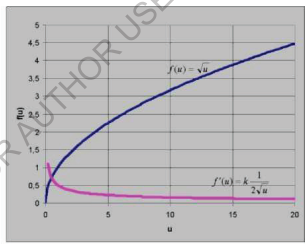
$$slope = \frac{change...in..Y}{change..in...X} = 1^{ST}\ DERIVATIVE\ OF\ \ U'=f(x)',possible\ N.E$$

The "win-win-win Equilibrium"

From the two graphs above, and the "Pareto Efficiency" conditions is resulted that the "utility functions" follows the law of diminishing marginal returns,

*The law of diminishing marginal returns, includes the marginal productivity and law of variable proportions (**Turgot (1727-1781)***

$$It\ is\ \ If\ ..u = f(x)..is..a..utility..function,..then..\frac{d(f(x))}{dx},or..$$
$$f(x)'..is..its..MARGINAL..UTILITY....FUNCTION$$



ΠΑΠΑΚΩΝΣΤΑΝΤΙΝΙΔΗΣ 2008

As..the.."rational....individual....objective...is..to....MAXIMIZE..individual.....profit then,on..the..MAX..POINT..in..his / her..Utility..function,..the..aditional / marginal ..quantity..must..be..zero..or..in..the..neghiborhood..of ..ZERO

1. *It..is...assumed..that..the....MAX..Utility..function..for....all..people..* $\Rightarrow$ *MARGINAL.UTILITY = ZERO, If ....*U_A, U_B, U_C*..are..UTILITY..FUNCTIONS..of ...A,..B,..AND.C,..then..the..product..*$U_A * U_B * U_C$ *responds.."social..welfare"..So....if ..the..product.....*$U_A * U_B * U_C = MAX$ *..then..MRS* $= 0$*..that's..the..END..of the..development...process..(IDEAL...CASE).We..can..measure..the..result..in..terms..of ..deviation..from ideal..case...The.."win – win – win..papakonstantinidis.." EQUILIBRIUM*

'*Pareto Efficiency*'

Pareto efficiency, also known as "Pareto optimality," is an economic state where resources are allocated in the most efficient manner, and it is obtained when a distribution strategy exists where one party's situation cannot be improved without making another party's situation worse. Pareto efficiency does not imply equality or fairness.

PARETO...EFI

MAX...Utility..

$\sum p_i x_i \leq M,...$

$p = price,...x_i$

$M = FRONTIE$

$$U_i = u_i \times p_i$$
$$U_A = u_A \times p_A$$
$$U_B = u_B \times p_B$$
$$U_C = u_C \times p_C$$

U = pleasant..exp eriance..according..to....a..strictly..personal...positive..list
u = individual....utils..(not..measuring)
p : probabilities, these..pleasant...exp eriance' s..utils..to..occure..in..the...A.B.C...individuals

U_A, U_B, U_C

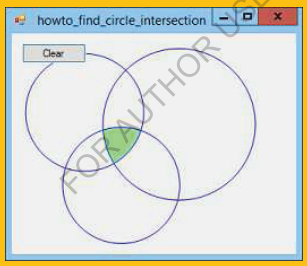
when

$U_A = x$
$U_B = y$
$U_c = (100 - x - y)$

$U_A \cap U_B \cap U_C = U_A \times U_B \times U_C = MAX \Leftrightarrow (U_A \times U_B \times U_C)' = 0$

$xy(100 - xy)^n = MAX \Leftrightarrow [xy(100 - x - y)^n]' = 0$

generally,
$(f(x) * g(x))' = f'(x) * g(x) + f(x) * g''(x)$



But,

$$U_A \cap U_B \cap U_c = U_A * U_B * U_c = \max$$
$$\left(U_A * U_B * U_c\right)' = 0$$

$$u_i = f_i(s)$$

$$xy(100-x-y)^n = \max \rightarrow [xy(100-x-y)^n]' = 0$$

$$[xy(100-x-y)^n]' = x'y(100-x-y)^n + xy'(100-x-y)^n = xy[(100-x-y)^n]' = 0$$

$$xy(100-x-y)^n]' = y(100-x-y)^n + x(100-x-y)^n + nxy(100-x-y)^{n-1} = 0$$

$$\left(f(x) * g(x)\right)' = f'(x) * g(x) + f(x) * g'(x)$$

$$[xy(100-x-y)^n]' =$$
$$y(100-x-y)^{n-1}(100-x-y) + x(100-x-y)^{n-1}(100-x-y) + nxy(100-x-y)^{n-1} = 0$$

$$It...must:.....xy(100-x-y)^n = \max \rightarrow \lim_{x\to\infty}[xy(100-x-y)^n] = 0$$
$$\sup ...that..(100-x-y) \neq 0$$
$$y(100-x-y) + x(100-x-y) + nxy * 1 = 0$$

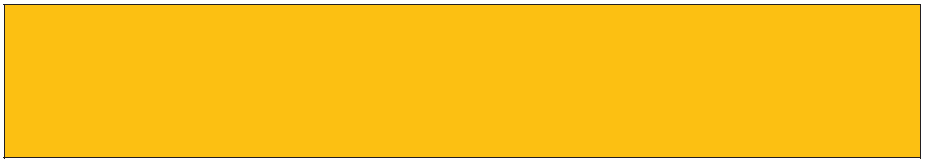
$$(x+y)(100-x-y) + nxy = 0 \Rightarrow \left(\frac{x+y}{xy}\right)(100-x-y) = (-1)n.....by..putting,....\frac{x+y}{xy} = \lambda \succ 0$$

$$\lambda(100-x-y) = (-1)n \Rightarrow (100-x-y) = \frac{-n}{\lambda} = (-n)\frac{1}{\lambda}$$

$$but,.....(100-x-y) = \%..Community.."share"..of...o.budget,..b = 1.....EXPECTED..payoff...from.."b = 1"$$

$$\%..Community...share = (-n)\frac{1}{\lambda}(b).....the..(-n)...denotes,,the..reduction$$
$$result...which..comes..from.the..Community.."reaction"..in..any..BARGAIN,..(by...its..3rd...role,....i.e$$
$$as..an..Agent..of..the..CITIZEN.-.PRINCIPALrelation,..Arbitrator,,,and..as..the..$$
$$Indepented..3rd..barty)..to.the..total..budget.."b"...of..the..BARGAIN$$

$$then,...the..i^{th}..player;s.best..mixed...strategy(probability = ..a..lottery..over..$$
$$a..trinomial...distribution),is..the..best..strategies..for..himself,as..well,as..the..best...strategies$$
$$..for..the..other..players,aswell..as..the..best..strategy..$$
$$for..the..Community..(the..common...welfare)$$



Probability Rule

To take inter consideration, the uncertainty of the outcomes of Von Neumann and Morgenstern joint work ***(Neumann, John von and Morgenstern, Oskar 1946)*** *addressed situations in which the outcomes of choices are not known with certainty, but have probabilities attached to them.*

A notation for a lottery is as follows: if options A and B have probability p and 1 − p in the lottery, we write it as a linear combination:

$$L = p(A) + (1 - p)B$$

$$Generally,$$

$$L = \sum p_i A_i$$

$$where,...$$

$$\sum p_i = 1$$

notes

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

…

[illegible]

[illegible]

[illegible]

[illegible]

LL

C. LIMIT OF A SEQUENCE'S APPROACH: The hlp 3-ple proposed equilibrium

3RD approach: *the 3 sequences, converging in:* $\phi \le hlp \prec e$

The "win-win-win concept" :Sensitization Process: terms of a continuous sequence u_n *,..with..* $\lim_{n\to\infty} u_n = .h^*_{hlp}.. = community..win-..The....end..of..senitization..process$

We suppose that ϕ, e, π *form a NEW sequence* W_n *converging in* hlp

φ, e, π relationship's manipulation

We can take the φ.e,π interactive relations in more than one ways:

$$\binom{n}{k} = \frac{n!}{k!(n-k)!} = \frac{(n(n-1..).....(n-k-1)}{k(k-1...1)} = \frac{3*2*1}{2*1(3-1)(3-2)} = 3$$ *ways for* ϕ, e, π *combination*

Taking into account the three mathematical constants (π,φ,e), as the limits of $(u_n,..v_n,..z_n)$ *i.e* $\lim_{n\to\infty}.(u_n,..v_n,..z_n)$*, then it is easy to manipulate their combination One of these math combinations seems to be* $\phi : \frac{e}{\pi}$

$$\frac{e}{\pi}=\frac{2,718}{3,14}=\frac{2,71}{3,14}=0,8569..=\omega$$

$$\frac{\phi}{\omega}=\frac{1,618..}{0,8569}=1,888...$$

Even,

$$\phi:\frac{e}{\pi}=\left(\frac{\phi}{\frac{e}{\pi}}\right)=\left(\frac{\frac{\phi}{1}}{\frac{e}{\pi}}\right)=\frac{\phi\pi}{e}=\left(\frac{1,618*3,14159}{2,7182818}\right)=\frac{5,083092}{2,7182818}\approx 1,888..$$

$$\underset{n\to\infty}{\ell im}..F_n=\phi\le hlp=1,888...\prec \ell im\left(1+\frac{1}{n}\right)^n=e,.....$$

888

Table 3 The intermediate Sequence: The hlp eui-harmony point-1.888..

The intermediate sequence g(x) between two sequences:

Suppose that $f(x)\le g(x)\le h(x)$.. *in the area of* x_0

If $\lim_{x\to x_0} f(x)=\lim_{x\to x_0} h(x)=L\in\mathbb{R}$

Then , $\lim_{x\to x_0} g(x)=L$

$$\ell n2\prec\phi\prec\underset{n\to\infty}{\ell im}\,u_n\le\underset{n\to\infty}{\ell im}\,v_n\le\underset{n\to\infty}{\ell im}\,z_n\prec e$$

$$\underset{n\leftarrow-\infty}{\ell n.2}\approx\frac{1}{n}+\frac{1}{n+1}+...\frac{1}{2n-1}\prec\phi\le\underset{n\to\infty}{\ell im}\left(\frac{\phi\pi}{e}\right)\approx 1,888..\le\frac{1}{n}+\frac{1}{n+1}+..\prec\left(1+\frac{1}{n}\right)^n\approx e$$

In their "win-win-win" ideal situation (perfect sensitization, or the ***angels' moment****),*

$$\phi = hlp = \underset{n\to\infty}{\ell im}\, u_n = \underset{n\to\infty}{\ell im} v_n = \underset{n\to\infty}{\ell im}\, z_n = e$$

The "3-win Lemma[32]

if ..for..the..sequences.. $u_n, v_n, \ldots z_n, \ldots . n = 1,..2,..n$

we..have,..that.. $u_n \prec v_n \prec z_n, \ldots$ *for..all..n..and..that..they..are..all..converging,..i.e*

we..have..that.. $a = \ell im_{n\to\infty} u_n, \ldots b = \ell im_{n\to\infty} v_n, \ldots$ *and..* $c = \ell im_{n\to\infty} z_n$ *,..then..(conclusion)*

we..will..have.. $\ell im_{n\to\infty} u_n \le \ell im_{n\to\infty} v_n \le \ell im_{n\to\infty} z_n, \ldots i.e, \ldots a \le b \le c$

we.'ll..use..the..ℓn*2,..to..start..with*

If ..c..is..the.. $\ell im_{n\to\infty}$ *..of ..* $z_n = \left(1 + \frac{1}{n} + \frac{1}{n+1} + \frac{1}{n+2} + \ldots . \frac{1}{2n}\right) = \left(1 + \frac{1}{n}\right)^n \le e \approx 2,7182816...$

If ....a...is..the.. $\ell im_{n\to 0}$ *...of ..* $u_n = \left(\frac{1}{n} + \frac{1}{n+1} + \ldots . \frac{1}{2n-1}\right) \ge \ell n2$

then,

$\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \ell n2 \le u_n, .. v_n, \ldots z_n \le e$

We will now show that the sequence[33]

$$u_n = \frac{1}{n+1} + \frac{1}{n+2} + \ldots + \frac{1}{2n}, \ldots n = 1,..2,..$$

converges and we have:

$$\underset{n\to\infty}{\ell im}\left(\frac{1}{n+1} + \frac{1}{n+2} + \ldots . + \frac{1}{2n}\right) = \ell og_e 2 = \ell n2$$

STATEMENT (Papakonstantinidis, 2018)

The ***sensitization process****-which is the core of this Work -may be formulated by the*

[32] starting from: Lambros Iossif-Leonidas A. Papakonstantinidis (1990) "Observation on a Limit" Mathematical Review, issue 37,
[33] The same for the other two, v_n and z_n

three (3) world constants, as limits of u_n, v_n, z_n : ϕ, e, π

W_n,..*so..that..* $\lim_{n\to\infty} W_n = h_{lp}^* = 1{,}888..$ *such that*[34]*:*

$\ell n2 \prec \phi = 1{,}618.. \le hlp = 1{,}888.. \le e = 2{,}7182818..$

MEASUREMENT: DEVIATION % from the hlp *suggested Equilibrium*

The win-win-win papakonstantinidis model is, thus, the limit-up of a continuous sensitization procedure, at any (A-B) bargainers AND Community "C" symbolized by the three sequences', i.e

u_n....*for..the..BARGAINER....A*

v_n....*for...the..BARGAINER...B*

z_n....*for...the...COMMUNITY , AS ...THE ...THIRD ...BARGAINER*

Indeed,

You can imagine the successive steps towards sensitization as a series of sequence terms that converges to a limit

The boundaries of these sequences, since they represent "sensitization levels", also form a new ***sequence*** W_n ***and let*** a ***a real number:***

$$W_n,..with.\lim_{n\to\infty} W_n = hlp$$

$$|W_n - a| \prec \varepsilon$$

and

$$\varepsilon \succ 0$$

[34] We use ln2 and e to "describe" the W_n as a sequence bounded up and down , by ln2 and the e sequences

W_n *"sensitization sequence" converges at some point to the ideal limit -up (the Angels' society) then all three limits of the* $u_n.v_n$, z_n *sequences a, b and the community, C, respectively forming a new-unique sequence, which converges in a* ***new*** hlp

Welfare can be measured, as the deviation from hlp ***suggested Equilibrium***

Tending toward an ideal (angels) situation, i.e the limit of the sensitization process, the win-win-win papakonstantinidis model is the limit-up of a continuous sensitization procedure, at any (A-B) bargainers symbolized by the three sequences', i.e

$$\lim_{n\to\infty} u_n \le \lim_{n\to\infty} v_n \le \lim_{n\leftarrow\infty} z_n$$

In their limit, we have:

$$\lim_{n\to\infty} u_n = \lim_{n\to\infty} v_n = \lim_{n\to\infty} z_n = \lim_{n\to\infty} W_n = 1{,}888..$$

Indeed,

You can imagine the successive steps towards sensitization as a series of sequence terms that converges to a limit

The boundaries of these sequences, since they represent "sensitization levels", also form a new "Win" sequence

We prove that this new sequence consists of their limits

as "sensitization sequences" converges to the ideal limit -up (the perfect society, or the society of angels) then all three limits of the $u_n.v_n$, z_n *sequences a, b and the community, C, respectively forming a new-unique sequence, which converges in a new L limit*

•••

LITERATURE

We introduce a three-player ultimatum game with three-options, which permits the responder to either penalize the proposer or to penalize a third party by rejecting offers. This allows for partially distinguishing rejections due to a retaliation motive driven by anger towards the proposer from rejections due to inequity aversion driven by feelings of envy towards a third party. Results from two experiments suggest that responders experience feelings of dissatisfaction and unfairness if their share is small in comparison to the proposer's share; anger, then, may trigger rejections towards the proposer. Responders also experience dissatisfaction and envy when third party shares exceed their own shares; however, in contrast to anger, envy does not trigger rejections and is dissociated from the decision to accept or reject an offer
. We conclude that acting upon anger is socially acceptable, whereas envy is not acceptable as a reason for action. Furthermore, we find that responders generally feel better after rejections, suggesting that rejections serve to regulate one's affective state.

The 3 Scientists[35] report results from two different settings of a three-player ultimatum game. Under the "Monocratic" rule, a player is randomly selected to make an offer to two receivers. Under the "Democratic" rule, all three players make a proposal, and one proposal is then randomly selected. A majority vote is required to implement the proposal in either setting. Although the two rules are strategically equivalent, different patterns of behavior emerge as the number of interactions increase. Under the "Monocratic" rule, proposers seem to be entitled to claim a larger share of the pie, and receivers are more likely to accept, than in the "Democratic" rule. We speculate that institutions allowing more participation in the process of collective choice lead to a more socially responsible behavior in individuals[36].

Short description, -the evolution of the bargain, through the time

[35] Gianluca Grimalda, Anirban Kar, Eugenio Proto (11 January 2008) **"On the value of participation: endogenous emergence of social norms in a three-player ultimatum game experiment"** International Review of Economics April 2008, Volume 55 Issue, 1-2 , pp 127–147

[36] Instructions for first block of three rounds You will play three rounds of the interaction under Rule 1.

An amount worth £10 is to be divided among your group. One of the three group members is drawn at random, and everyone is informed about whether she has been selected or/not The person who has been selected is asked to make a proposal. We shall refer to this person as the *proposer* throughout these instructions. The proposal is any amount of money *X* less than or equal to £10 that the proposer wants to keep for herself. The proposer may use any number up to the second decimal digit. The residual amount (10 – *X*) is to be divided equally between the other two group members. Once the proposer has made her decision, the other two group members are informed of the share of the stake allocated to them by the proposal. We shall refer to these people as the *receivers*. The receivers are then asked to either accept or reject the proposal. If both receivers reject the proposal, then everyone gets £0 each. In all other cases (at least one of them accept the proposal), then everyone gets the share determined by the proposal.

On gamesmen… *Ramzi Suleiman*	*Responder Feelings in a Three-Player Three-Option Ultimatum Game* *Arno Riedlz and Jana Vyrastekovax*	*Take it or leave it for something better? Responses to fair offers in ultimatum bargaining* *Rob M.A. Nelissen *, Dorien S.I. van Someren, Marcel Zeelenberg*	*The win-win-win papakonstantinidis model* *Papakonstantinidis la*	*Responder behavior*	*The bus-train syndrome*[37] *The marginal behavior in which a person chooses a bus position that he or she can manage within a route. After securing an individual position, the individual seeks to facilitate the one who did not secure a seat on the bus (a purely socially conscious, inherent behavior, with extremely extreme social behavior, the voluntary concession of the position that he had "conquered" particularly to those who appear to be suffering This sensitized-innate-behavior highlights the latent social sensitivity that*
An alternative model, termed 'economic harmony' in which we modified the individual's utility by defining it as a function of the ratio between the actual and aspired pay-offs, is proposed *The notion of equilibrium, is abandoned in favor of a new notion of 'harmony',*	*It addresses the **role of affect and emotions in shaping the behavior of responders in the ultimatum game.** A huge amount of research shows that players do not behave in an economically rational way in the ultimatum game, and emotional mechanisms have been proposed as a possible explanation. In particular, feelings of fairness, anger and envy are likely candidates as affective*	*It is investigated if responders accept a 50–50 split in a modified version of the ultimatum game, in which rejection yields a higher payoff (€7) than accepting the equal offer (€5). Therefore, the decision to accept the 50–50 split in this*	*The win-win perception: based on when each side of a dispute feels they have won. Since both sides benefit from such a scenario, any resolutions to the conflict are likely to be accepted voluntarily. The process of integrative bargaining aims to achieve, through cooperation, win-win outcomes* *Instead of,* *the "win-win-win*	*It is extended the standard ultimatum game to a three person game where the proposer chooses a three-way split of a pie and two responders independently and simultaneously choose to accept or reject the proposal. We investigate whether a responder perceives the other responder as a reference person. We do this by varying*	

[37] Papakonstantinidis LA (2018) "The bus syndrome as a pre-suppose of the win-win-win papakonstantinidis model – RESEARCH GATE, 2018 : The marginal behavior in which a person chooses a bus position that he or she can manage within a route. After securing an individual position, the individual seeks to facilitate the one who did not secure a seat on the bus (a purely socially conscious, inherent behavior, with extremely extreme social behavior, the voluntary concession of the position that he had "conquered" particularly to those who appear to be suffering This sensitized-innate-behavior highlights the latent social sensitivity that emerges under sterile individualism, which is not innate behavior but a defense against fantasy enemies, in a highly competitive environment

defined as the intersection of strategies, at which all players are equally satisfied. We showed that the proposed model yields excellent predictions of offers in the ultimatum game, and requests in the sequential common pool resource dilemma game. Strikingly, the predicted demand in the ultimatum game ***is equal to the famous Golden Ratio*** *(approx. 0.62 of the entire pie).*	*determinants. We* ***introduce a three-player ultimatum*** *game with three-options, which permits the responder to either penalize the proposer or to penalize a third party by rejecting offers. This allows for partially distinguishing rejections due to a retaliation motive driven by anger towards the proposer from rejections due to inequity aversion driven by feelings of envy towards a third party. Results from two experiments suggest that responders experience feelings of dissatisfaction and unfairness if their share is small in comparison to the proposer's share; anger, then, may trigger rejections towards the proposer. Responders also experience dissatisfaction and envy when third party shares exceed their own shares; however, in contrast*	*modified ultimatum game cannot be perceived as a self-interest act, as opposed to the standard game, in which acceptance may reflect resignation in the knowledge that the equal split is the best one can expect.*	*papakonstantinidis model" is-or, may be- an extension of the win-win model; based –not only-on when each side of a dispute feels they have won, but even more the two sides feel that their own community has also won, in the context of a social contract between them (moral contract, beyond the strict interpretation of the Law: that's the limit of the sensitization process toward the absolute social cohesion-the "angel's point*	*the other responder's payo_ in case the responder rejects. Hence, we explore whether reciprocal behavior towards the proposer is a_ected by the presence of the third player. In three treatments, the third player is either negatively affected, unaffected, or positively affected by the responder's choice to punish the proposer. We found that responders are very heterogeneous in their actions. Around one half of subjects submit strategies showing no concern for the other responder's payoffs. Another half of the subject pool submits strategies sensitive to the distribution of the pie among all three players. Preferences for equal splitting of the pie are*	

	to anger, envy does not trigger rejections and is dissociated from the decision to accept or reject an offer. We conclude that acting upon anger is socially acceptable, whereas envy is not acceptable as a reason for action.			*expressed by less than 10 percent of all responders.*	

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PART III

The win-win-win papakonstantinidis' implementation: SENSITIZATION

Introduction

After the American US Elections (NOE,2016) and the voting results in many EU countries (Austria, France, Poland, Hungary Poland) as well as, a number of referendums (the "BREXIT" case, the Scotland Referendum, the Greek Referendum (2015) show that people throughout the world are be moving from the "political correct" behavior[38] to an unexpected general behavior highlighting other priorities and other internal forces that were previously "under the carpet" (Greek Traditional expression): Nowadays the "tyranny of political correct" is a reality[39] The EXIT-POLE Companies cannot not predict the election results, while everywhere in the world, elected the outsiders politicians

*The win-win-win papakonstantinidis model" concerns **B**eing-**B**argaining-**B**ehaving: the **3B's** model*

This triple coincidence is achieved by the Sensitization process and is necessary because:

World society will have to accept it because there is no alternative, without causing social disorder

Different preferences converge on the subject of the flag because of greater knowledge creation

The implementation of the Sensitization raising process

3 separate processes are suggested

1. *Creating Knowledge*
2. *A (local) theme that unites Expectations [flag theme]*
3. *Steps to sensitization The Arnstein Scale*

Sensitization

Sensitization is a non-associative learning process in which repeated administration of a stimulus results in the progressive amplification of a response. Sensitization often is characterized by an enhancement of response to a whole class of stimuli in addition to the one that is repeated. For example, repetition of a painful stimulus may make one more responsive to a loud noise[40].

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[38] **ANDREAS ADRIANOPOULOS (2016/NOE)** "The end of the Political correct ANDREAS ADRIANOPOULOS Partner (Public Policy Fellow) Research Foundation's Woodrow Wilson Center in Washington (1998-9) and particularly the Institute Kenny for the former Soviet Union. He is a member of the Board of the Woodrow Wilson Center Alumni Association in Europe He conducts seminars and has lectured on Islamic revival issu es and pipelines at Harvard University, Stanford, Berkeley, Wisconsin, George Washington, Virginia and DC, at the US Department of State & Washington think tanks.

[39] Takis Michas (tyranny of political effect) "The tyranny of political correct"/ PROTAGON BLCK

[40] Shettleworth, S. J. (2010). Cognition, Evolution and Behavior (2nd Ed New York: Oxford.

The three poles*-instead of two- in a bargain (hpl...principle)*

i. The three poles' bargaining equilibrium: - the hpl..equilibrium is feasible

ii.

In each bargain / reaction/interaction there are basically three - separate actors sometimes hidden, such as social cohesion, the market, the school, the environment, culture, communication codes, (eg, People-Principles-Consumers: PAC ..., Teachers-Students-Parents: TSP, Social Cohesion ...) ***each of which tries to win, adopting mixed strategies, (win-win-win positions instead of usual win- win***

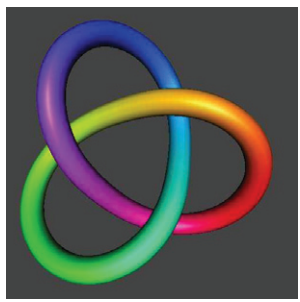
iii.

All three are absolutely necessary to complete the negotiation (either by agreement or by disagreement). Each of these persons has - from the negotiation itself - a point of disagreement (or otherwise a threat to the potential agreement of the other two and not a threat 1-1 respectively

iv. The "win-win-win papakonstantinidis" model can be considered an extension of the win-win model. Not only does each side of a dispute feel that they have won, but even more so both sides feel that their own community has also won, in context a social contract between them (moral convention, beyond its strict interpretation of the law: this is the limit of the process of raising awareness of total social cohesion - the "point of angels"

v.

This observation makes disagreement as a leading process of democracy, cooperation and social prosperity as the process of awareness-raising proceeds to minimize differences.



The model is a "triple pole" *continuous local bargaining's approach that could concern "the real assets of a region" (actors, entrepreneurs, politicians, work force of organizations, material and financial resources and regional culture of co-operation, communication and competition). The main hypothesis of this study is that development may be sighted as the output of the bargaining trends, inside the community. From this point of view, Local Development as a local management process tables a number of questions, mainly concerned on conflict resolution between the three power local poles. As the three poles are in a constant negotiations, then each of them should prevailed over the other two, thus introducing in the bargaining problem. Bargaining behavior must therefore be defined. The "win-win-win papakonstantinidis" conceptualization tries to find ways for the 3-poles bargaining conceptual equilibria, under conditions, thus maximizing expected utilities for all the involved parts in local decision making. Practically, it may supports that public involvement -in terms of "knowledge creation" and "pure individual strategies" is concerned with Rural Tourism and Rural Development. Involving local people in the development process round a local "Flag Theme" is therefore necessary. This study focuses on the sensitization process as the reaction to given information, which influences the socio-economic behavior in the local bargain. Public participation presupposes that a methodological approach could be applied in the rural area, by easy steps towards motivating local people and involving the Community. This methodological approach includes five steps In its main version, based on the "bottom-up" approach, the local "team-psychology" creation and the local people motivation, towards developing their place: a "new" behavior local standard may be resulted, such as each of the three rural tourism parts [local People, local Authorities and Consumers (P.A.C)] to win according to the win-win-win papakonstantinidis model. At last, two successful case studies concerned rural – community development due to rural tourism based on the win-win-win methodological process, are been analyzed in this presentation thus justified the above theoretical view.*

1st win-win-win papakonstantinidis principle

At each bargain-interaction there are basically three - separate actors sometimes hidden, such as social cohesion, school environment natural, environment, ethics, good practices
(eg, People-Principles-Consumers: PAC ..., Teachers-Students-Parents: TSP, Social Cohesion ...) each of which tries to win, adopting mixed strategies, (win-win-win positions instead of usual win- win
All three are absolutely necessary to conclude a bargain(either by agreement or by disagreement) Each of these persons has - from the bargain itself - a point of disagreement (or otherwise a threat to the potential agreement of the other two and not a threat 1-1 respectively
This observation makes disagreement a leading process of Democracy, cooperation and social prosperity as the sensitization process proceeds to

minimize differences.
Example: Trading between consumers and businesses is, in essence, a customer-business-society (CBS) agreement.
1. A customer may threat with disagreement if he finds that any partnership between the company and society may harm his interests
2. Society threatens to disagree if it finds that a potential consumer-
a role in
***The "win-win-win papakonstantinidis model"** Contribution*
peration to
side is
trying to win, through the point of disagreement with all the other "-per 2- possible deals"
4. The threat of disagreement over a possible collusion of the other two may lead the negotiation to collapse, depending on the negotiating power of the threat

According to the afore-mentioned analysis, paper contribution in the scientific thought (2008) should be summarized in introducing "the third "WIN" for the COMMUNITY (the third-part pole). According to my suggestion, COMMUNITY –the "C" factor- must participate in any bargain by its "bargainers' characteristics" (shares /utilities), thus adding the THIRD "WIN" in any two bargainers' win-win expectation between TWO (the METRON analysis or the THREE POLES analysis), like in other fields e. g philosophy, economy, creating an interactional flow. By introducing the THIRD POLE in the bargain, the crucial bargainers' QUESTION must be changed in:

What should be the best for me, taking into account that the other person (bargainer in a negotiation) should try for the best for himself –thus recognizing that the other person may be as clever as I am and, at the same time, taking into account that COMMUNITY, as the third or invisible part also participates by the "bargainers' characteristics" (shares/utilities)?

Win-win-win analysis methodology

The following methodology is adopted in points (Papakonstantinidis)

knowledge creation⇒ creating a "non conflict" behavior ⇒ inserting sensitization⇒ integrated information creation⇒ uncertainty due to negative entropy⇒ thus, smoothing potential conflicts⇒closing differences in the competitive bargain⇒payoff-utilities & shares, influencing behavior in the bargain /individual winning strategies influencing by a "new behavior" ⇒in the opposite, the more decisive, the more risk ,should derive more profit in a globalizing world but ⇒ inserting sensitization in the bargain⇒thus smoothing the conflict strategies taking into account the "C" factor ⇒ converting a bilateral "conflict" into a 3-part negotiation ⇒ leading to a "new" social perception , the win-win-win perception, including a real cooperation between negotiators, thus, carrying alongside a social market's perspective- the "INTERMEDIATE POSITION"

We use, on this, the stochastic process:

Stochastic process

A stochastic process is defined as a collection of random variables defined on a common probability space (Ω, F, P), Ω *is a sample space, F is σ-algebra*[41] *and P is a probability measure; and the random*

[41] Vestrup, Eric M. (2009). The Theory of Measures and Integration. John Wiley & Sons. p. 12 In mathematical analysis and in probability theory, a σ-algebra (also σ-field) on a set X is a collection: *Σ of subsets of X that includes* X itself, is closed under complement, and is closed under countable unions. The definition implies that it also includes the empty subset and that it is closed under countable intersections .If X = {a, b, c, d}, one possible σ-algebra on X is Σ = { ∅, {a, b}, {c, d}, {a, b,

variables, indexed by some set T, all take values in the same mathematical space S, which must be measurable with respect to some σ -algebra Σ

In other words, for a given probability space (Ω, F, P) *and a measurable space* (S, Σ)*, a stochastic process is a collection of* S *-valued random variables, which can be written as*

$$\{X(t) : t \in T\} \quad .$$

In many problems from the natural sciences a point $t \in T$ *had the meaning of time so* $X(t)$ *is a random variable representing a value observed at time* t

A stochastic process can also be written as $\{X(t) : t \in T\}$ *to reflect that it is actually a function of two variables,* $t \in T$ *and* $\omega \in \Omega$

In game theory, a stochastic game, introduced by Lloyd Shapley in the early 1950s, is a dynamic game with probabilistic transitions played by one or more players. The game is played in a sequence of stages. At the beginning of each stage the game is in some state. The players select actions and each player receives a payoff that depends on the current state and the chosen actions. The game then moves to a new random state whose distribution depends on the previous state and the actions chosen by the players. The procedure is repeated at the new state and play continues for a finite or infinite number of stages. The total payoff to a player is often taken to be the discounted sum of the stage payoffs or the limit inferior of the averages of the stage payoffs.

Stochastic two-player games on directed graphs are widely used for modeling and analysis of discrete systems operating in an unknown (adversarial) environment. Possible configurations of a system and its environment are represented as vertices, and the transitions correspond to actions of the system, its environment, or "nature". A run of the system then corresponds to an infinite path in the graph. Thus, a system and its environment can be seen as two players with antagonistic objectives, where one player (the system) aims at maximizing the probability of "good" runs, while the other player (the environment) aims at the opposite

c, d} }, where Ø is the empty set. In general, a finite algebra is always a σ-algebra. If {A1, A2, A3, ...} is a countable partition of X then the collection of all unions of sets in the partition (including the empty set) is a σ-algebra.

The ingredients of a stochastic game are: a finite set of players ***I*** *a state space* ***M*** *(either a finite set or a measurable space* ***(M,A)*** *for each player* $i \in I$ *an action set* S^i, *a transition probability* ***P*** *from* $M \times S$ *, where* $S = X_{i \in I} S^I$ *is the action profiles, to ,* ***M*** *where* $P(A|m,s)$ *is the probability that the next state is in* ***A*** *given the current state* ***m*** *and the current action profile* ***s****; and a payoff function* $g..from..M \times S..to..R^I$ *where the* $i-th$ *coordinate of* g, g^i, , *is the payoff to player* i *as a function of the state* m *and the action profile* s

The game starts at some initial state m_i *. At stage* t *players first observe* m_t, *then simultaneously choose actions* $s_t^i \in S^i$, *then observe the action profile* $s_t = (s_t^i)_i$, *and then nature selects* m_{t+1} *according to the probability* $P(\bullet | \ m_t, s_t)$. *A play of the stochastic game,* $m_{1...}, s_1 .....m_t ...s_t$, *defines a stream of payoffs* $g_{1...} g_2, ...$, *where .* $g_t = g(m_t, s_t)$

The 3-ple win-win-win approach:

What is the best for me(A), taking into account that bargainer (B) tries the best for him/her AND the Community (C) also tries for its best

In this case, at stage t *players first observe* m_t, *then simultaneously choose actions* $s_t^i \in S^i$, *then observe the action profile* $s_t = (s_t^i)_i$, *and then nature selects* m_{t+1} *according to the probability* $P(\bullet | \ m_t, s_t | m_{t'}, s_{t'})$. *A play of the stochastic game,* $m_{1...}, s_1 .....m_t ...s_t$, *defines a stream of payoffs* $g_{1...} g_2, ...$, *where .* $g_t = g(m_t, s_t)$ *for all triades, forming a triangle*

Information/ behavior & the bargaining problem (Knowledge transfer, information, behavior)

Paper conception is mainly based on Games Theory – especially on its "Non-Cooperative Games Theory's version by J. F Nash, 1950- in relation with the Modern Innovation Theory" - (M. M. Fischer, 2000)

M. I. T provides us with useful methodological tools as knowledge creation and knowledge transfer (Table 2)

The suggested win-win-win model

According to the above analysis, the book's contribution in the scientific thought (2007) should be summarized in introducing "the third WIN" or the third "person" in a two-party bargain, i. e the "C"

"invisible part, which should be the " Community interest" = "C" , thus taking part as "community" be present in every two-party bargain, claiming its own "share" from this

> *or, how to transform a "competition" into the absolute cooperation, taking into account the integrated information, coming from knowledge transfer AND the sensitization process in the community, thus maximizing bargainers utilities and the Community utility (Uc)*

for this, we analyze our proposal, through the ultimate sharing approach

•••

What the win-win-win papakonstantinidis model is?

The win-win perception: based on when each side of a dispute feels they have won. Since both sides benefit from such a scenario, any resolutions to the conflict are likely to be accepted voluntarily. The process of integrative bargaining aims to achieve, through cooperation, win-win outcomes

the "win-win-win papakonstantinidis model" is-or, may be- an extension of the win-win model; based –not only-on when each side of a dispute feels they have won, but even more the two sides feel that their own community has also won, in the context of a social contract between them (moral contract, beyond the strict interpretation of the Law: that's the limit of the sensitization process toward the absolute social cohesion-the "angel's point"

There is ongoing debate among Economists historians, and Information Specialists:

1. *As to what role the crash played in subsequent economic, social, and political events. The Economist argued in a 1998 article that the Depression did not start with the stock market crash[42], nor was it clear at the time of the crash that a depression was starting. They asked, "Can a very serious Stock Exchange collapse produce a serious setback to industry when industrial production is for the most part in a healthy and balanced condition?" They argued[43] that there must be some setback, but there was not yet sufficient evidence to prove that it would be long or would necessarily produce a general industrial depression of that of 1929[44]*

[42] "Economics focus: The Great Depression", The Economist (September 17, 1998)
[43] "Reactions of the Wall Street slump", The Economist (November 23, 1929)
[44]

2. *As to what the point on a crucial "turnover" of the capitalist economic model. In such a case, could we suggest "new forms" or new Equilibria? The answer is YES- Let's start from the COMMUNITY as an imaginative third player, in a bargain of two that means the COHESION of any type, around a FLAG THEME*

Since ***2002-08-14-the first presentation in Visby University-SW,*** *till now the "win-win-win papakonstantinidis model" seems to turn a lot of times, but remains in the same base:*
Generally, the philosophy of "Action-Reaction" could be the "Theory of all", especially in nowadays

Any living (not only human) "activity" is dominated by the "action-reaction Rule" Even the baby crying is a reaction against their parents to give more care to him/her

From this point of view, the "game theory" approach, and even more the "bargaining theory" may match to a new perception

On this "step" the "win-win-win papakonstantinidis model" is a concept for socialized human relations, taking into consideration the COMMUNITY's "profit" coming from any bargain between the two bargainers (A-B)[45]

"Community"-the "C" Factor participates-as a "third person"- at any bargain between 2

This participation is visible or invisible, defining the legal framework for negotiation for 2 persons involved in any bargain So far, Community involvement is invisible, neutral and ends in legislative intervention, eg labor law which defines the legal framework within the which employers and workers determine, for example, the remuneration of the latter

ends in legislative intervention, eg labor law which defines the legal framework within the which employers and workers build a relation for example, the payoff of the latter

In some of 2-persons bargains, the community participation is more visible, for example, to every 2-person financial negotiation, the Community (the State here) clearly participates in a "share" of this Negotiation However, this is not enough to describe how we imagine "community participation"

- Bone, James. "The beginner's guide to stock markets". The Times. London. Archived from the original on May 25, 2010. Retrieved January 29, 2012. The most savage bear market of all time was the Wall Street Crash of 1929–1932, in which share prices fell by 89 per cent.
- "Stock Market Crash of 1929". Encyclopædia Britannica. Retrieved January 29, 2012.

- Black Tuesday: The Wall Street Crash of 1929 (10-29) also known as the Stock Market Crash of 1929 or the Great Crash, is a major stock market crash that occurred in late October 1929. It started on October 24 ("Black Thursday") and continued until October 29, 1929 ("Black Tuesday"), when share prices on the New York Stock Exchange collapsed

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- Papakonstantinidis LA "Bargaining and Local Development" BOOK Edit, 2007 Dardanos SA
- https://www.researchgate.net/publication/330181167_Political_Economy_and_Decision_Making_Methodical_Reflections_on_the_WWW_Papakonstantinidis_Bargaining_Model

By this we mean the coincidence of the following

1. arbitration

2. Mediation

3. "Putting" the moral negotiation-free will

4. As the overall GLOBAL: Climate change behavior, towards the CSR Principles/free will-see at the scheme

Interaction[46] *does exist at any relation of live It's the payoff for "dealing with" the others' system Interaction is a kind of action that occur as two or more objects have an effect upon one another. The idea of a two-way effect is essential in the concept of interaction, as opposed to a one-way causal effect. A closely related term is interconnectivity, which deals with the interactions of interactions within systems: combinations of many simple interactions can lead to surprising emergent phenomena. Interaction has different tailored meanings in various sciences. Changes can also involve interaction*[47] *As any thought , any behavior, in any place, reacts with real human needs and therefore behaviors, let me study this reaction, by the prism of strategies, mainly individual strategies In such a system, conflict is the only concluding*

Suppose that any human reaction must have-it is forced to have- a social welfare step, has been launched-since 2002- an alternative price strategy approach: Any reactive, instant reflection winning strategy(DECISION) could be approached by the game theory-especially, the bargaining theory and its Nash win-win solution. [So, this let us to see human reaction as a game, especially as a part of the whole holistic equilibrium, under the [Nash hypothesis AND Pareto efficiency constraints] That is the "win-win-win papakonstantinidis model" Of course, the John Nash' game –non cooperative game theory with its famous N.E gives an answer But it is not enough for a meta-capitalist global society Capitalist perception has

[46]

- Card, Stuart K.; Thomas P. Moran; Allen Newell (July 1980). "The keystroke-level model for user performance time with interactive systems". Communications of the ACM. 23 (7): 396–410. doi:10.1145/358886.358895.
- Carlisle, James H. (June 1976). "Evaluating the impact of office automation on top management communication". Proceedings of the June 7-10, 1976, national computer conference and exposition on - AFIPS '76. Proceedings of the June 7–10, 1976, National Computer Conference and Exposition. pp. 611–616. of 'human–computer interaction' appears in references
- Suchman, Lucy (1987). Plans and Situated Action. The Problem of Human–Machine Communication. New York, Cambridge: Cambridge University Press. Retrieved 7 March 2015.
- Dourish, Paul (2001). Where the Action Is: The Foundations of Embodied Interaction. Cambridge, MA: MIT Press.
- Grudin, Jonathan (1992). "Utility and usability: research issues and development contexts". Interacting with Computers. 4 (2): 209–217. . Retrieved 7 March 2015.
- Chalmers, Matthew; Galani, Areti (2004). Seamful interweaving: heterogeneity in the theory and design of interactive systems. Proceedings of the 5th Conference on Designing Interactive Systems: Processes, Practices, Methods, and Techniques. pp. 243–252. . Retrieved 7 March 2015.
- Barkhuus, Louise; Polichar, Valerie E. (2011). "Empowerment through seamfulness: smart phones in everyday life". Personal and Ubiquitous Computing. 15 (6): 629–639.
- Rogers, Yvonne (2012). "HCI Theory: Classical, Modern, and Contemporary". Synthesis Lectures on Human-Centered Informatics. 5 (2): 1–129

[47] Human–computer interaction (HCI) researches the design and use of computer technology, focused on the interfaces between people (users) and computers. Researchers in the field of HCI both observe the ways in which humans interact with computers and design technologies that let humans interact with computers in novel ways. As a field of research, human–computer interaction is situated at the intersection of computer science, behavioral sciences, design, media studies, and several other fields of study

adopted the bi-polar system of thinking (black-white, 0-1, the religious "filioque" etc In such a system, conflict is the only concluding perception

In a post-capitalist system, or inside the capitalism, a third possibility may facilitate human and not only, relations, in the base of re-action

The launched "win-win-win papakonstantinidis model", may give some new ideas for a meta-capitalist economic organization cooperative bargaining game theory" has often been concerned with whether expected bargaining outcomes could be altered by certain contractions of the feasible set. There is strong theoretical support on both sides - while there are allocation rules that require that certain contractions of the feasible set are immaterial in terms of the predicted final outcome (Nash, 1950), there are also others that suggest that those very contractions should significantly alter the predicted outcome (Kalai-Smorodinsky, 1950). Nydegger and Owen (1974) provided empirical support for the former set of allocation rules by experimentally demonstrating that certain contractions of the feasible set leave the expected bargaining outcome unchanged. Since then the ineffectiveness of such contractions has never been questioned.[48] From this point of view, "reaction concept" meets with a number of the scientific fields as, Management, Marketing, Sociology, Decision Making, Strategy, History, folklore study, Psychology, Medicine, Biology, Biochemistry, the Science of Culture and Plants, the Science of livestock, Engineering, the Science of Electricity, Astronomy, Physics, Space Aeronautics, Philosophy, Arts, Scenography, the Art of Movie or Theatre Actors, Sculpture, Art, Painting, "Consumer Attitude, Brand Awareness, Brand Association, Perceived Quality and Brand Loyalty scales" are included in the "behavioral economics" From this point of view, it could be possible to see-alternatively-all these expressions [Consumer Attitude, Brand Awareness , Brand Association….) as a part of "reaction behavior" that matches the whole LIFE and its evolution In this frame, GAME THEORY seems to match better than any other, in your important question. A click forward, your question could be analyzed in the frame of the "bargaining theory, focusing on Nash solution-Nash Equilibrium As "competition" does not match any more to our "meta-capitalist era", a more "socialized economic environment" in a fairer world with more equal opportunities is feasible This does not a wish, it is the reality

The aim *of* <u>*the theoretical contribution*</u> *in this chapter may be is to highlight the "SENSITIZATION ability"(if it exists) that everyone of us either relates to refugees, or in countries, whether in claiming or even in our daily transactions It is time to stop looking only personal interest or "individual defense" in the form of the suggested "the win-win-win papakonstantinidis model" focusing on the development, particularly, of small villages and the SMEs networking, inside the total quality management*

In particular, the proposal deals with the collecting, classifying and comparing the theoretical material from various sources on the functioning of ***S****ocial* ***W****elfare* ***F****unction* ***(SWF),*** *towards building a strong case with logical and coherent arguments, towards the one Triple Pole* ***(A-B-COMMUNITY)*** *Equilibrium (TPE),*

[48] Any human on even more, living activity is included in the "reactive decision, or behavior For example, When a baby cries, he actually reacts with his parents, drawing their attention to him.

*different from N.E, that leads to the **S**ocial **B**argaining **S**olution" **(SBS)** and coincide with the "optimal" **C**ommunity **C**ollective **C**hoice **(CCC)** in order to create a highly versatile tool, "the win-win-win papakonstantinidis model" of well-formed formulas **(wffs),***

*Coming from its applications, the ambitious is to create a series of new policy' tools to strengthen social welfare, despite the "impossibility theorem" (K. Arrow 1955) I supported with arguments, that through "a simultaneous, reflective, strong effective (Pareto), Flexible, fair (Rawls), collective (Amartya Sen) Social Welfare Function **(SWF)** in the frame of a General Equilibrium (Walras), **incompatibilities** that incorporate the values of equality, justice, harmony, symmetry, and the hypothesis, of self-organization (Papakonstantinidis) as well as the hypothesis of self-supporting bargaining solution in a community level, should exist and be the only one: the win-win-win equilibrium Win-win-win papakonstantinidis situation is proposed as an extension of both "non-cooperative game"[49] and the principal–agent problem (also known as agency dilemma or theory of agency)[50] under the constrains put by the five theorems Especially, Pareto efficiency , as an economic state where resources are allocated in the most efficient manner Pareto efficiency is obtained when a distribution strategy exists where one party's situation cannot be improved without making another party's situation worse. Pareto efficiency does not imply equality or fairness. Also known as "Pareto optimality" (INVESTOPEDIA) Also, the theory of justice focuses on the "veil of ignorance", along with the original position, is a method of determining the morality of a certain issue (e.g., slavery) based upon the following thought experiment: parties to the original position know nothing about their particular abilities, tastes, and position within the social order of society. When such parties are selecting the principles for distribution of rights, positions, and resources in the society they will live in, the veil of ignorance prevents them from knowing about who they will be in that society.*

SENSITIZATION

[49] **J.F. Nash (1951)** "the non-cooperative game theory- Econometrica, 1951

[50] **INVESTOPEDIA –DEFINITION** conflict of interest inherent in any relationship where one party is expected to act in another's best interests The problem is that the agent who is supposed to make the decisions that would best serve the principal is naturally motivated by self-interest, and the agent's own best interests may differ from the principal's best interests. The agency problem is also known as the "principal–agent problem."-also, see at **Joseph E. Stiglitz and Andrew Weiss (1981)** Credit Rationing in Markets with Imperfect Information *The American Economic Review* Vol. 71, No. 3 (Jun., 1981), pp. 393-410

Definition

SENSITIZATION

……

According to *Eric Kandel* [51]*, Sensitization is a non-associative learning process in which repeated administration of a stimulus results in the progressive amplification of a response.*

The neural basis of behavioral sensitization is often not known, but it typically seems to result from a cellular receptor becoming more likely to respond to a stimulus. Several examples of neural sensitization include:

Electrical or chemical stimulation of the rat hippocampus causes strengthening of synaptic signals, a process known as long-term potentiation or LTP of AMPA receptors is a potential mechanism underlying memory and learning in the brain.

In "kindling", repeated stimulation of hippocampal or amygdaloid neurons in the limbic system eventually leads to seizures in laboratory animals. After sensitization, very little stimulation may be required to produce seizures. Thus, kindling has been suggested as a model for temporal lobe epilepsy in humans, where stimulation of a repetitive type (flickering lights for instance) can cause epileptic seizures. Often, people suffering from temporal lobe epilepsy report symptoms of negative effects such as anxiety and depression that might result from limbic dysfunction.

In "central sensitization," nociceptive neurons in the dorsal horns of the spinal cord become sensitized by peripheral tissue damage or inflammation. This type of sensitization has been suggested as a possible causal mechanism for chronic pain conditions. The changes of central sensitization occur after repeated trials to pain. Research from animals has consistently shown that when a trial is repeatedly exposed to a painful stimulus, the animal's pain threshold will change and result in a stronger pain response. Researchers believe that there are parallels that can be drawn between these animal trials and persistent pain in people. For example, after a back surgery that removed a herniated disc from causing a pinched nerve, the patient may still continue to "feel" pain. Also, newborns who are circumcised without anesthesia have shown tendencies to react more greatly to future injections, vaccinations, and other similar procedures. The responses of these children are an increase in crying and a greater hemodynamic response (tachycardia and tachypnea).

As people throughout the world are be moving from the "political correct" behavior to an unexpected general behavior highlighting other priorities and other internal forces that were previously "under the carpet"

[51]Eric Kandel was one of the first to study the neural basis of sensitization, conducting experiments in the 1960s and 1970s on the gill withdrawal reflex of the seaslug Aplysia. Kandel and his colleagues first habituated the reflex, weakening the response by repeatedly touching the animal's siphon. They then paired noxious electrical stimulus to the tail with a touch to the siphon, causing the gill withdrawal response to reappear. After this sensitization, a light touch to the siphon alone produced a strong gill withdrawal response, and this sensitization effect lasted for several days. (After Squire and Kandel, 1999[2]). In 2000, Eric Kandel was awarded the Nobel Prize in Physiology or Medicine for his research in neuronal learning processes.

(Greek Traditional expression): The "win-win-win papakonstantinidis model" must succeed in different fields: welfare economics, ethics, moral aggregation[52] *in order to* ***a.*** *have a good appreciation of the way that both positive economics and value judgments enter into the formulation of economic policy; b. understand the link between the relevant value judgments and major ethical theories that have a bearing on them, and feel comfortable about the role of these theories in welfare economics;* ***c.*** *be able to analyze and comment on economic policy texts and debates that combine ethics and economics issues*

We can see the social welfare, as the limit of the Sensitization Process, especially focused on social welfare based on the incompatibilities of other theorems, especially the Impossibility Theorem (Kenneth Arrow, 1951) "Non-Cooperative Game" Theory and the bargaining problem, thus synthesizing, the suggested h^*_{lp} *harmony-equilibrium in a new proposal of bargaining behavior A new approach on "social bargain behavior" with more grades of 'action-reaction' freedom is examined. The same competitive market rules, could provide humanity by a quite different behavior choice, toward the absolute cooperation, the upper limit of the sensitization process-sequence, for producing "social welfare results" especially in LDC, by peer-pressure operation*

The cultural darkness which may lead the predominance of "political rationality" and of course the related laws that have been adopted by various European countries and "progressive" parties All this ***literally trivialize*** *any notion of free speech and artistic expression These developments should seriously preoccupy everyone -in the basis of best intent trying to impose commonplace as the necessary condition for a happy society. Because when we reach the point of accepting these indifferently, without complain An example can be given from the case of "John Adams's 1991 opera, "The Death of Klinghofferby" the Met*[53] *that postponed due to "political correct"*[54] *reasons It seems that peoples' behavior is changing in a very interesting "transition CHOICES period" people in a very interesting transition period, but to everyone touts a simple message.* ***The people are tired of the "politically correct" choices and seek initiatives without myopic blinders*** *Care that the ordinary people of a country without special favors to selected social groups* **(***Andreas Andrianopoulos 2016/NOE)* [55] ***"..****We interact with floating signifiers every day. When a coworker raises their hand in a staff meeting and says, "Our office needs to become a better* community*," **everyone else has an*** **idea** ***in their heads of "what "community" means, but any consensus (of three-part dealer) on the group's definition is only*** assumed ***implicitly".*** *Consider the way politicians refer to ideas like "hope" or "freedom." What do "community," "hope," and "freedom"* mean*? It depends on who you ask. I think that the term "political correctness" may be one of the emptiest signifiers of our time This article gives an alternative (I believe) search of the concept of "social welfare" focusing on the development of*

[52] Kaushik Basu; S M Ravi Kanbur; Amartya Sen (2009) "Arguments for a better world. Vol. 1, Ethics, welfare and measurement : essays in honor of Amartya Sen" Oxford ; New York : Oxford University Press, 2009.

[53] Metropolitan Museum of Arts (USA)

[54] "political correct" EXAMPLE: John Adams's 1991 opera, "The Death of Klinghoffer"—a dramatization of the 1985 Achille Lauro hijacking, during which members of the Palestine Liberation Front murdered the Jewish-American businessman Leon Klinghoffer—was beginning to fade. When the opera was first seen in New York, at BAM, in 1991, it sparked outrage in onlookers who felt that it unduly favored the Palestinian point of view, not least because the score begins with a lamenting chorus of Palestinian exiles ("Israel laid all to waste") The opera of Adams (first time in 1991) and had, as expected, an adventurous course, particularly in the US. I will not comment here opera of Adams

[55] ANDREAS ADRIANOPOULOS (2016/NOE) "The end of the Political correct

small villages and the SMEs networking, inside the total quality management (TQM) During the 2 centuries (18th to 21st centuries) industrial revolution has changed our perception of cosmos, life, relations etc, thus leading in conflict, but over the second half of the 20th century, the continuous transformation of the world's population from rural to urban have been seen (Wilkinson, 1991; Ramonet, 2000) and this change is likely to continue in decades during the 21st century, directly combined with the "sustainability" of development.

The frame is defined by what we call "the bargaining problem" which provides us with the strategic material of "trends" alongside the network, by forming new equilibrium points, new balances, or destroying the existing, doing step-by-step new networks or transforming the existing ones. By its turn, bargaining problem is depended on both "instant reflections" and pure individual or SMES "winning strategies" based on "information given" in relation with "expectations". By its turn, information given may be the "output" of knowledge creation, according to the "New Innovation Theory", influencing social behaviour and by this, individual strategies. For this, Capacity building as Factor of Networking SMES towards local development, is analyzed

1. *capacity building is about "stimulating learning" (Moseley, 2003)*
2. *learning by doing-but not in isolation- is often extremely effective*
3. *the challenge for capacity builder is to create situations in which learning occurs as a by-product of someone responding to a challenge*

From this point of view, "sensitization" –especially in rural areas might include a sustained and sustainable process of economic, social, cultural and environmental change, designed to enhance the long term well-being of the whole by networking (Wilkinson, 1991, Swarebrooke, 1999, Papakonstantinidis, 2002, Moseley, 2003).

Among different definitions on "capacities building", the paper starts this dialogue from the definitions of capacity building provided by professor Moseley (2003):

a) *"Increasing the stock of skills, knowledge and readiness to act."*
b) *"Promoting the development of social capital (institutions and networks etc.) in order to produce positive social outcomes."*
c) *Networking SMES around a FLAG THEME in the small place*

- *As it concerns the first definition, "Readiness to act" relates to a host of other things to do with motivation confidence, resources, the removal of constraints etc*

- *The second definition includes reference to the purpose of capacity building and it also states unambiguously that capacity building is about increasing one of the "four capitals" (the social capital) whereas it is arguable that it is also concerned with enhancing human capital, i.e individual people and not just the "glue" that binds them.*

- *The Third DEFINITION, ie "networking" may lead to "coalitions" around a flag theme, thus promoting the integrated and endogenous development, at local level*

"Win-win-win", Welfare Economics, the Impossibility Theorem (Arrow) the Incompleteness Theorem (Gödel) Pareto Efficiency, Nash Equilibrium

SENSITIZATION PROCESS

Literature (Reinsmann, Fischer,2002 & others) introduced various processes of "knowledge conversion" based on the proven and "built" information systems incorporated in an organization. Possible cases among different types of knowledge produce the four (4) major processes of knowledge conversion : (1) Tacit knowledge to tacit knowledge produces sympathized knowledge (socialization) (2) Tacit knowledge to codified knowledge produces conceptual knowledge (externalization) (3) Codified knowledge to tacit knowledge produces procedural knowledge (internalization) (4) Codified knowledge to codified knowledge produces systemic knowledge (combination)

Each of these processes of "knowledge conversion" corresponds [1-1] to a specific type of information (Papakonstantinidis 2003) i. e ,

- *Social Information-Sensitization*
- *External Information- Participation*
- *Internal Information-Involvement*
- *Combined Information-Networking*

Type of Knowledge-1	Type of Knowledge-2	Synthesis	Resulted Behavior
tacit	tacit	Sympathetic	Socialization
tacit	codified	Conceptual	Externalization
codified	tacit	Procedural	Internalization
codified	codified	Systemic	Networking
sympathetic	systemic	Conceptual	Sensitization
systemic	systemic	Procedural	**Strategic**

Papakonstantinidis, 2003

Papakonstantinidis, 2003

ASSUMPTIONS

For this we predicted that:

1. *A Descriptive Psychology DP (Ossorio P.G 1995) conceptual framework with Bergner notes/ comments 1, 2) in relation with Applied Behavioral Analysis (ABA)* ***and*** *individual deliberative*

and consistent rational choice's perception (Thomas S. Ulen 1999) emphasizing the "Instrumental Rationality" (Weber M 1910/1978) and J. F. Nash,. 1950 & 1951) could satisfactory interpret bargaining behavior, inside the community, and thus be helpful for drawing paper's conclusions and formulating our proposals

2. *There is interaction between behavior and bargain. Behavior occurs in any reaction-bargain. There is no bargain without behavior. There is no behavior without interaction/ bargain (Papakonstantinidis, 2011)*
3. *The main hypothesis is that development (especially, local development) may be sighted as the output of the bargaining trends.*
4. *Each of the three poles interacts with other within the bargain*
5. *Bargainers Decisions are taken into consideration of conditional probability: In probability theory, the "conditional probability of A given B" is the probability of A if B is known to occur*[56] *(Bayesian Anal)*
6. *Each of the three (3) power poles seeks maximum benefit, from their actions, making-for this purpose- their best /optimal instant reflection individual winning strategies (instrumental rationality- Nash 1950). Otherwise there is not a bargain between the poles*
7. *Social interactions regularly lead to mutually beneficial transactions that are sometimes puzzling*
8. *Bargaining is strongly correlated with bargainers behavior* ***[Xiao – Ping Chen and Chao C. Chen*** *(2010), Zhang J. and alle (2012)]*
9. *We could imagine the intra-community relations as a continuous bargain between 3 by 2- It is rather a dynamic "winning strategies instant reflections" game, based on competitive interaction relations*

[56] Bayes Theorem: is a method of incorporating new knowledge into an existing estimate of the value of a variable so that the uncertainty in this value is reduced by the new knowledge. The theorem gives the relationship between the probabilities of *A* and *B*, *P*(*A*) and *P*(*B*), and the conditional probabilities of *A* given *B* and *B* given *A*, *P*(*A* | *B*) and *P*(*B* | *A*).In probability theory, the "**conditional probability** of *A* given *B*" is the probability of *A* if *B* is known to occur... $P(A/B) = \frac{P(A \cap B)}{P(B)} \quad p(B) \neq 0$

10. *All players have complete information about the game being played.- J. F. Nah, "instrumental rationality", 1950*
11. *Each player has a subjective probability distribution over the alternative possibilities – (Harsanyi, 1967),*
12. *If a type is associated with several states but cannot distinguish between the states, it assigns a probability distribution over the set of types. If a type is associated with only one state, then that type believes with certainty that it is in that state (Dunford Michael 1988)*
13. *All individuals are indifferent between any two probability distributions over social states -Pareto efficiency*[57] *(Pareto, 1916 & Stiglitz Joseph E, 1987)*
14. *Sensitization is a form of knowledge and at the same time a practical information which could be taught, thus influence (among the others) the human behavior (Papakonstantinidis, 2007 coming from 20 years' experience on the Leader EU Program application in Greece)*

•••

SENSITIZATION RESEARCH-CHAOS THEORY

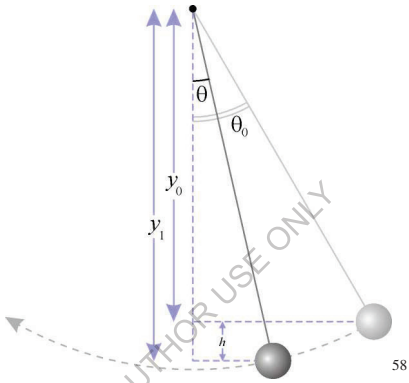
From pendula to chaos theory

[57] In a Pareto efficient economic system no allocation of given goods can be made without making at least one individual worse off

PENDULA

A double-rod pendulum animation showing chaotic behavior Starting the pendulum from a slightly different initial condition would result in a completely different trajectory. The double-rod pendulum is one of the simplest dynamical systems with chaotic solutions.

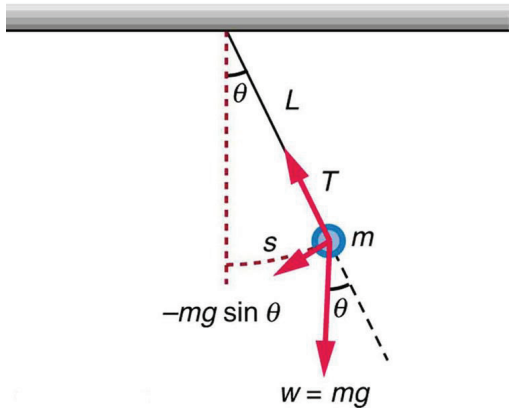
PENDULUM SIMPLE



A simple pendulum has a small-diameter bob and a string that has a very small mass but is strong enough not to stretch appreciably. The linear displacement from equilibrium is , the length of the arc. Also shown are the forces on the bob, which result in a ***net force of*** $-mg.\times.s.i.n..\theta$ ***toward the equilibrium position—that is, a restoring force.***

58

- Επίσημη μονάδα μέτρησης της γωνιακής ταχύτητας είναι το $1s^{-1}$,
- Ο χρόνος που χρειάζεται το κινητό για να εκτελέσει μία πλήρη περιστροφή ονομάζεται **περίοδος** της κυκλικής κίνησης και συμβολίζεται συνήθως με το κεφαλαίο Τ. Μονάδα της περιόδου στο S.I. είναι το δευτερόλεπτο (s). Ισχύει: $T = \frac{2\pi}{\omega}$ and Centripetal power : $F_c = \frac{mv^2}{R}$



Pendulums are in common usage[59]*. Some have crucial uses, such as in clocks; some are for fun, such as a child's swing; and some are just there, such as the sinker on a fishing line. For small displacements, a pendulum is a simple harmonic oscillator. A* ***simple pendulum*** *is defined to have an object that has a small mass, also known as the pendulum bob, which is suspended from a light wire or string, such as shown above Exploring the simple pendulum a bit further, we can discover the conditions under which it performs simple harmonic motion, and we can derive an interesting expression for its period. We begin by defining the displacement to be the arc length* ***s***

(The weight ***mg*** *has components* $mg..\cos..\theta$ *along the string and* $mg..s.i.n..\theta$ *tangent to the arc.) Tension in the string exactly cancels the component* $mg..\cos..\theta$ *parallel to the string. This leaves a net restoring force back toward the equilibrium position at* $\theta = 0$ Then,

$$F \approx -mg\theta$$

The displacement ***s*** *is directly proportional to* θ *When is expressed in radians, the arc length in a circle is related to its radius* ***L****in this instance) by:*

[59] https://opentextbc.ca/physicstestbook2/chapter/the-simple-pendulum/

$$s = L\theta ... so..that$$

$$\theta = \frac{s}{L}$$

$$for..small..angles,..the..ex.pression..of..the..restoring..force..is$$

$$F \approx \frac{-mg}{L} s....of..the..for,..of...F = -kx$$

where the force constant is given by $k = \frac{mg}{L}$ *and the displacement is given by* $x = s$

For angles less than about 15º the restoring force is directly proportional to the displacement, and the simple pendulum is a simple harmonic oscillator.

Using this equation, we can find the period of a pendulum for amplitudes less than about 15º For the ***simple pendulum:***

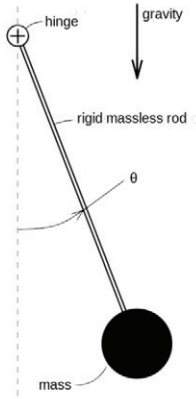
$$T = 2\pi\sqrt{\frac{m}{k}} = 2\pi\sqrt{\frac{m}{mg/L}}$$

…and thus,

$$T = 2\pi\sqrt{\frac{L}{g}}$$ [60]

A classic, extensively studied nonlinear problem is ***the dynamics of a pendula***[61] *under the influence of gravity. Using Lagrangian mechanics, it may be shown that the motion of a*

[60] Physics - Raymond A. Serway, τόμος I



pendulum can be described by the dimensionless nonlinear equation

$$\frac{d^2\theta}{dt^2} + s.i.n.(\theta) = 0\,,$$

Where

t = the.."incentive's..gravity"..or..how.."strong"it..is
θ = the..angle..the..pendulum..forms..with..its..position...or,..finding..out
how...directly..or..indirectly..sensitization....is..toward..a..specific..population..group

One approach to "solving" this equation is to use $\frac{d\theta}{dt}$ *as an integrating factor, which would eventually yield*

$$\int \frac{d\theta}{\sqrt{C_o + 2\cos(\theta)}} = t + C_1$$

which is an implicit solution involving an elliptic integral.

---

[67] a weight hung from a fixed point so that it can swing freely backward and forward, especially a rod with a weight at the end that regulates the mechanism of a clock.

Another way to approach the problem is to ***linearize any nonlinearities*** *(the sine function term in this case) at the various points of interest through Taylor expansions. For example, the linearization* $\theta = 0$ *, called the small angle approximation, is*

$$\frac{d^2\theta}{dt^2} + \theta = 0$$

since $s.i.n.(\theta) \approx \theta..for..\theta \approx 0$ *This is a simple harmonic oscillator corresponding to oscillations of the pendulum near the bottom of its path.*

Another linearization would be at $\theta = \pi$ [62] *corresponding to the pendulum being straight up:*

$$\frac{d^2\theta}{dt^2} + \pi - \theta = 0$$

since $s.i.n.(\theta) \approx \pi..for..\theta \approx \pi$

Also,

It is possible to get a value of $\pi.(pi)$ *using a pendulum. Well, you need a few other things. There is a connection between* $\pi.(pi)$ *and the gravitational field* g *The period of a pendulum (with a small amplitude) and length* L *is:*

$$T = 2\pi\sqrt{\frac{L}{g}}$$

Further, it seems that the period of a pendulum with a length of 1 meter is 2 seconds. This would mean that $\pi.(pi)$ *squared would be* g *(the gravitational field in* N/kg *which it is.*

Indeed,

$\pi.(pi)$	*3,14159*	$\pi.(pi)^2$ =*9,8695…*

[62] See at appendix

Gravity (g_n)	*9.80665 m/s²*	

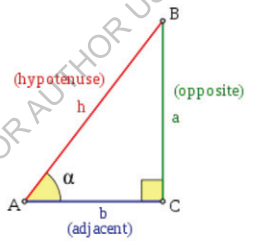
$$\pi^2 = gn...???$$

the more of a circle you make your pendulum trace out, the worse *your approximation will be. Circles kill* $\pi.(pi)$

That is just a coincidence. NO! It's not. It's not magic either. Well, it's not magic *but is it's liked as magical*[63].

Scientists are going to measure the gravitational field g_n *using some arbitrary distance units (not meters). Next, the period of a pendulum is measured, and record the length in these same pendulum and record the length in these same non-meter distance units From those two experiments*[64] $\pi.(pi)$ *will be calculated*

$sin^2\theta + cos^2\theta = 1$



Proof
Pythagorean Theorem

[63] Paul Taylor(2017) Measuring π with a pendulum Posted October 12, 2017 in Blackboard Bold
[64] https://www.wired.com/2013/03/can-you-determine-pi-with-a-pendulum/

$$a^2 + b^2 = h^2$$

$$\frac{a^2}{h^2} + \frac{b^2}{h^2} = \frac{h^2}{h^2}$$

$$\left(\frac{a}{h}\right)^2 + \left(\frac{b}{h}\right)^2 = 1$$

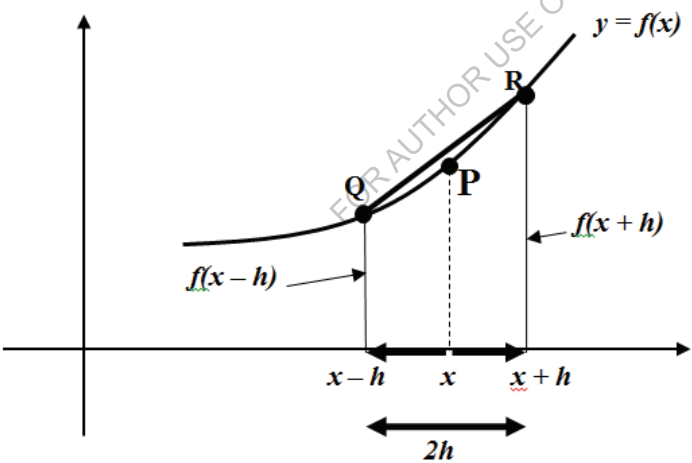
$$\frac{a}{h} = s.in\,\theta, \ldots \frac{b}{h} = c.os\,\theta, \ldots . so,$$

$$\left(s.in\,\theta\right)^2 + \left(c.os\,\theta\right)^2 = 1 \ldots . finally, \ldots . s.in^2\theta + c.os^2\theta = 1$$

$$(\sin x)' = \cos x = \sin\left(x + \frac{\pi}{2}\right)$$

Hospital Rule

Proof[65]



Gradient of ***chord QR*** *is an approximation to the gradient of the* ***tangent at P****.*

$$\text{The gradient of QR} = \frac{\mathbf{f(x+h) - f(x-h)}}{\mathbf{2h}}$$

[65] https://www.quora.com/How-do-I-prove-that-the-derivative-of-sin-x-is-cos-x

$$\lim_{x\to\infty}\frac{s.in.x}{x}=\lim_{x\to\infty}\frac{c.os.x}{1}=\frac{1}{1}=1$$

Hospital..Rule

Gradient at P = $\lim_{h\to 0}\dfrac{f(x+h)-f(x-h)}{2h}$

If y = sin x then y ′ = $\lim_{h\to 0}\dfrac{\sin(x+h)-\sin(x-h)}{2h}$

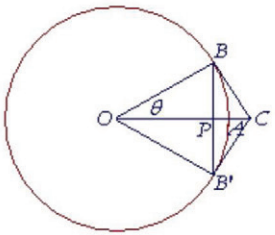
$$=\lim_{h\to 0}\frac{\sin x\cosh+\cos x\sinh-\sin x\cosh+\cos x\sinh}{2h}$$

$$=\lim_{h\to 0}\frac{2\cos(x)\ \sin(h)}{2h}$$

This is much easier for students to follow.

$$=\cos x\times\lim_{h\to 0}\frac{\sin(h)}{h}$$

$$=\cos x\times 1 \quad \text{if } x \text{ is in radians!}$$



$$\lim_{\theta\to 0}\frac{\sin\theta}{\theta}=1.$$

$$\frac{d}{dx}\sin x=\cos x$$

$$\frac{d}{dx}\cos x=-\sin x$$

Taylor series

$$f(a) + \frac{f'(a)}{1!}(x-a) + \frac{f''(a)}{2!}(x-a)^2 + \frac{f'''(a)}{3!}(x-a)^3 + \cdots,$$

$$\sum_{n=0}^{\infty} \frac{f^{(n)}(a)}{n!}(x-a)^n.$$

$$\sin x = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \ldots$$

$$cosx = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \ldots$$

$$(\sin x)' = \cos x = \sin\left(x + \frac{\pi}{2}\right)$$

There is a connection between $\pi.(pi)$ *and the gravitational field* g *The period of a pendulum (with a small amplitude) and length* L *is:*

$$T = 2\pi\sqrt{\frac{L}{g}}$$

Using a pendulum in an attempt to find ***<u>without using circles is cheating a bit:</u>*** *surely a pendulum's swing time depends on because it moves along the arc of a circle? Well, no. In fact the opposite is true. I lied a bit when I said the time doesn't depend on how far back you pull the pendulum. The formula above is only an approximation for small initial angles, when a pendulum approximates simple harmonic motion. The full formula is this:*

$$T = 2\pi\sqrt{\frac{l}{g}}\left(1 + \left(\frac{1}{2}\right)^2 s.in^2\frac{\theta_o}{2} + \left(\frac{1*2}{2*4}\right)s.in^4\frac{\theta_o}{2} + \left(\frac{1*3*5}{2*4*6}\right)^2 s.in^6\frac{\theta_0}{2}.....\right) =$$

$$= 2\pi\sqrt{\frac{l}{g}} * \sum_{n=0}^{\infty}\left(\left(\frac{(2n)!}{(2^n * n!)^2}\right) * s.in^{2n}\frac{\theta_o}{2}\right)$$

In the case that…

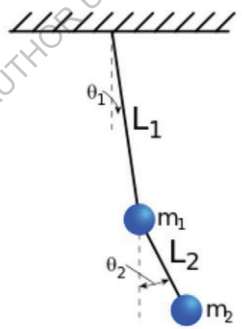
$$\sum_{n=0}^{\infty}\left(\left(\frac{(2n)!}{\left(2^n * n!\right)^2}\right) * s.in^{2n}\frac{\theta_o}{2}\right) = 1.....then,$$

$$T = 2\pi\sqrt{\frac{L}{g}}$$

⌂

Double pendulum

Lorenz attractor



A double pendulum consists of two pendulums attached end to end

Linear and not linear mapping (function)

In mathematics, a linear map (or linear function) f(x) is one which satisfies ***both of the*** *following properties:*

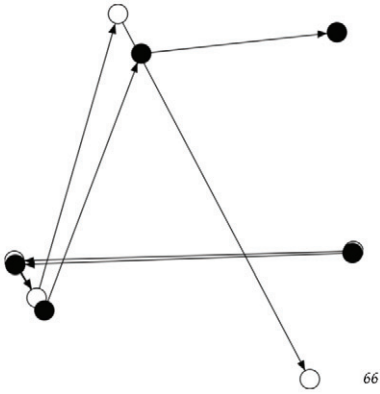
Additivity (or superposition) principle: $f(x+y)=f(x)+f(y)$;

Homogeneity: $f(ax)=af(x)$

…….

Nonlinear algebraic equations*, which are also called polynomial equations, are defined by equating polynomials (of degree greater than one) to zero. For example,*

$$x^2+x-1=0$$



66

*In mathematics, a **nonlinear system** is a system that is not linear—i.e., a system that does not satisfy the superposition principle[67] Less technically, a nonlinear system is any problem where the variable(s) to solve for cannot be written as a linear sum of independent components. A non-homogeneous system, which is linear apart from the presence of a function of the independent variables, is nonlinear according to a strict definition, but such systems are usually studied alongside linear systems, because they can be transformed to a linear system as long as a particular solution is known.*

Dynamical systems

Dynamical systems theory is an area of mathematics used to describe the behavior of the complex dynamical systems, usually by employing differential equations or difference equations. *When differential equations are employed, the theory is called continuous dynamical systems. From a physical point of view, continuous dynamical systems is a generalization of classical mechanics, a generalization where the equations of motion are postulated directly and are not constrained to be Euler–Lagrange equations of a least action principle. When difference equations are employed, the theory is called discrete dynamical systems. When the time variable runs over a set that is discrete over some intervals and continuous over other intervals or is any arbitrary time-set such as a cantor set, one gets dynamic equations on time scales. Some situations may also be modeled by mixed operators, such as differential-difference equations.*

---

[66] The map defined by $x \to 4\,x\,(1-x)$ and $y \to (x+y) \bmod 1$ displays sensitivity to initial x positions. Here, two series of x and y values diverge markedly over time from a tiny initial difference

[67] Boeing, G. (2016). "Visual Analysis of Nonlinear Dynamical Systems: Chaos, Fractals, Self-Similarity and the Limits of Prediction". Systems. 4 (4): 37.

This theory deals with the long-term qualitative behavior of dynamical systems, and studies the nature of, and when possible the solutions of, the equations of motion of systems that are often primarily mechanical or otherwise physical in nature, such as planetary orbits and the behavior of electronic circuits, as well as systems that arise in biology, economics, and elsewhere. Much of modern research is focused on the study of chaotic systems[68].

CHAOS THEORY DEFINITION[69]

***Chaos" means "a state of disorder". More precisely, Chaos theory** is a branch of mathematics focusing on the behavior of dynamical systems that are highly sensitive to initial conditions*

However, in chaos theory, the term is defined more precisely. Although no universally accepted mathematical definition of chaos exists, a commonly used definition originally formulated by Robert L. Devaney says that, to classify a dynamical system as chaotic, it must have these properties:

1. ***it must be sensitive to initial conditions,***
2. ***it must be topologically transitive,***
3. ***it must have dense periodic orbits.***

In some cases, the last two properties in the above have been shown to actually imply sensitivity to initial conditions. In these cases, while it is often the most practically significant property, "sensitivity to initial conditions" need not be stated in the definition[70].

From the other hand, we defined the sensitization process as a "non-associative learning process in which repeated administration of a stimulus results in the progressive amplification of a response"

[68] https://en.wikipedia.org/wiki/Dynamical_systems_theory

[69] 1972 Predictability: Does the Flap of a Butterfly's Wings in Brazil Set Off a Tornado in Texas? American Association for the Advancement of Sciences; 139th meeting

[70]

- Hasselblatt, Boris; Anatole Katok (2003). A First Course in Dynamics: With a Panorama of Recent Developments. Cambridge University Press.
- Elaydi, Saber N. (1999). Discrete Chaos. Chapman & Hall/CRC. p. 117.
- Basener, William F. (2006). Topology and its applications. Wiley. p. 42.
- Vellekoop, Michel; Berglund, Raoul (April 1994). "On Intervals, Transitivity = Chaos". The American Mathematical Monthly. 101 (4): 353–5.
- Medio, Alfredo; Lines, Marji (2001). Nonlinear Dynamics: A Primer. Cambridge University Press. p. 165. .
- Ovchinnikov, I.V. (March 2016). "Introduction to Supersymmetric Theory of Stochastics". Entropy. 18 (4): 108.

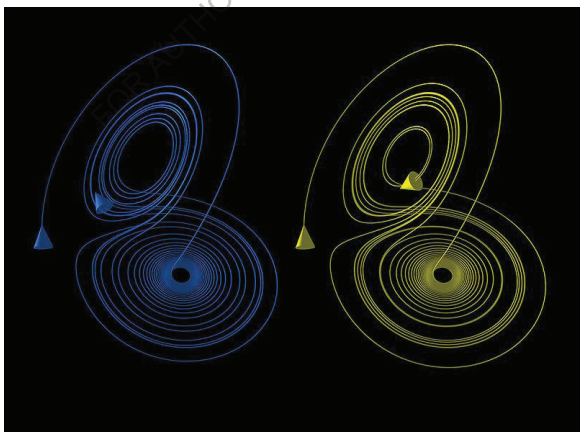
The neural basis of behavioral sensitization is often not known, but it typically seems to result from a cellular receptor becoming more likely to respond to a stimulus.

It is obvious that SENSITIZATION is the point of "external intervention" to the behavior interpreted by the chaos theory

***Small differences in initial conditions**, such as those due to rounding errors in numerical computation, yield widely diverging outcomes for such dynamical systems, rendering long-term prediction of their behavior impossible in general. This happens even though these systems are deterministic, meaning that their future behavior is fully determined by their initial conditions, with no random elements involved. In other words, the deterministic nature of these systems does not make them predictable. This behavior is known as deterministic chaos, or simply chaos. The theory was summarized by Edward Lorenz as:*

"Chaos: When the present determines the future, but the approximate present does not approximately determine the future".

……..



The Lorenz attractor displays chaotic behavior. These two plots demonstrate sensitive dependence on initial conditions within the region of phase space occupied by the attractor.

Sensitivity to Initial Conditions

Sensitivity to initial conditions means that each point in a chaotic system is arbitrarily closely approximated by other points with significantly different future paths, or trajectories. Thus, an arbitrarily small change, or perturbation, of the current trajectory may lead to significantly different future behavior.

A plot of the Lorenz attractor

Sensitivity to initial conditions is popularly known as the "butterfly effect", so-called because of the title of a paper given by Edward Lorenz in 1972 to the American Association for the Advancement of Science in Washington, D.C., entitled Predictability: Does the Flap of a Butterfly's Wings in Brazil set off a Tornado in Texas?. The flapping wing represents a small change in the initial condition of the system, which causes a chain of events that prevents the predictability of large-scale phenomena. Had the butterfly not flapped its wings, the trajectory of the overall system would have been vastly different.

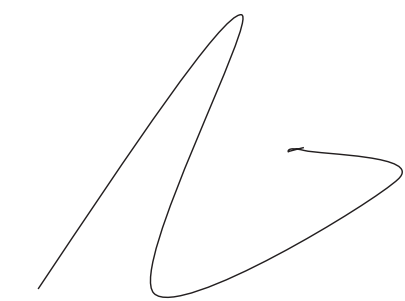
A consequence of sensitivity to initial conditions is that if we start with a limited amount of information about the system (as is usually the case in practice), then beyond a certain time the system is no longer predictable. This is most prevalent in the case of weather, which is generally predictable only about a week ahead Of course, this does not mean that we cannot say anything about events far in the future; some restrictions on the system are present. With weather, we know that the temperature will not naturally reach 100 °C or fall to −130 °C on earth (during the current geologic era), but we can't say exactly what day will have the hottest temperature of the year.

In more mathematical terms, the Lyapunov exponent measures the sensitivity to initial conditions. Given two starting trajectories in the phase space that are infinitesimally close, with initial separation δZ_o *the two trajectories end up diverging at a rate given by*

$$\delta Z_o \approx e^{\lambda t} \left| \delta Z_o \right|$$

where t is the time and ***λ is the Lyapunov exponent.*** *The rate of separation depends on the orientation of the initial separation vector, so a whole spectrum of Lyapunov exponents exist. The number of Lyapunov exponents is equal to the number of dimensions of the phase space, though it is common to just refer to the largest one of the system. A positive MLE is usually taken as an indication that the system is chaotic*

Scheme- chaos non-linear function



…….

PhD Thesis

I found an excellent Ph.D Thesis…. Blackerby, Rae Fortunato[71] *"Application of Chaos Theory to Psychological Models" Publisher, University of Texas at Austin, 1993*

"…This dissertation shows that ***<u>an alternative theoretical approach from physics--chaos theory--offers a viable basis for improved understanding of human beings and their behavior.</u>*** *Chaos theory provides achievable frameworks for potential identification, assessment, and adjustment of human behavior patterns. Most current psychological models fail to address the metaphysical conditions inherent in the human system, thus bringing deep errors to psychological practice and empirical research. Freudian, Jungian and behavioristic perspectives are inadequate psychological models because they assume, either implicitly or explicitly, that the human psychological system is a closed,*

[71] https://ui.adsabs.harvard.edu/abs/1993PhDT.....109B/abstract

linear system. On the other hand, Adlerian[72] models that require open systems are likely to be empirically tenable. Logically, models will hold only if the model's assumptions hold. The innovative application of chaotic dynamics to psychological behavior is a promising theoretical development because the application asserts that human systems are open, nonlinear and self-organizing. Chaotic dynamics use nonlinear mathematical relationships among factors that influence human systems. This dissertation explores these mathematical relationships in the context of a sample model of moral behavior using simulated data. Mathematical equations with nonlinear feedback loops describe chaotic systems. Feedback loops govern the equations' value in subsequent calculation iterations. For example, changes in moral behavior are affected by an individual's own self-centeredness, family and community influences, and previous moral behavior choices that feed back to influence future choices. When applying these factors to the chaos equations, the model behaves like other chaotic systems. For example, changes in moral behavior fluctuate in regular patterns, as determined by the values of the individual, family and community factors. In some cases, these fluctuations converge to one value; in other cases, they diverge in still other cases, they oscillate periodically among two or more precise values. At certain values, the equations iterate random results, with no convergence, divergence or periodicity: "chaos." At still other values, the equations behave chaotically for many iterations; then a periodic oscillation emerges from the chaos These emergent patterns provide a significantly better model fit to the dynamic reality of psychological behavior because qualitatively reorganized behavior is logically possible and incorporated in the model's metaphysical assumptions…"

SENSITAZATION IMPACT: THE CHAOS THEORY'S APPROACH

SENSITAZATION's IMPACT: THE CHAOS THEORY

Sensitization is a non-associative learning process in which repeated administration of a stimulus results in the progressive amplification of a response.

Sensitization may provoke much more impact, than its first stimulus……..

The butterfly effect describes-better than any other- how a small change in one state of a deterministic nonlinear system can result in large differences in a later state, meaning there is sensitive dependence on initial conditions. A metaphor for this behavior is that a butterfly flapping its wings in China can cause a hurricane in Texas[73].

[72] Alfred Adler was an Austrian medical doctor, psychotherapist, and founder of the school of individual psychology. His emphasis on the importance of feelings of inferiority, the inferiority complex, is recognized as an isolating element which plays a key role in personality development. Alfred Adler considered a human being as an individual whole, therefore he called his psychology "Individual Psychology" (Orgler 1976).

- Adler". Random House Webster's Unabridged Dictionary.
- Hoffman, E (1994). The Drive for Self: Alfred Adler and the Founding of Individual Psychology. Reading, MA: Addison-Wesley. pp. 41–91.
- Alfred Adler, Understanding Human Nature (1992) Chapter 6
- Carlson, Neil R (2010). Psychology the science of behavior.

[73]

Chaos Theory in Psychology

The Underlying Chaos of Depression

When Randal first went to a therapist, he was suffering from a depression that he just could not seem to shake. He said that it didn't seem to be caused by anything; he was just down a lot of the time. He was given an antidepressant to help balance his mood, and the therapist agreed to see him once a week. As the therapist worked with Randal, she saw that there were many deeper issues that he was keeping hidden. He had repressed some issues so far that he had completely forgotten them. The therapist recognized that a seemingly simple case of malaise (or mild depression) was actually backed by a complex and confounding web of prior events.

*For psychologists, **chaos**, or random disorder, is a fact of life. However, a great deal of research into something called **chaos theory** has begun to shed light on how the brain functions. More importantly for mental health professionals, chaos theory driven investigations of brain function have led to discoveries that have helped frame new theories of practice.*

Chaos theory has successfully explained various phenomena in the natural sciences and has subsequently been heralded by some as the new paradigm for science. Chaos and its concepts are beginning to be applied to psychology by researchers from cognitive, developmental and clinical psychology. This paper seeks to provide an overview of this work and evaluate the application of chaos to psychology. Chaos is briefly explained before existing applications of chaos in psychology and possible implications are examined. Finally, problems of applying chaos are evaluated and conclusions drawn regarding the usefulness of chaos in psychology[74].

Sensitization process: very sensitive to initial conditions

Sensitization is a non-associative learning process in which repeated administration of a stimulus results in the progressive amplification of a response.

- Edward Lorenz (1972) Predictability: Does the Flap of a Butterfly's Wings in Brazil Set Off a Tornado in Texas? American Association for the Advancement of Sciences; 139th meeting
- Boeing (2015). "Chaos Theory and the Logistic Map". Journal of the Optical Society of America B. 3 (5): 741. Retrieved 2015-07-16.

[74] Susan Ayers The Application of Chaos Theory to Psychology-June 1997Theory & Psychology 7(3):373

From this point of view, "sensitization process" as a psychological intervention, is very sensitive to initial conditions, each of individual has a complex psychological ID

There are 2 different paradigms of the same sensitization process

During the 1991, EU Commission announced the L.E.A.D.E.R EU Initiative for the poor rural communities of the European zone

It was the only case - until then - where poor places across Europe would have to design and implement a European Commission program (initiative) on their own, without the involvement of the central government ... This was a revolution in rural development planning, with emphasis on the very poor mountain and island areas

Five -5 experts, including myself, traveled across the Greek countryside to explain the program and raise sensitization among the local population.

So we have two diametric examples

a. in the mountainous Karditsa, in the middle of the country, an amazing response to the sensitization we made there.

b the region of Gortynia in the Peloponnese where not only did they not exploit the 1st Leader but still further, the program became a cause for further intervention by the State ...

in the first case, sensitization in an asymmetric spiral process created mach more positive results

in the second case, sensitization process led in the mach more bad results

Measuring sensitization

The concept of measuring sensitization's influence on population Group/Sensitized group from this point and then "N/ SENS" may be based on CHAOS THEORY, through pendula / oscilanium functions

Coming from its definition, "Sensitization is a non-associative learning process in which repeated administration of a stimulus results in the progressive amplification of a response"[75]

From this point and then, the root is pendulum-sensitization -chaos-……

•••

PART IV

RURAL-LOCAL DEVELOPMENT-case study: rural tourism

Rural-local development: backward steps

[75] Shettleworth, S. J. (2010). Cognition, Evolution and Behavior (2nd ed.). New York: Oxford. *we can imagine the stimulus as the gravity g=9.80665 m/s² bob*


pendulum bob

Over the second half of the 20th century, we have seen the continuous transformation of the world's population from rural to urban (Wilkinson, 1991; Ramonet, 2000) and this change is likely to continue in decades during the 21st century, directly combined with the "sustainability" of development. Besides, over the last years (since 2000) the concept of "sustainable tourism development" has become universally (Roberts and Hall, 2001). It has been accepted as a politically appropriate approach to, and goal of, tourism and local development. Rural Tourism is a global tourism and –at the same time, a profitable rural development activity, particularly in EU rural space. Rural tourism has achieved global endorsement, in sectoral and integrated local development (Papakonstantinidis, 2004). It is the "bridge" between local and international level. Strategic Planning, concerned cities and local communities must take into consideration the trends of urbanization, changes in employment, immigration trends, (Ankerl, 2000), the standards of production and marketing (Kafkalas, 2000), The new data have changed the development concept: Market globalization and the "New Economic Geography" created a new field approach to spatial and economic development (Fujita and Krugman, 2003). It is also influences the socioeconomic behavior locally, as the output of dynamical trends that develop the local space in a free market environment (Papakonstantinidis, 2005). Therefore, market analysis (duopoly- triopoly in its main expression) is considered, along with the "win-win-win papakonstantinidis Model"

*The continuous conflict between the three (3) main bargaining power poles at the local level i.e local **P**eople (and their interests lobbies), local **A**uthorities and the **C**onsumers of tourism services shapes the landscape of its management and operation. This conflict landscape is directly correlated with the development dynamical trends coming especially from the rapid rate of world urbanization: Market forces based on **I**nstant **R**eflection **I**ndividual **M**ixed **S**trategies **(IRIMS)** between the three power poles i.e Local **P**eople, Local **A**uthorities and tourism services' **C**onsumers **(P. A. C.) shape the local space unity** by a continuous dynamic evolution. This evolution positively influences the community development towards its spatial integration, during the process of community tourism at the local level. Given the above:*

(a) *May the rural development be viewed as the result of a continuous conflict among local power poles' (people, authorities, organizations, regions) for the domination over the rural tourism activity? How, local interests -which converging in a local goal- should be achieved by the same market rules?*

(b) *Is the 3ple PAC involvement, able to create equilibrium point in a payoffs matrix coming from "best responses", of the three (3) players? How the 3-ple PAC equilibrium is different (if it is) from that of the 2-players game? Is any possibility, the PAC system to produce conflict equilibria in a globalized and competitive world? What is the possibility ensuring the max profit for each of them ["Pareto efficiency"], so that none of the PAC members have any interest to change his/her strategy, without losses for him/herself and for the others?*

(c) *Could, a 3-ple pole system influence the world economic and social system?*

(d) *Could the behavior of bargainers (locally) being changed resulting rural development process' spillover feedback? Should, a 3-ple pole system influence the world economic and social system?*

(e) *Could the behavior of bargainers (locally) being changed resulting rural development process' spillover feedback?*

3. Assumptions

3a. Development-Market Assumptions

1. *Community development depends mainly on endogenous forces' participation (public involvement) in the development process (Brugger, 1986).*
2. *Rural Tourism Plan in Rural Community is the output of public involvement around a Flag Theme (Thirion S- INDE 2000) which motivates its endogenous forces.*
3. *Policy planning has been structured on the trigonal layout "market-behavior-knowledge" (Fischer, 2006; Papakonstantinidis, 2004).*
4. *Market and behavior are set by the 3 "local development actors- (3 local power poles, i.e (local) People, (local) Authorities and the Consumers (of tourism services) – PAC) Market –behavior system depends on interactive relations among 3 local power's poles* ***(PAC),*** *in the frame of bargaining best response (Spais, Papakonstantinidis and Papakonstantinidis, 2009; Spais and Papakonstantinidis 2011).*
5. *The domination effort of one over the others in a continuous conflict among them has the profit maximization, as basic incentive (Spais 2012; Spais and Papakonstantinidis, 2012).*
6. *Each of them (PAC) is "Buyer" and "Seller" of the same need (tourism) on the others, simultaneously Each side, seeks to maximize its profit (different view)*
7. *Oligopoly (Duopoly-Triopoly) is considered as a "simultaneous game" of best responses concerning the rural local tourism, due to the owners possibility offering differentiated services (Cournot Aug. 1838/1897) Payoffs Utility function's prices (by its probabilities) are used to define the Nash Equilibrium (NE) and the Harsanyi Refinement (Harsanyi, 1967).*
8. *Triopoly equilibrium, is assumed as the intersection point of "best responses" in 3D space.*
9. *The contradiction between the utility of individual and welfare economics is given but not definitive (Sen 1984 vs Arrow 1950).*
10. *Market forces are assumed to be based on instant Reflection Individual (mixed) strategies among the three (PAC) members (Nash, 1950).*
11. *Equilibrium is achieved on that point, on which* ***none of the PAC members has anything to gain by changing only his own strategy unilaterally (Nash, 1950).***

3b. Behavior's Assumptions

1. *Development (especially, local development) may be considered as the output of the behavioral trends in the bargain (any bargain) (Papakonstantinidis, 2007).*

2. *Public involvement in the local development process is achieved by five (5) easy stages (steps), i.e information, sensitization, participation, involvement and partnership, in its main version (Arnstein, 1969) This process influences the behavior in the bargain.*

3. *There is interaction between behavior and bargain. There is no bargain without behavior. There is no behavior without bargain (Papakonstantinidis, 2011)*

4. *Each of the three poles behavioral interacts with other within the bargain.*

5. *All individuals are indifferent between any two probability distributions over social states -Pareto efficiency (Pareto, 1916; Stiglitz, 1987).*

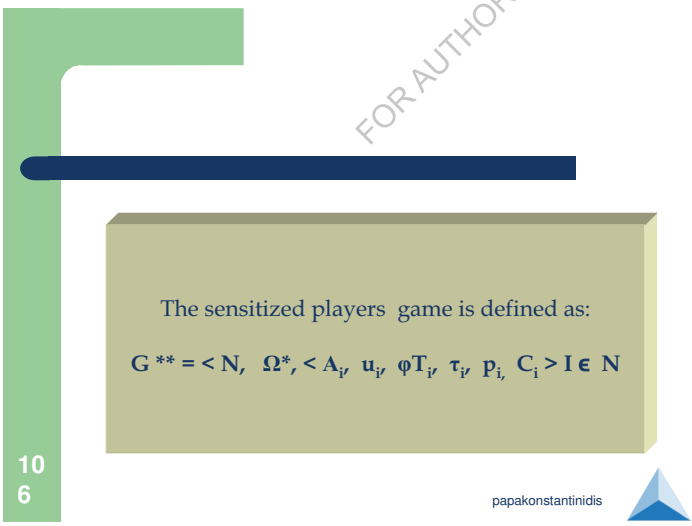
6. *Conversion of a given behavior could be realized by using the same conflict rules that push the PAC members in converging their behavior (Reynolds, 1999). In fact, it is a NEW local sensitized behavior to absolute cooperation.*

7. *Conditions of Conflict behavior are developed in the frame of the "Instrumental Rationality" in an environment of Common Knowledge of Rationality.*

8. *"Sensitization" as a form of knowledge/information should be taught, thus influencing the PAC 3-ple power poles (Papakonstantinidis, 1996, 1999, 2002, 04,*

9. *Behavioral analysis should be broached in close correlation with the suggested "win-win-win papakonstantinidis model" and its usefulness in respect to local communities' management and development (Herbert Simon 1955),*

DEVELOPING THE MODEL



1. N is the set of players.

2. *Ω* is the set of the states of the "Intermediate Community", depended on local people bargaining intra-community behavior*

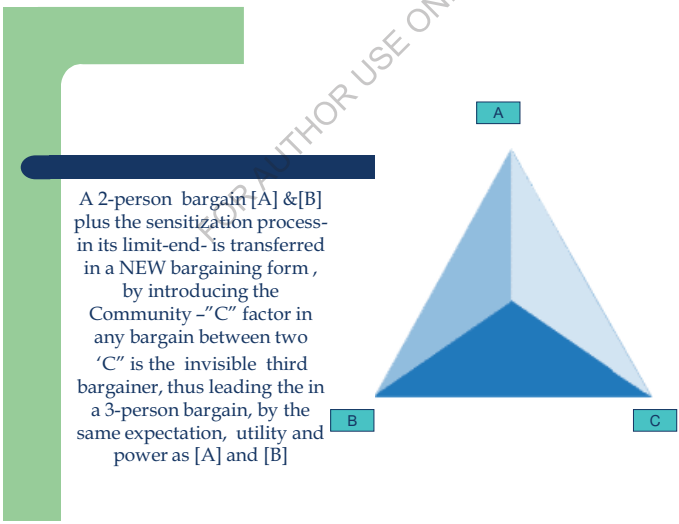
3. *A_i is the set of actions for player i. Let* $A = A_1 \times A_2 \times ...A_N$.

4. *T_i is the types of player i, decided by the function* $\tau_i : \Omega \rightarrow T_i$. *So for each state of the nature, the game will have different types of players. The outcome of the players is what determines its type. Players with the same outcome belong to the same type.*

5. $C_i \subseteq A_i \times T_i$ *defines the available actions for player i of some type in T_i.*

6. $u_i : \Omega \times A \rightarrow R$*is the payoff function for player i*

7. ***φ*** *: the* ***sensitization*** *coefficient of Ti : Each state of the Community (Nature, Local Community, Physical Environment etc) must be (according to model definition) weighted by the"φ" appropriate sensitization coefficient of Ti, thus providing behavioral convergence towards community prevailing ethos(John Friedman, Clyde Weaver ,1979)*



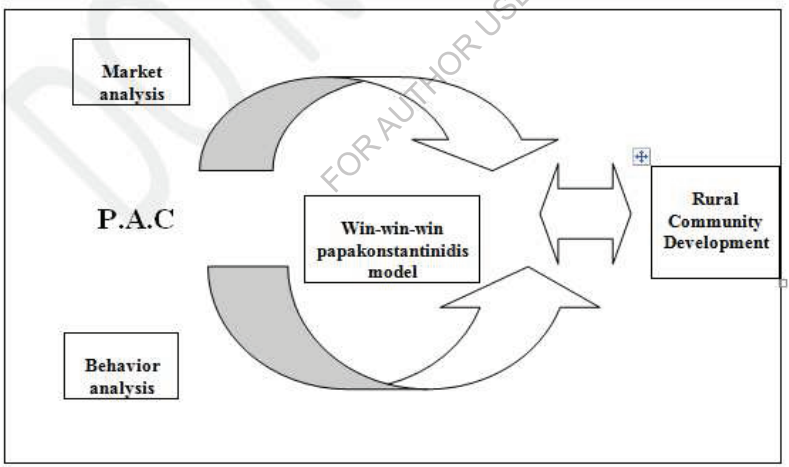
Ideal situation: equal probabilities di

$$\lim_{i\to\infty} Pi(\&)\ Qi(\&)\ Ri(\&) = \max Ua\ Ub\ Uc = \frac{1}{3}$$

Papakonstantinidis equations, 2005

papakonstantinidis

Rural Tourism contribution in Rural Development



Papakonstantinidis, 2013

Recent Scientific Discussion

Public involvement in the community development is an old success story in planning the development process Rural tourism, as a local initiative and as a tool for rural community development, is also given, since '80s At the same time, techniques as the "bottom-up approach" (Wilkinson Kenneth, 1991, Stochr W and Taylor R. 1981) the encourage the community's endogenous force" (Garofoli and Latella, 1989) or motivating local people around a "flag theme" (Thirion S, 2000) locally has contributed in the development theoretical view and practice, from 80s. Also, Local Action Group's (LAG's operation, (Leader EU Initiative, R 4253/88) have enriched our experience on the rural-local development field This presentation starts from this point: ***(i)*** *I've tried to give an alternative interpretation of the "community development through public involvement (basically) in the local action of rural tourism Market analysis (as "best response" interaction's game), and also the game of behaviour/ knowledge in and during the bargain among the 3 local power poles (the PAC triangular layout) are the pillars on which the 3-win model was based:* ***(ii)*** *The 3-win model has been included in the bibliography of social sciences This model also includes the sensitization process as a form of knowledge which is transferred either from tacit or codified and from conceptual to the sensitized knowledge, (see neural nets, Modern Innovation Theory Fischer M.M. 2006) thus producing useful material for planning the development process* ***(iii)*** *Next, I've tried to compose the literature on market and behaviour research in an integrated overview, on the "Community Development- Public Involvement- Rural Tourism" complex synthesis, in order to produce conclusions, comparing them with the old problem of "welfare economics" and the "Impossibility Theorem" (Kenneth Arrow, 1950)* ***(iv)*** *Besides, an extension of the development process, based on market- behaviour dipole is presented, in order to interpret local space creation(Papakonstantinidis L 2005) : It is argued by the author that local space may be formulated, by the market forces even if the indeterminacy of the "game" is given* ***(v)*** *Finally, I examined 2 case-studies concerned (a) the "**W**omen Rural Tourism Cooperative, in Gargaliani, South-West Greece and (b) the "Women **E**ntrepreneurs for **R**ural **T**ourism (**WERT-** European Section) providing the Conference with teaching material: In these (2) cases have adopted the "win-win-win P. model" Principles for building their enterprises under a spirit of mutuality, high responsibility and cooperation*

A selective view on the international literature (by grouped disciplines) is presented in the following table (Table 1):

Economics	*Sociology*	*Rural development/Rural*	*Knowledge manageme*	*Marketing/Decisi on Sciences/*	*Other*

		tourism management and development	***nt and Innovation Manageme nt***	***Entrepreneurship***	
• *Nash, J. F. (1950). The bargaining problem. Econometric a, 18, 155-162.* • *Nash, J. F. (1951). Non cooperative games. Annals of Mathematic s, 54, 286-295.* • *Nash, J. F. (1950). Equilibrium points in n-person games. Proceedings of the National Academy of Sciences.* • *Nash, J. F. (1953). Two-person cooperative games. Econometric a, 21, 128-140* • *Neuman (von) & Morgenster n (1947) "Game Theory and Economic Behavior" – The*	• *Coleman J (1988) "Social Capital in the Creation of Human Capital" America n Journal of Sociology 94 Supplem ent 95-S120 Chicago Universit y* • *Weber, Max. 1895/199 4. "The Nations State and Economi c Policy (Freiburg Address) " in Weber: Political Writings . ed./trans. P. Lassman and R. Speirs. Cambrid ge:*	• *Arnstein, Sherry R.(1969) "A Ladder of Citizen Participation," Journal of the America Planning Association- JAIP, Vol. 35, No. 4,* • *Friedmann J and Weaver C (1979) "Territory and Function: The Evolution of Regional Planning University of California Press" U.C.L.A Press (U.S) Berkley and Los Angeles California* • *Papakonstantinidis L.A (2003) "Rural Tourism: "Win-Win-Win"Journal of Hospitality and Tourism Volume 1, issue 2, /2003 pp 49-70, INDIA ISSN 0972-7787 www.johat.com* • *Kokossis Charis and al. (2002) "Sustainable Rural Tourism" Papazissis Ed, Greece trnsl, p.p 322-325* • *Brugger E 1986 'Endogenous Development: a concept between utopia and reality"*	• *Fischer Manfre d M (2006) Knowle dge, complex ity, and innovati on systems Journal of Geograp hical Systems 2006) Edition: Springe r-Verlag Berlin and Heidelbe rg GmbH & Co. KG* • *Papakon stantini dis L.A (2004) "Knowl edge Creatio n and the win-win-win model" Scientifi c Review of Applied*	▪ *Spais, G., Papakonstantin idis, L. and Papakonstantin idis, S. (2009) 'An innovative bargaining solution analysis for vertical cooperative promotion management decisions', Innovative Marketing, Vol. 5, No. 3, pp.7–29.* ▪ *Spais, G. and Papakonstantin idis, L. (2011) 'An application of the win-win-win Papakonstantin idis model as an innovative bargaining solution analysis in cooperative sales promotion campaigns', Proceedings of the 4th Annual Euromed Conference of the Euromed Academy of Business, pp.1724–1744.* • *Spais, G. (2012) 'An*	• *Pavlov Ivan P. (1927) Conditioned Reflexes: An Investigatio n of the Physiologic al Activity of the Cerebral Cortex" Translated by G. V. Anrep (1927) Oxford University Press LONDON* •

Princeton University Press U. S • *Harsanyi, J. (1967, November). Games with incomplete information, played by Bayesian players. Contribution (Nobel 1994) Management Science, 11(3).* • *Kuhn, H. W., & Nasar, S. (2001). The essential John Nash (pp. 31, 43, 56, 85-89, 99-103). Princeton University Press.*	*Cambridge University Press.*		*Economics TEIPI Ed, Jan 2004*	*integrated bargaining solution analysis for vertical cooperative sales promotion campaigns based on the win-win Papakonstantinidis model', Journal of Applied Business Research, Vol. 28, No. 3, pp.359–383.* • *Papakonstantinidis (2012) The win-win-win Papakonstantinidis model -A behavioral analysis in dynamical systems The Non Instrumental Rationality Paradox Case-study: Hellenic Benefactors ISBEFA (Book of Proceedings) Kefallinia GR 2012* • *Spais, G. and Papakonstantinidis, L. (2012) 'An exploratory study of brand manufacturers' perceived value of the 'triple pole' approach in bargaining*	

				for vertical cooperative sales promotion campaign: a pilot study in Greece and Cyprus', Proceedings of the 5th Annual Euromed Conference of the Euromed Academy of Business, pp.1452–1489.	

Table 1: Selective view of the international literature (by grouped disciplines)

Source: *Papakonstantinidis, L. (2013)*

ANALYSIS

1. Rural Local Development

Rural Local Development –based on "sustainable development, environmental protection and social cohesion - which has emerged since the middle of the 1990ies can be characterised as follows The real assets (Papageorgiou, 2003) of a region are the actors, the entrepreneurs, the politicians, the work force, organisations and institutions, their material and financial resources and the specific regional culture of cooperation and communication. The need for rural communities' development from a wider perspective has created more focus on a broad range of development goals rather than merely creating incentive for agricultural or resource based businesses (Ward and Brown, 2009). Local development, mainly based on social capital building and social networks, and grassroots movements has been developed in the recent literature (Portes and Landolt, 2000). Local and rural development process must be approached from a view of public involvement. People themselves have to participate in their sustainable rural development process by easy steps, as presented in Table 2 (Arnstein, 1969) .

Table 2: Five steps towards Local development

				partnership
			Involvement	

		Participation		
	sensitization			
Information				

Source: Arnstein (1969)

Papakonstantinidis,

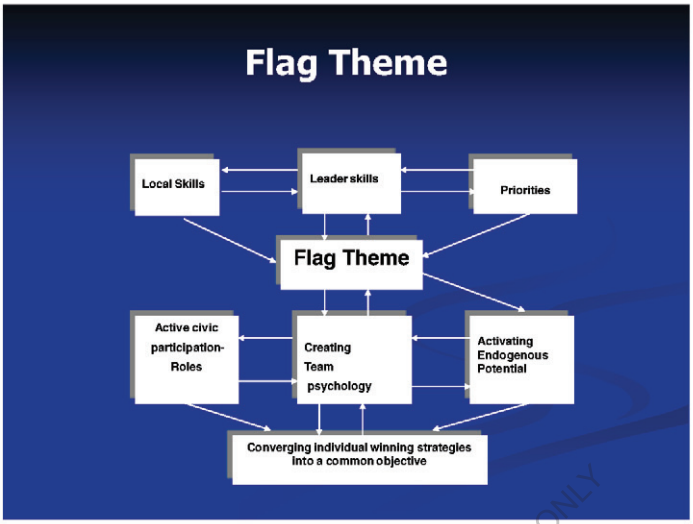
	objectives	*impact*	*benefits*
BACKWARD-STEPS			
1•	*partnership*	*business self-regulation*	*Social cohesion*
2	*involvement*	*voluntary decisions individual organizations*	*company be socially accountable*
3	*participation*	*philanthropy*	*Shared value*
4	*sensitization*	*Benefactors-Evergetes*	*COMMUNITY*
5	*information*	*Team psychology*	*First Links between company - society*

2002

Recently, "Local Standard", a European FatMan Program "Scenarios" ["Aims and objectives of the FutMan scenarios (2015 - 2020), (Pyrgiotis, 2010)] recognizes that local authorities have gained new powers. Regional governments determine policy priorities and drive regulation. Consumer and citizen groups push their agendas on local and environmental issues. Besides: (a) from the development side (Wilkinson 1991) focuses on the endogenous local development process / "bottom-up approach" (bargain, locally) 2nd, Friedman / Weaver – UCLA (1978) in their classic "Territory and Function" focused in the local development as an "ideology" , emphasizing in the endogenous local development; and (b) from the pure Sociological side (Coleman, 1988) as "Social Capital" describes the cooperation processes of individuals, which minimize possible dilemma, coming from individuals', networks and common actions. Putnam (2000) describes social capital as the basis of social schemes creation (i.e. networks). Emphasis is given to the endogenous force's (Garofoli and Latella, 1989) mainstreaming around a local "flag theme". Endogenous

development (in European, at least territories) is based on local peoples' own criteria for change (Cinnéide, 2004) and their vision for well-being based on the material, social and spiritual aspects of their livelihoods but in a constant and dynamic interface with external actors and the world around them (Hiemstra, 2011). In the case of the PAC system operation, endogenous local development is developed through PAC "bargaining relations" On that "frame" conflict conditions may lead in a pure cooperation, around the rural tourism-rural development The more characteristic case of local cooperation, starting from the "market trends" is the ***L.E.A.D.E.R*** *(Liaison Entre Action de Development de I' Economies Rurale) Philosophy:*

LEADER *EU Initiative, is based on the EU Regulation 4253/88 [executive of Council Regulation 2052/88, Jun 24, 1988, "On the tasks of the Structural Funds and their effectiveness and on coordination of their activities.."] Built on the Local* ***"Cooperation*** *philosophy" (Papakonstantinidis,1993) the integrated local action plan, the bottom-up approach endogenous approach, the application of rural innovative ideas, it was a revolution in rural less developed areas of Europe: it brought out positive changes in the european rural community Under the Community's innovative rural development policy, rural areas have embarked on a debate on their socio-economic role and are making structural adjustments in order to meet these important challenges effectively (EU Legislation) to encourage the development of new activities and sources of employment. The Community Initiatives Leader I (1991-94) Leader II (1994-1999), Leader + also played an experimental role, which has made it possible to define and implement innovative, integrated and participative local schemes; LEADER has been focused on the integrated rural local development goals i.e mobilizing of local actors to take control of the future of their area, decentralized, integrated and bottom-up approach to territorial development, the exchange and transfer of experience through the creation of networks; the ability to include small-scale projects and support small-scale promoters (Kokossis Ch. & al. 2002) The local actors implement the original strategy that they themselves have designed, experimenting with new ways of (a) enhancing natural and cultural heritage (b) reinforcing the economic environment in order to create jobs (c) improving the organizational capabilities of their community, through (d)* ***Local Cooperation and european networks*** *The final beneficiaries of assistance under LEADER are the* ***local action groups*** ***(LAGs).*** *These groups draw up the development strategy for their territory and are responsible for implementing it based on a specific development plan. The* ***LAGs*** *create an open local partnership that clearly allocates the powers and responsibilities to the different partners. (EEC Commission, 1993-Jun) They are made up of a balanced and representative selection of partners drawn from the different socio-economic sectors in the local area. The economic and social partners and non-profit (voluntary) associations must make up at least 50% of the local partnership .The members of the* ***LAGs*** *must be locally based*



Therion, 2000

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PART V

THEORETICAL BACKGROUND: The philosophical side

Introduction

*The win-win-win papakonstantinidis model is a methodological tool for creating conditions for SOCIAL WELFARE situations especially strategic decision making in a number of fields and domains (biology, psychology, management, marketing, history- especially in interpretation of historic events It proves that building social capital at local level mainly depends on social trust links among local people: Social cohesion based on social capital may be measured by the diversification Rate (R *) from strict globalization rules: From this point of view, local people's intervention should be useful, so as to diversify these "rules" at local level adjusting win methodology [Papakonstantinidis Model] should facilitate local people to "readjust" bargaining globalization rules locally, through a sensitization process: Community is defined as a discrete spatial / cultural entity, as their people's sensitization process' is going to its limit……*

From this point of view, MARXISM and the Greek Ancient Philosophy are the main FIELDS towards a win-win-win (ideal) situation, as both of them introduce to (i) the upper level of sensitization in the case of decision-making, (ii) a "path" to social justice, (iii) the basic process for sensitizing local population on the development, around a local "flag theme" (iv) a way to "feel free" through involvement in the development process (v) to develop "new" bargaining behavior (vi) to convert conflict into cooperation. (vii) As the sensitization process tends to infinity, then the limit of the A-B-C bargaining relations tend to the absolute collaboration. That's the end of the real social welfare process

It is necessary to analyze the Nash "non-cooperative- instant reflection game" /or a "win-win perception" as follow: Non-co-operative game is a game between two (2) players/ individuals who have opposite interests (Aumann, 1987). Each player makes his own choices, based on instant reflections' rational movements and his physical cleverness. The game (bargain) is determined by the result (pay-off) and not by player's expectations. It presupposes best choices by both players towards meeting individual interests ("winning strategies"- Harsanyi, 1973). Players (negotiators) do not regret, a posteriori, from their own decision taken, based on personal choices, during the bargain. Each of the players knows a priori that the other negotiator (or player) is as clever as he is. During the bargain, "mutual respect" between the two bargainers to each other's best choices' is necessary. It is recognized that the more DETERMINED to break down the negotiation (= less utility), the more satisfied (=better shares) - the more risk, the more profit.

Tending toward an ideal (angels) situation

II. Theoretical Framework: "win-win-win papakonstantinidis model"

1. *win-win perception: based on when each side of a dispute feels they have won. Since both sides benefit from such a scenario, any resolutions to the conflict are likely to be accepted voluntarily. The process of integrative bargaining aims to achieve, through cooperation, win-win outcomes.*

2. *A new treatment is presented of a classical economic problem, one which occurs in many forms, as bargaining, bilateral monopoly, etc*[76]*.*

3. *It may also be regarded as a nonzero-sum two-person game. In this treatment a few general assumptions are made concerning the behavior of a single individual and of a group of two individuals in certain economic environments. From these, the solution (in the sense of this paper) of the classical problem may be obtained. In the terms of game theory, values are found for the game.*

4. *Social behavior is not recognized as an acceptable one in the bargain, thus deriving unfair results: That means, "who needs the agreement as the result of a bargain, has to loose in shares, by accepting any result". Information may be the "link" between knowledge creation and the bargaining process. In particular, "Information" is a power factor in pure individuals winning strategies (Aumann, 1987). The more information, the better winning strategy, the more profit. Each of the players (negotiators), starting negotiations with the other, expects to gain the maximum profit. Interaction, based on instant reflection individual winning strategies, is the base of the Nash Non Cooperative Games Theory.*

5. *An examination of the historical evolution of bargaining and game theories (the last 300 years, from the first pioneers Waldegrave, Cournot, Walras, Edgeworth, Bertrand, Neumann and Stackelberg to Nash and Harsanyi and their influences to widely acknowledged scholars of the cooperative advertising literature such as Berger, He, Huang, Jørgensen, Prasad, Sethi, Villas-Boas, Zaccour (the last 40 years, see Spais, 2012) we can safely state that it is revolutionary approach, as the "triple-pole" approach is examined for the first time in the 300 years of scientific development of bargaining and game theories*

"GOOD" from GOD

The win-win-win philosophy

[76] John F. Nash, Jr. The Bargaining Problem Econometrica, Volume 18, Issue 2 (Apr., 1950), 155-162.

Philosophy (from Greek φιλοσοφία, philosophia, literally "love of wisdom" is the study of general and fundamental problems concerning matters such as existence, knowledge, values, reason, mind, and language. The term was probably coined by Pythagoras (c. 570–495 BCE). Philosophical methods include questioning, critical discussion, rational argument, and systematic presentation. Classic philosophical questions include: Is it possible to know anything and to prove it? What is most real? Philosophers also pose more practical and concrete questions such as: Is there a best way to live? Is it better to be just or unjust (if one can get away with it)? Do humans have free will?

Historically, "philosophy" encompassed any body of knowledge. From the time of Ancient Greek philosopher Aristotle to the 19th century, "natural philosophy" encompassed astronomy, medicine, and physics. For example, Newton's 1687 Mathematical Principles of Natural Philosophy later became classified as a book of physics. In the 19th century, the growth of modern research universities led academic philosophy and other disciplines to professionalize and specialize. In the modern era, some investigations that were traditionally part of philosophy became separate academic disciplines, including psychology, sociology, linguistics, and economics.

Other investigations closely related to art, science, politics, or other pursuits remained part of philosophy. For example, is beauty objective or subjective? Are there many scientific methods or just one? Is political utopia a hopeful dream or hopeless fantasy?[Major sub-fields of academic philosophy include metaphysics ("concerned with the fundamental nature of reality and being") epistemology (about the "nature and grounds of knowledge [and]...its limits and validity"), ethics, aesthetics, political philosophy, logic and philosophy of science.

Since the 20th century, professional philosophers contribute to society primarily as academics. However, many of those who study philosophy in undergraduate or graduate programs contribute in the fields of law, journalism, politics, religion, science, business and various art and entertainment activities.

While moral theory does not invent morality, or even reflection on it, it does try to bring systematic thinking to bear on the phenomenon. Ancient moral theory, however, does not attempt to be a comprehensive account of all the phenomena that fall under the heading of morality. Rather, assuming piecemeal opinions and practices, it tries to capture its underlying essence. It is the nature of such an enterprise to evaluate and criticize some of these opinions and practices but that is not its primary goal. Ancient moral theory tries to provide a reflective account of an essential human activity so one can grasp what is of fundamental importance in pursuing it. In historical order, the theories to be considered in this article are those of Socrates as presented in certain dialogues of Plato; Plato in the Republic; Aristotle; the Cynics; Cyrenaic(=Κυρήνη)[77] hedonism; Epicurus; the Stoics; and Pyrrhonian skepticism[78].

[77] δηλώνει την ηδονιστική σχολή φιλοσοφίας, η οποία ιδρύθηκε γύρω στο 400 π.Χ. από τον Αριστερίπο τον Γέροντα της Κυρήνης και η οποία θεωρεί ότι η ευχαρίστηση είναι το υψηλότερο αγαθό και ότι η αρετή πρέπει να εξομοιωθεί με την ικανότητα να απολαμβάνει.

[78] of or denoting the hedonistic school of philosophy, which was founded circa 400 bc by Aristippus the Elder of Cyrene and which holds that pleasure is the highest good and that virtue is to be equated with the ability to enjoy

Ancient Greek Philosophy *"Ancient Ethical Theory[79]"*

Ancient Greek Philosophy: meaning of social good?

Ancient Greek Philosophy introduced the meaning of *social good What is a Social Good*

A social good is something that benefits the largest number of people in the largest possible way, such as clean air, clean water, healthcare and literacy. Also known as "common good," social good can trace its

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- Strong's Greek Dictionary 5385".
- "Online Etymology Dictionary". Etymonline.com. Retrieved 22 August 2010. The definition of philosophy is: "1. orig., love of, or the search for, wisdom or knowledge 2. theory or logical analysis of the principles underlying conduct, thought, knowledge, and the nature of the universe". Webster's New World Dictionary (Second College ed.).
- Jenny Teichmann and Katherine C. Evans, Philosophy: A Beginner's Guide (Blackwell Publishing, 1999), p. 1: "Philosophy is a study of problems which are ultimate, abstract and very general. These problems are concerned with the nature of existence, knowledge, morality, reason and human purpose."
- A.C. Grayling, Philosophy 1: A Guide through the Subject (Oxford University Press, 1998), p. 1: "The aim of philosophical inquiry is to gain insight into questions about knowledge, truth, reason, reality, meaning, mind, and value."
- Adler, Mortimer J. (2000). How to Think About the Great Ideas: From the Great Books of Western Civilization. Chicago, Ill.: Open Court. ISBN 978-0-8126-9412-3.
- Quinton, Anthony, The ethics of philosophical practice Philosophy is rationally critical thinking, of a more or less systematic kind about the general nature of the world (metaphysics or theory of existence), the justification of belief (epistemology or theory of knowledge), and the conduct of life (ethics or theory of value). Each of the three elements in this list has a non-philosophical counterpart, from which it is distinguished by its explicitly rational and critical way of proceeding and by its systematic nature. Everyone has some general conception of the nature of the world in which they live and of their place in it. Metaphysics replaces the unargued assumptions embodied in such a conception with a rational and organized body of beliefs about the world as a whole. Everyone has occasion to doubt and question beliefs, their own or those of others, with more or less success and without any theory of what they are doing. Epistemology seeks by argument to make explicit the rules of correct belief formation. Everyone governs their conduct by directing it to desired or valued ends. Ethics, or moral philosophy, in its most inclusive sense, seeks to articulate, in rationally systematic form, the rules or principles involved. in Honderich 1995.
- Greco, John, ed. (2011). The Oxford Handbook of Skepticism (1st ed.). Oxford University Press.
- Glymour, Clark (2015). "Chapters 1–6". Thinking Things Through: An Introduction to Philosophical Issues and Achievements (2nd ed.). A Bradford Book.
- "Contemporary Skepticism | Internet Encyclopedia of Philosophy". www.iep.utm.edu. Retrieved 25 April 2016.
- "The Internet Classics Archive | The Republic by Plato". classics.mit.edu. Retrieved 25 April 2016.
- "Free Will | Internet Encyclopedia of Philosophy". www.iep.utm.edu. Retrieved 25 April 2016.
- "Philosophy". www.etymonline.com. Online Etymological Dictionary. Retrieved 19 March 2016. The English word "philosophy" is first attested to c. 1300, meaning "knowledge, body of knowledge."
- Shapin, Steven (1998). The Scientific Revolution (1st ed.). University Of Chicago Press. Briggle, Robert Frodeman and Adam. "When Philosophy Lost Its Way". Opinionator. Retrieved 25 April 2016.
- Sartwell, Crispin (2014). Zalta, Edward N., ed. Beauty (Spring 2014 ed.).
- "Plato, Hippias Major | Loeb Classical Library". Loeb Classical Library. Retrieved 27 April 2016.
- Feyerabend, Paul; Hacking, Ian (2010). Against Method (4th ed.). Verso.
- "Nozick, Robert: Political Philosophy | Internet Encyclopedia of Philosophy". www.iep.utm.edu. Retrieved 25 April 2016.
- "Rawls, John | Internet Encyclopedia of Philosophy". www.iep.utm.edu. Retrieved 25 April 2016.
- Thomas (2015). Utopia. Courier Corporation.
- "Merriam-Webster Dictionary". www.merriam-webster.com. Retrieved 14 May 2016.

history to Ancient Greece philosophers and implies a positive impact on individuals or society in general. It also provides the basis for charity or philanthropic work [80]

From Thales, who is often considered the first Western philosopher, to the Stoics and Skeptics, ancient Greek philosophy opened the doors to a particular way of thinking that provided the roots for the Western intellectual tradition. Here, there is often an explicit preference for the life of reason and rational thought. We find proto-scientific explanations of the natural world in the Milesian thinkers, and we hear Democritus posit atoms—indivisible and invisible units—as the basic stuff of all matter. With Socrates comes a sustained inquiry into ethical matters—an orientation towards human living and the best life for human beings. With Plato comes one of the most creative and flexible ways of doing philosophy, which some have since attempted to imitate by writing philosophical dialogues covering topics still of interest today in ethics, political thought, metaphysics, and epistemology. Plato's student, Aristotle, was one of the most prolific of ancient authors. He wrote treatises on each of these topics, as well as on the investigation of the natural world, including the composition of animals.

The Pythagoreans believed in the transmigration of souls. The soul, for Pythagoras, finds its immortality by cycling through all living beings in a 3,000-year cycle, until it returns to a human being (Graham 915). Indeed, Xenophanes tells the story of Pythagoras walking by a puppy who was being beaten. Pythagoras cried out that the beating should cease, because he recognized the soul of a friend in the puppy's howl (Graham 919). What exactly the Pythagorean psychology entails for a Pythagorean lifestyle is unclear, but we pause to consider some of the typical characteristics reported of and by Pythagoreans. Plato and Aristotle tended to associate the holiness and wisdom of number—and along with this, harmony and music—with the Pythagoreans (Graham 499). Perhaps more basic than number, at least for Philolaus, are the concepts of the limited and unlimited. Nothing in the cosmos can be without limit (F1), including knowledge (F4). Imagine if nothing were limited, but matter were just an enormous heap or morass. Next, suppose that you are somehow able to gain a perspective of this morass (to do so, there must be some limit that gives you that perspective!). Presumably, nothing at all could be known, at least not with any degree of precision, the most careful observation notwithstanding. Additionally, all known things have number, which functions as a limit of things insofar as each thing is a unity, or composed of a plurality of parts.

SOCRATES

(469-399 B.C.E) wrote nothing, so what stories and information we have about him come to us primarily from Xenophon (430-354 B.C.E.) and Plato. Both Xenophon and Plato knew Socrates, and wrote dialogues in which Socrates usually figures as the main character, but their versions of certain historical events in Socrates' life are sometimes incompatible. We cannot be sure if or when Xenophon or Plato is reporting about Socrates with historical accuracy. In some cases, we can be sure that they are intentionally not doing so, but merely using Socrates as a mouthpiece to advance philosophical dialogue (Döring 25). Xenophon, in his Memorobilia, wrote some biographical information about Socrates, but we cannot know how much is

[80] Stanford Encyclopedia of Philosophy- https://plato.stanford.edu/entries/ethics-ancient/

fabricated or embellished. When we refer to Socrates, we are typically referring to the Socrates of one of these sources and, more often than not, Plato's version.

Socrates' elenchos, as he recognizes in Plato's Apology (from apologia, "defense"), made him unpopular. Lycon (about whom little is known), Anytus (an influential politician in Athens), and Meletus, a poet, accused Socrates of not worshipping the gods mandated by Athens (impiety) and of corrupting the youth through his persuasive power of speech. In his Meno, Plato hints that Anytus was already personally angry with Socrates. Anytus has just warned Socrates to "be careful" in the way he speaks about famous people (94e). Socrates then tells Meno, "I think, Meno, that Anytus is angry, and I am not at all surprised. He thinks…that I am slandering those men, and then he believes himself to be one of them" (95a) This is not surprising, if indeed Socrates practiced philosophy in the way that both Xenophon and Plato report that he did by exposing the ignorance of his interlocutors.

Socrates practiced philosophy, in an effort to know himself, daily and even in the face of his own death. In Plato's Crito, in which Crito comes to Socrates' prison cell to persuade Socrates to escape, Socrates wants to know whether escaping would be just, and imminent death does not deter him from seeking an answer to that question. He and Crito first establish that doing wrong willingly is always bad, and this includes returning wrong for wrong (49b-c). Then, personifying Athenian law, Socrates establishes that escaping prison would be wrong. While he acknowledges that he was wrongly found to be guilty of impiety and corrupting the youth, the legal process itself ran according to law, and to escape would be to "wrong" the laws in which he was raised and to which, by virtue of being a life-long Athenian, he agreed to assent.

Plato's Phaedo presents us with the story of Socrates' last day on earth. In it, he famously claims that philosophy is practice for dying and death (64a). Indeed, he spends his final hours with his friends discussing a very relevant and pressing philosophical issue, that is the immortality of the soul. Socrates is presented to us as a man who, even in his final hours, wanted nothing more than to pursue wisdom. In Plato's Euthyphro, Socrates aims to dissuade Euthyphro from indicting his own father for murder. Euthyphro, a priest, claims that what he is doing – prosecuting a wrongdoer – is pious. Socrates then uses his elenchos to show that Euthyphro does not actually know what piety is. Once he is thoroughly confused and frustrated, Euthyphro says, ""it is a considerable task to acquire any precise knowledge of these things [that is, piety]" (14b). Nevertheless, Euthyphro offers yet another definition of "piety." Socrates' response is the key to understanding the dialogue: "You could tell me in far fewer words, if you were willing, the sum of what I asked…You were on the verge of doing so, but you turned away. If you had given that answer, I should now have acquired from you sufficient knowledge of the nature of piety" (14c1-c4). It is, in other words, the very act of philosophizing – the recognizing of one's own ignorance and the search for wisdom – that is piety. Socrates, we are told, continued this practice even in the final hours of his life.

The Greek Ancient Philosopher Socrates (469-399 b.C) believed that self-knowledge was sufficient to live a good life. He concerned that "knowledge is equivalent to virtue. People can reach absolute knowledge say, just follow the correct method.. One has to seek knowledge and wisdom before the other private interests. The knowledge sought as a means of moral action. The logic is a prerequisite to live a good life.

Socrates' Life (469-399 BC): During his life Socrates was predominantly interested in ethics .

A. Self-knowledge is a sufficient condition to the good life. Socrates identifies knowledge with virtue. If knowledge can be learned, so can virtue. Thus, Socrates states virtue can be taught.

B. He believes "the unexamined life is not worth living." One must seek knowledge and wisdom before private interests. In this manner, knowledge is sought as a means to ethical action.

C. What one truly knows is the dictates of one's conscience or soul: these ideas form the philosophy of the Socratic Paradox

II. Socrates' ethical intellectualism has an eudaemological character.

A. Socrates presupposes reason is essential for the good life.

1. One's true happiness is promoted by doing what is right.

2. When your true utility is served (by tending your soul), you are achieving happiness. Happiness is evident only in terms of a long-term effect on the soul.

3. The Socratic ethics has a teleological character – consequently; a mechanistic explanation of human behavior is mistaken. Human action aims toward the good in accordance with purpose in nature.

B. Socrates states no one chooses evil; no one chooses to act in ignorance.

1. We seek the good, but fail to achieve it by ignorance or lack of knowledge as to how to obtain what is good.

2. He believes no one would intentionally harm themselves. When harm comes to us, although we thought we were seeking the good, the good is not obtained in such a case since we lacked knowledge as to how best to achieve the good.

3. Aristotle's criticism of Socrates belief that no one intentionally harms oneself is that an individual might know what is best, and yet still fail to act rightly.

C. Socrates' influence extends to many different subsequent ethical theories in the Western World. Some specific aspects of Socrates' ethical influence is shown in the following chart.

A. If evil were never done deliberately or voluntarily, then evil would be an involuntary act and consequently no one could properly be held responsible for the evil that is done.

B. Since, on Socrates' view, the good is that which furthers a person's real interests, it will follow that if the good is known, people will seek it. But many times people do not.

C. If moral laws were objective and independent of feelings, and if knowledge were to be identified with virtue, then it would seem to follow that moral problems are always capable of rational resolution. But often they are not.

D. Psychiatric evidence shows sometimes people behave in an entirely self-damning manner. For example, St. Paul said, "For I do not do the good I want, but the evil I do not want is what I do."

E. If Sigmund Freud's psychoanalytical theory is correct, we are often unaware of rationalizing unethical actions in order to maintain our self-respect. That is, this kind of defense mechanism leads to self-deceptive. With respect to Freud's definition, Margaret Boden points out, "Insofar as defense mechanisms are employed by normal, neurotic, and psychotic personalities, they may be regarded as universal features of the human mind."

PLATO

Plato's Ethics: An Overview, STANFORD ENCYCLOPEDIA of PHILOSOPHY First published Tue Sep 16, 2003; substantive revision Wednesday December 6, 2017 https://plato.stanford.edu/entries/plato-ethics/
Plato Athens (c. 370 BC): Born 428/427 or 424/423 BCAthens, Greece Died 348/347 BC (age c. 80)

Plato (/ˈpleɪtoʊ/;[a] Greek: Πλάτων[a] Plátōn, pronounced [plá.tɔːn] in Classical Attici, was a philosopher in Classical Greece . Virtue Ethics Contemporary philosophers still disagree on what exactly the term "ethics" means. Many such philosophers today consider ethical language to be nothing more than a moral fiction. Nevertheless, the general consensus in the field diverges among three major branches: consequentialism, deonto-logicalism and virtue ethics. The first two are relatively recent ideas, but virtue ethics has been around since the time of Plato. Virtue ethics focuses on the idea that what we call good is not dependent on the actions we take (deonto-logicalism) nor the results of those actions (consequentialism), but instead focuses on the person that we are. To a virtue ethicist like Plato, actions are only good to the extent that virtuous persons take such actions. When Plato talks about what is good, he always means for us to think of an ideal good person. In this way, Plato would agree wholeheartedly with the basic idea of the "What Would Jesus Do?" movement since the focus is on what a good person is rather than what good actions or good consequences are .

Eudaimonia and Arete

For Plato, ethics comes down to two basic things: eudaimonia and arete. Eudaimonia, or "well -being," is the virtue that Plato teaches we must all aim toward. The ideal person is the person who possesses eudaimonia, and the field of ethics is mostly just a description of what such an ideal person would truly be like. However, achieving eudaimonia requires something extra, which Plato calls arete, or excellence. Possessing arete is the way that one can reach a state of eudaimonia. A person with arete is a person who has the character traits that would lead to a eudaimonious life. If given enough time, the set of virtues will help anyone to become eudaimonious. Most of Plato's writings about ethics focuses on what arete is, with the idea that if one can figure that out, then eudaimonia will follow shortly after.

What Is Arete?

Plato's earliest ideas on arete revolve around the question whether each positive character trait we might name would be a part of arete. For example, is courage part of arete? Surely so, Plato argues, since we would

hardly call a cowardly person's life eudaimonious. However, maybe courage is only an effect of a eudaimonious life and not a cause. Questions like this plague the early Plato, but by his middle period, he seems to have decided on arete being nothing more than just pure knowledge. Knowledge of all things is important, but none is more important than knowledge of knowledge itself, which Plato considers to be the ultimate virtue and a necessary component for any individual to achieve eudaimonia. Perhaps shockingly to modern readers, Plato also includes several other items as necessary conditions for eudaimonia, including luck and wealth. Plato argued that a community has three parts which are guardians, producers, and soldiers and each part performs a particular function. For a community to be just, every element has to perform the role to the best capacity, which is a good worth. The same characters and elements will materialize in the state; have to exist in every person. Someone might respond to Plato's argument that if the good worth of a community were not in a person, it would be hard for the community to uphold itself. The understanding is that a community is just a collection of people who have formed a sense of laws on living collectively; thereby, every individual would introduce some elements, values and functions into the community. Since every person contributes to the community, those aspects that are present in the community, ought to have come from the person, thereby, souls have three different elements.

Plato-Socrates

The precise relationship between Plato and Socrates remains an area of contention among scholars. Plato makes it clear in his Apology of Socrates that he was a devoted young follower of Socrates. In that dialogue, Socrates is presented as mentioning Plato by name as one of those youths close enough to him to have been corrupted, if he were in fact guilty of corrupting the youth, and questioning why their fathers and brothers did not step forward to testify against him if he was indeed guilty of such a crime (33d–34a).

Aristotle attributes a different doctrine with respect to Forms to Plato and Socrates (Metaphysics 987b1–11). Aristotle suggests that Socrates' idea of forms can be discovered through investigation of the natural world, unlike Plato's Forms that exist beyond and outside the ordinary range of human understanding.

Plato is perhaps the most influential philosopher of all time, and he is widely regarded as the first truly systematic thinker in Western intellectual culture. No less a mind than the esteemed British mathematician and philosopher Alfred North Whitehead once quipped that the "safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato."

Virtue Ethics

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While Plato never strays from his conception of virtue ethics throughout his life, by the time he fully matures his views, he does seem to clarify what arete and eudaimonia are by quite a bit. By the end of his career, Plato decides that true eudaimonia is not really achievable on Earth in the same way that he thought was the case earlier on. Early Plato acts as though striving for arete is a realistic goal to have; yet later Plato questions whether arete is even possible without first possessing knowledge of the universe as a whole. For this older Plato, a person cannot even know what arete really is without knowing the form of the good itself, and so the greatest good comes from knowing the measure of one's own knowledge.

Plato's use of myth

Mythos and logos are terms that evolved along classical Greece history. In the times of Homer and Hesiod (8th century BC) they were quite synonyms, and contained the meaning of tale or history.

Like most other ancient philosophers, Plato maintains a virtue-based eudaemonistic conception of ethics. That is to say, happiness or well-being (eudaimonia) is the highest aim of moral thought and conduct, and the virtues (aretê: 'excellence') are the requisite skills and dispositions needed to attain it. If Plato's conception of happiness is elusive and his support for a morality of happiness seems somewhat subdued, there are several reasons. First, he nowhere defines the concept or makes it the direct target of investigation, but introduces it in an oblique way in the pursuit of other questions. Second, the treatment of the human good varies in the different dialogues, so that readers find themselves confronted with the problem of what to make of the discrepancies in different works. This touches on a fundamental problem with Plato's work – namely whether to follow a 'unitarian', 'revisionist', or 'developmentalist' approach to Plato's writings. Whereas unitarians regard the dialogues as pieces of one mosaic, and take the view that Plato in essence maintains a unified doctrine from his earliest to his latest works, revisionists maintain that Plato's thought underwent a

fundamental transformation later in his life, while 'developmentalist' hold that Plato's views evolved significantly throughout his career. While revisionism has lost its impact in recent years, developmentalism has gained in influence. Although there is no unanimity, few unitarians deny nowadays that the character of Plato's early, middle, and late works differ in style, language, scope and content, as is to be expected in a philosopher who worked for more than fifty years. Most developmentalists, in turn, agree that it is impossible to line up Plato's works like pearls on a string and to reconstruct his progress from dialogue to dialogue; for example, where the views expressed in different dialogues seem to disagree there may be complementation or supplementation at work, rather than divergence. Given that Plato never speaks in his own voice, it is important to take note of who the interlocutors are and what role is assigned to Socrates, if he is the main speaker. Plato's dialogues should never be treated in isolation when it comes to the reconstruction of his doctrine; but even the comparison and contrasting of ideas presented in different dialogues is not a sure recipe for interpreting this elusive thinker's views.

Plato's so-called 'Socratic' dialogues share certain characteristics as a group. They are short interrogations by Socrates of the kind indicated in his explanation of his divine mission in the Apology. They seem designed to undermine unquestioned traditional views and values rather than to develop positive accounts, although they sometimes contain indications that seeming dead ends are not real dead ends. The positive accounts contained in the middle dialogues – the so-called 'Platonic' dialogues – that are grouped around the Republic – treat happiness in different ways as a state of perfection. The exact nature of this state is not easy to pinpoint, however, because it is based on metaphysical presuppositions that are, at least prima facie, both hazy and out of the realm of ordinary understanding. There is not, as there is in Aristotle, an explicit determination of happiness as a self-sufficient state of the active individual. Instead, at least in some texts, Plato's moral ideals appear both austere and self-abnegating: The soul is to remain aloof from the pleasures of the body in the pursuit of higher knowledge, while communal life demands the subordination of individual wishes and aims to the common good.

The difficulties of assessing Plato's ethical thought are compounded by the fact that the metaphysical underpinnings seem to have changed during his long life. In the Socratic dialogues, there are no indications that the search for virtue and the human good goes beyond the human realm. This changes with the middle dialogues, which show a growing interest in an all-encompassing metaphysical grounding of knowledge, a development that leads to the positing of the 'Forms' as the true nature of all things, culminating in the Form of the Good as the transcendent principle of all goodness. Though the theory of the Forms is not confined to human values, but encompasses the whole of nature, Plato in the middle dialogues seems to assume no more than an analogy between human affairs and cosmic harmony. The late dialogues, by contrast, display a growing tendency to assume a unity between the microcosm of human life and the macrocosmic harmonic order of the entire universe, a tendency that is displayed most fully in the Philebus and the Timaeus. While these holistic tendencies appeal to the imagination because they rely on harmonic relations expressed in mathematical proportions, the metaphysical status of the Forms is even harder to make out in the late dialogues than in the middle dialogues.

The early 'Socratic' dialogues are not concerned with the question of the good life and its conditions in general, but rather with particular virtues. Socrates explores the individual virtues through a discussion with

persons who are either representatives of, or claim to be experts on, that virtue. Socrates' justification for this procedure is that a paragon or expert must know the characteristic property of a particular virtues, and therefore be able to give an account or definition of it (cf. Xenophon Memorabilia I, 10; 16). Thus, in the Euthyphro, Socrates discusses piety with an 'expert' on religious affairs. In the Laches, he discusses courage with two renowned generals of the Peloponnesian war, Laches and Nicias. Similarly, in the Charmides Socrates addresses – somewhat ironically – the nature of moderation with the two of the Thirty Tyrants, namely the then very young Charmides, an alleged model of modesty, and his guardian and intellectual mentor, Critias. In the Greater Hippias Socrates raises the question of the nature of the beautiful with a producer of 'beautiful things', the sophist and polymath Hippias.

ARISTOTLE

Aristotle (384-322) Aristotle's emphasis was on good reasoning combined with his belief in the scientific method forms the backdrop for most of his work. For example, in his work in ethics and politics, Aristotle identifies the highest good with intellectual virtue; that is, a moral person is one who cultivates certain virtues based on reasoning.

What Plato called idea or ideal, Aristotle called essence, and its opposite, he referred to as matter. Matter is without shape or form or purpose. It is just "stuff," pure potential, no actuality. Essence is what provides the shape or form or purpose to matter. Essence is "perfect," "complete," but it has no substance, no solidity. Essence and matter need each other

Essence realizes ("makes real") matter. This process, the movement from formless stuff to complete being, is called entelechy, which some translate as actualization.

There are four causes that contribute to the movement of entelechy. They are answers to the question "why?" or "what is the explanation of this?"

1. *The material cause: what something is made of.*
2. *The efficient cause: the motion or energy that changes matter.*
3. *The formal cause: the thing's shape, form, or essence; its definition.*
4. *The final cause: its reason, its purpose, the intention behind it.*

1. The material cause: The thing's matter or substance. Why a bronze statue? The metal it is made of. Today, we find an emphasis on material causation in reductionism, explaining, for example, thoughts in terms of neural activity, feelings in terms of hormones, etc. We often go down a "level" because we can't explain something at the level it's at.

2. The efficient cause: The motion or energy that changes matter. Why the statue? The forces necessary to work the bronze, the hammer, the heat, the energy.... This is what modern science focuses on, to the point where this is what cause now tends to mean, exclusively. Note that modern psychology usually relies on reductionism in order to find efficient causes. But it isn't always so: Freud, for example, talked about psychosexual energy and Skinner talked about stimulus and response.

3. The formal cause: The thing's shape, form, definition, or essence. Why the statue? Because of the plan the sculptor had for the bronze, it's shape or form, the non-random ordering of it's matter. In psychology, we see some theorists focus on structure -- Piaget and his schema, for example. Others talk about the structure inherent in the genetic code, or about cognitive scripts.

4. The final cause: The end, the purpose, the teleology of the thing. Why the statue? The purpose of it, the intention behind making it This was popular with medieval scholars: They searched for the ultimate final cause, the ultimate purpose of all existence, which they of course labeled God! Note that, outside of the hard sciences, this is often the kind of cause we are most interested in: Why did he do it, what was his purpose or intention? E.g. in law, the bullet may have been the "efficient" cause of death, but the intent of the person pulling the trigger is what we are concerned with. When we talk about intentions, goals, values, and so on, we are talking about final causes. Although Aristotle is deeply indebted to Plato's moral philosophy, particularly Plato's central insight that moral thinking must be integrated with our emotions and appetites, and that the preparation for such unity of character should begin with childhood education, the systematic character of Aristotle's discussion of these themes was a remarkable innovation. No one had written ethical treatises before Aristotle. Plato's Republic, for example, does not treat ethics as a distinct subject matter; nor does it offer a systematic examination of the nature of happiness, virtue, voluntariness, pleasure, or friendship. To be sure, we can find in Plato's works important discussions of these phenomena, but they are not brought together and unified as they are in Aristotle's ethical writings.

The Human Good and the Function Argument: The principal idea with which Aristotle begins is that there are differences of opinion about what is best for human beings, and that to profit from ethical inquiry we must resolve this disagreement. He insists that ethics is not a theoretical discipline: we are asking what the good for human beings is not simply because we want to have knowledge, but because we will be better able to achieve our good if we develop a fuller understanding of what it is to flourish. In raising this question—what is the good?—Aristotle is not looking for a list of items that are good. He assumes that such a list can be compiled rather easily; most would agree, for example, that it is good to have friends, to experience pleasure, to be healthy, to be honored, and to have such virtues as courage at least to some degree. The difficult and controversial question arises when we ask whether certain of these goods are more desirable than others. Aristotle's search for the good is a search for the highest good, and he assumes that the highest good, whatever it turns out to be, has three characteristics: it is desirable for itself, it is not desirable for the sake of some other good, and all other goods are desirable for its sake. Aristotle thinks everyone will agree that the terms "eudaimonia" ("happiness") and "eu zên" ("living well") designate such an end. The Greek term "eudaimon" is composed of two parts: "eu" means "well" and "daimon" means "divinity" or "spirit". To be eudaimon is therefore to be living in a way that is well-favored by a god. But Aristotle never calls attention to this etymology in his ethical writings, and it seems to have little influence on his thinking. He regards

"eudaimon" as a mere substitute for eu zên ("living well"). These terms play an evaluative role, and are not simply descriptions of someone's state of mind.

Aristotle: *The Nicomachean Ethics: The Nicomachean Ethics is widely considered one of the most important historical philosophical works, and had an important impact upon the European Middle Ages Aristotle argues that the correct approach for studying such controversial subjects as Ethics or Politics which involve discussing what is beautiful or just is to start with what would be roughly agreed to be true by people of good up-bringing and experience in life, and to work from there to a higher understanding. a contemplation about good living, because it also aims to create good living. It is therefore connected to Aristotle's other practical work, the Politics, which similarly aims at people becoming good. Ethics is about how individuals should best live, while the study of politics is from the perspective of a law-giver, looking at the good of a whole community. Taking this approach, Aristotle begins by saying that the highest good for humans, the highest aim of all human practical thinking, is eudaimonia, a Greek word often translated as well-being or happiness Aristotle in turn argues that happiness is properly understood as an on-going and stable dynamic a way of being in action (energeia) specifically appropriate to the human "soul" (psyxi)at its most "excellent" or virtuous (virtue translates arête in Greek). If there are several virtues then the best and most complete or perfect of them will be the happiest one. An excellent human will be a person good at living life, who does it well and beautifully (kalos). Aristotle says that such a person would also be a serious (spoudaios) human being, in the same sense of "serious" that one contrasts serious harpists with other harpists. He also asserts as part of this starting point that virtue for a human must involve reason in thought and speech (logos) as this is an aspect (an ergon, literally meaning a task or work) of human living. Character here translates ēthos in Greek, related to modern words such as ethics, ethical and ethos Aristotle does not however equate character with habit (ethos in Greek, with a short "e") because real character involves conscious choice, unlike habit. Instead of being habit, character is a hexis like health or knowledge, meaning it is a stable disposition which must be pursued and maintained with some effort. However, good habits are described as a precondition for good character.*

The Doctrine of the Mean- Ethical Virtue as Disposition

Aristotle *describes ethical virtue as a "hexis" ("state" "condition" "disposition")—a tendency or disposition, induced by our habits, to have appropriate feelings (1105b25–6). Defective states of character are hexeis (plural of hexis) as well, but they are tendencies to have inappropriate feelings. The significance of Aristotle's characterization of these states as hexeis is his decisive rejection of the thesis, found throughout Plato's early dialogues, that virtue is nothing but a kind of knowledge and vice nothing but a lack of knowledge. Although Aristotle frequently draws analogies between the crafts and the virtues (and similarly between physical health and eudaimonia), he insists that the virtues differ from the crafts and all branches of knowledge in that the former involve appropriate emotional responses and are not purely intellectual conditions.*

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WEST EUROPE: Renaissance –Industrial Revolution

Starting point for the west Europe philology is divided in two (2) main philosophical currents (although were guided by those bases provided by the classical ancient Greek thought):

o Classical Utilitarianism , which started with the slogan "The greatest happiness for the greatest number" and

o Welfare Economics, which is supposed to increase national welfare Example:

Thomas Hobbes (1588-1679) , *The pure state of nature or "the natural condition of mankind" was deduced by the 17th century English philosopher in "Leviathan" in his earlier work on the Citizen" Hobbes argued that all humans are by nature equal in faculties of body and mind (i.e., no natural in equalities are so great as to give anyone a "claim" to an exclusive "benefit*

David Hume (1711-1776) *Beginning with his "A treatise of Human Nature" (1739), Hume strove to create a total naturalistic "science of man" that examined the psychological basis of human nature In opposition to the rationalists who preceded him, most notably Rene Descartes he concluded that desire rather than reason governed human behavior.*

Immanuel Kant (1724-1804) *Kant argued that our experiences are structured by necessary features of our minds. In his view, the mind shapes and structures experience so that, on an abstract level, all human experience shares certain essential structural features.*

J. J. Rousseau (1712-1778) *Rousseau claimed that the state of nature was a primitive condition without law or morality, which human beings left for the benefits and necessity of cooperation. As society developed, division of labor and private property required the human race to adopt institutions of law. In the degenerate phase of society, man is prone to be in frequent competition with his fellow men while also becoming increasingly dependent on them. This double pressure threatens both his survival and his freedom. According to Rousseau, by joining together into civil society through the Social Contract and abandoning their claims of natural right individuals can both preserve themselves and remain free. This is because submission to the authority of the general will of the people as a whole guarantees individuals against being subordinated to the wills of others and also ensures that they obey themselves because they are, collectively, the authors of the law.*

Classical utilitarianism : *The origins of utilitarianism are often traced as far back as the Greek philosopher Epicurus but, as a specific school of thought, it is generally credited to Jeremy Bentham (1748-1832) (Utilitarianism) Utilitarianism retains the Epicurean view that humans naturally seek pleasure and avoid pain,)*

J .Bentham *(1748-1832) : Utilitarianism theory-cardinal utility function) became a leading theorist in Anglo-American philosophy of law*

Bentham's utilitarianism is based on a number of assumptions like, Each individual knows best what is good for him/her, Each individual should decide him/herself in private matters, The welfare of an individual doesn't depend on other individual's welfare…From the other hand,

John Stuart Mill *(20 May 1806 – 7 May 1873) was better known as the author of Principles of Political Economy (1848) , a work that tried to show that economics was not the "dismal science" that its radical and literary critics had supposed. Its philosophical interest lay in Mill's reflections on the difference between what economics measured and what human beings really valued*

John Rawls (A Theory of Justice 1971) *. Rawls belongs to the social contracts tradition. However, Rawls' social contract takes a different view from that of previous thinkers. Specifically, Rawls develops what he claims are principles of justice through the use of an artificial device he calls the Original position in which everyone decides principles of justice from behind a veil of ignorance. This "veil" is one that essentially blinds people to all facts about themselves so they cannot tailor principles to their own advantage:*

Capitalism: *The historical context of classical economics was the age of enlightenment the French Revolution (1789-1799) and the Industrial Revolution Classical economics is widely regarded as the first modern school of economic thought It is the idea that free markets can regulate themselves. Its major developers include*

Adam Smith, (1723 – 1790) David Ricardo, Thomas Malthus and John Stuart Mill Adam Smith's The Wealth of Nations in 1776 is usually considered to mark the beginning of classical economics. The school was active into the mid 19th century and was followed by neoclassical economics in Britain beginning around 1870. Classical economists attempted and partially succeeded to explain economic growth and development. Wealth of Nations (1776)

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Karl Marx (1818-1883)

Marx's theories about society, economics and politics—the collective understanding of which is known as "Marxism" hold that human societies progress through class struggle a conflict between an ownership class that controls production and a dispossessed laboring class that provides the labor for production.

In Das Kapital (1867), Marx proposes that the motivating force of capitalism is in the exploitation of labor, whose unpaid work is the ultimate source of surplus value. The owner of the means of production is able to claim the right to this surplus value because he or she is legally protected by the ruling regime through

property rights and the legally established distribution of shares which are by law only to be distributed to company owners and their board members. The historical section shows how these rights were acquired in the first place chiefly through plunder and conquest and the activity of the merchant and "middle-man". In producing capital (produced goods), the workers continually reproduce the economic conditions by which they labour. Capital proposes an explanation of the "laws of motion" of the capitalist economic system, from its origins to its future, by describing the dynamics of the accumulation of capital, the growth of wage labour, the transformation of the workplace, the concentration of capital, commercial competition, the banking system, the decline of the profit rate, land-rents, et cetera.

The critique of the political economy of capitalism proposes that: *Wage-labor is the basic "cell-form" (trade unit) of a capitalist society. Moreover, because commerce as a human activity implied no morality beyond that required to buy and sell goods and services, the growth of the market system made discrete entities of the economic, the moral and the legal spheres of human activity in society; hence, subjective moral value is separate from objective economic value. Subsequently, political economy – the just distribution of wealth and "political arithmetick" about taxes – became three discrete fields of human activity: economics, law and ethics, politics and economics divorced.[citation needed]*

"The economic formation of society [is] a process of natural history". It is thus possible for a political economist to objectively study the scientific laws of capitalism, given that its expansion of the market system of commerce had objectified human economic relations; the use of money (cash nexus) voided religious and political illusions about its economic value and replaced them with commodity fetishism, the belief that an object (commodity) has inherent economic value. Because societal economic formation is a historical process, no one person could control or direct it, thereby creating a global complex of social connections among capitalists.[citation needed] The economic formation (individual commerce) of a society thus precedes the human administration of an economy (organized commerce).

The structural contradictions of a capitalist economy, the gegensätzliche Bewegung, describe the contradictory movement originating from the two-fold character of labour and so the class struggle between labor and capital, the wage laborer and the owner of the means of production. These capitalist economic contradictions operate "behind the backs" of the capitalists and the workers as a result of their activities and yet remain beyond their immediate perceptions as men and women and as social classes.

The economic crises (recession, depression, et cetera) that are rooted in the contradictory character of the economic value of the commodity (cell-unit) of a capitalist society are the conditions that propitiate proletarian revolution – which The Communist Manifesto (1848) collectively identified as a weapon, forged by the capitalists, which the working class "turned against the bourgeoisie, itself".

In a capitalist economy, technological improvement and its consequent increased production augment the amount of material wealth (use value) in society while simultaneously diminishing the economic value of the same wealth, thereby diminishing the rate of profit – a paradox characteristic of economic crisis in a capitalist economy. "Poverty in the midst of plenty" consequent to over-production and under-consumption

After two decades of economic study and preparatory work (especially regarding the theory of surplus value), the first volume appeared in 1867 as The Production Process of Capital After Marx's death in 1883, from manuscripts and the first volume Engels introduced Volume II: The Circulation Process of Capital in 1885; and Volume III: The Overall Process of Capitalist Production in 1894. These three volumes are collectively known as Das Kapital.

Marxism

"The relations of capital assume their most externalized and most fetish-like form in interest-bearing capital We have here , money creating more money, self-expanding value, without the process that effectuates these two extremes. In merchant's capital, , there is at least the general form of the capitalistic movement, although it confines itself solely to the sphere of circulation, so that profit appears merely as profit derived from alienation; but it is at least seen to be the product of a social relation, not the product of a mere thing. (...) This is obliterated in , the form of interest-bearing capital. (...)

According to Marxist theory, class conflict arises in capitalist societies due to contradictions between the material interests of the oppressed proletariat – a class of wage laborers employed to produce goods and services – and the bourgeoisie – the ruling class that owns the means of production and extract their wealth through appropriation of the surplus product (profit) produced by the proletariat[81].

This class struggle that is commonly expressed as the revolt of a society's productive forces against its relations of production, results in a period of short-term crises as the bourgeoisie struggle to manage the intensifying alienation of labor experienced by the proletariat, albeit with varying degrees of class consciousness. This crisis culminates in a proletarian revolution and eventually leads to the establishment of socialism – a socioeconomic system based on social ownership of the means of production, distribution based on one's contribution and production organized directly for use[82]. As the productive forces continued to advance, Marx hypothesized that socialism would ultimately transform into a communist society; a classless, stateless, humane society based on common ownership and the underlying principle: "From each according to his ability, to each according to his needs" From the other hand, Natalie Moszkowska (1886-1968) supported (1935)[83] "... wages that follow the growth of work productivity, such that the share of wages would

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- Wolff and Resnick, Richard and Stephen (August 1987). Economics: Marxian versus Neoclassical. The Johns Hopkins University Press. p. 130.The German Marxists extended the theory to groups and issues Marx had barely touched. Marxian analyses of the legal system, of the social role of women, of foreign trade, of international rivalries among capitalist nations, and the role of parliamentary democracy in the transition to socialism drew animated debates ... Marxian theory (singular) gave way to Marxian theories (plural).
- O'Hara, Phillip (September 2003). Encyclopedia of Political Economy, Volume 2. Routledge. p. 107.. Marxist political economists differ over their definitions of capitalism, socialism and communism. These differences are so fundamental, the arguments among differently persuaded Marxist political economists have sometimes been as intense as their oppositions to political economies that celebrate capitalism.
- Ermak, Gennady (2016). Communism: The Great Misunderstanding.
- Bridget O'Laughlin (1975) Marxist Approaches in Anthropology Annual Review of Anthropology Vol. 4: pp. 341–70 (October 1975)
- William Roseberry (1997) Marx and Anthropology Annual Review of Anthropology, Vol. 26: pp. 25–46 (October 1997)
- S. L. Becker (1984) "Marxist Approaches to Media Studies: The British Experience", Critical Studies in Mass Communication, 1(1): pp. 66–80.
- Georges Haupt, Peter Fawcett, Eric Hobsbawm. Aspects of International Socialism, 1871–1914: Essays by Georges Haupt. Paperback Edition. Cambridge, England, UK: Cambridge University Press, 2010. pp. 18–19.

82 Natalie Moszkowska(1935) Criticism of Modern Crisis Theories (Zur Kritik moderner Krisentheorien), published in 1935

83 Natalie Moszkowska(1935) Criticism of Modern Crisis Theories (Zur Kritik moderner Krisentheorien), published in 1935

remain constant and balanced. She considered that technical progress, a subject she developed in her previous book, is synonymous with the rise of the rate of profit. She believed appreciation would increase due to the disparate adjustment in prices. Wages and the price of raw materials would decrease faster than the price of manufactured goods.."

Income of society is the output of society Production is the supply Income is demand Income of one period, corresponds to production of the same period - 2 exactly match Income is just enough to buy production breaks down in production goods and consumption goods The income is shared in saving-consumption The first part of the income is used for the purchase of means of production, the second one for the purchase of consumption means (KASEL) For the uninterrupted course of consumption ECONOMY is consequently necessary:

1. The share of the income of the society saved is coincident with the value (price) of the productive means produced (tools ..) The part of the income intended for direct consumption coincides with the value of the consumer goods

2. the two parts of the income - and thus the two major production spheres are in harmony with each other

In the capitalist economy only the first of these two necessary ratios can be respected

The second ratio, which is equally important for the normal course of the economy, REASONABLE cannot exist

In capitalism the purpose of production is not to meet needs but to achieve profit And the profit is-ceteris paribus-the higher, the higher the rate of surplus value and the already accumulated capital

PART VI
CONCLUSIONS

Conclusions

Win-win-win papakonstantinidis model vs win-win model

win-win model

The intuition of profitable outcome: It is based on when both sides of a deal feel they have won. Given that both sides benefit from such a scenario, any conflicting decisions are likely to be voluntarily accepted. The process of integrated negotiation aims to achieve profitable results through cooperation

the "win-win-win papakonstantinidis" model

The "win-win-win papakonstantinidis" model can be considered an extension of the win-win model. Not only does each side of a dispute feel they have won, but even more so both sides feel that their own community has also won, in context a social contract between them (moral convention), beyond its strict interpretation of the law: this is the limit of the sensitization process towards the absolute social cohesion - the "point of angels"

Conclusions-1

1. *The "win-win-win papakonstantinidis model" is a "tool of consent" useful in socio-economic human (and not only) relations Using this tool, a decent answer can be given to Arrow's impossibility theorem. Also it is a "tool" for conflict resolution Also it may be used in approaching the "Principal-Agent Problem" (PAP) In particularly, argumentation of the work is focused on "transferring the "voting perception (Arrow, 1951) from a single individual choice, in the «bargaining multiple decision making, thus taking into consideration the "Community Profit" (The 3rd part so a "peer-pressure perception" Bargainers A-B and the Community as a whole (the "C" Factor), or as "a Moral Aggregation"*

2. *Identification "win-win-win" as a key tool for the approach to social welfare by clicking on the incompatibility of five basic theorems that define it - each one of its own side-either positive (justice theorem) or negative (the impossibility theorem)*
3. *The suggested "win-win-win papakonstantinidis model" is built up on these incompatibilities, in particular as regards the pairs" Pareto efficiency – Impossibility Theorem" "paradox liberty (Amartya Sen) - Pareto Efficiency" , "Theorem of Justice –Pareto Efficiency" and (the most important) "the Theorem of incompleteness-the Impossibility Theorem"*
4. *The "win-win-win papakonstantinidis model" (2002, August, SW) may, thus, transform individual winning –instant reflection –strategies (the win-win Nash Theory) in a NEW –three poles-equilibrium point, including the COMMUNITY (Environmental Protection, Value Systems, Ethic etc), which is the "absolute cooperation" limit point in the bargain between TWO*
5. *Any living (not only human) "activity" is dominated by the "action-reaction Rule" Even the baby crying is a reaction against their parents to give more care to him/her*
6. *Especially, Groups of mutually corresponding interests are subject to mutually* ***corresponding interactions***[84]***.***
7. *From this point of view, "interaction concept" meets with a number of the scientific fields as, Management, Industry, Marketing, Sociology, Decision Making, Strategy, History, CULTURE folklore study, Psychology, Medicine, Biology, Biochemistry, the Science of Culture and Plants, the Science of livestock, Engineering, the Science of Electricity , Astronomy, Physics, Space Aeronautics, Philosophy, Arts, Scenography, the Art of Movie or Theatre Actors, Sculpture, Art, Painting,*
8. *"Consumer Attitude, Brand Awareness, Brand Association, Perceived Quality and Brand Loyalty scales" are included in the "behavioral economics" From this point of view, it could be possible to see-alternatively-all these expressions [Consumer Attitude, Brand Awareness , Brand Association….) as a part of "reaction behavior" that matches the whole LIFE and its evolution*
9. *In this frame, BARGAINING THEORY seems to match better than any other,*
10. *From this point and then, a more deep analysis must be proved to be necessary , especially as it concerns a "social interaction" concept, or the win-win-win papakonstantinidis model*
11. *"The win-win-win papakonstantinidis approach" may work :*
    I. *As a basis for social interaction and decision making, utility maximizing agents frequently act according to the potential consequences on other agents' utilities. Social decision making interests academics across diverse disciplines from psychology to evolutionary biology, and includes the seminal works of John Nash and Kenneth Arrow who studied situations where two or more agents must jointly decide on a social outcome deemed acceptable to each agent*[85]

[84] Morton-Firth CJ, Bray D (1998) Predicting temporal fluctuations in an intracellular signalling pathway. J Theor Biol. 1998 192(1):117-28.

- [85] https://www.researchgate.net/publication/330181167_Political_Economy_and_Decision_Making_Methodical_Reflections_on_the_WWW_Papakonstantinidis_Bargaining_Model

II. *As "competition" does not match any more to our "meta-capitalist era", a more "socialized economic environment" in a fairer world with more equal opportunities is feasible This does not a wish, it is the reality*

III.

Papakonstantinidis Conjectures

1. "at any bargain between two, each one from the 2 bargainers represents the whole of the community and (at the same time) him/her self From this point of view, Community may be concerned as an aggregate entity that participates in a social welfare game. So, "what is good for the Community (the third "win") and what is no, incorporated in each one from the bargainers' expectations (in the frame of the "agency theory" or "the principal-agent -problem"

AND

1. People have by nature, a strong trend to cooperate each-other. From this point of view, "a win-win-win situation may be possible if and only if the human mind (as expressed in terms of interaction), is built to accept this situation (the universal cooperation) bargainers think double, as separate rational units AND as "the COMMUNITY"

AND

2. The problem of interaction in a bargain is transferred from the negotiators' intentions into share's distribution in a possible solution by agreement

a. People want to cooperate, but in the depth of their mind seek such an agreement that will give them shares such that to maximize the satisfaction of personal needs

b. This point is very important for our work: Social welfare is the product of "ordinal" (and not cardinal) individual /personal utilities (to maximize the satisfaction of personal needs)

c. The product of individual ordinal utilities becomes maximum when the product of marginal utilities tends, or is equal to zero, as there is nothing else to be added such as to increase personal or individual satisfaction beyond the existing level

Conclusions-2

- https://www.researchgate.net/publication/328217960_Stakeholder_Theory_Integrative_Business_Ethics_by_the_win-win-win_papakonstantinidis_model
- https://www.researchgate.net/publication/329708054_CSR_An_application_of_the_win-win-win_papakonstantinidis_model
- https://www.researchgate.net/project/Social-Welfare-Collection-of-bibliographic-references-and-the-win-win-win-papakonstantinidis-model
- https://www.researchgate.net/publication/330912223_978-613-9-44761-9_1
- ISSN 978-613-9-44761-9
- https://www.researchgate.net/publication/329708054_CSR_An_application_of_the_win-win-win_papakonstantinidis_model
- ISSN 978-613-9-96708-7

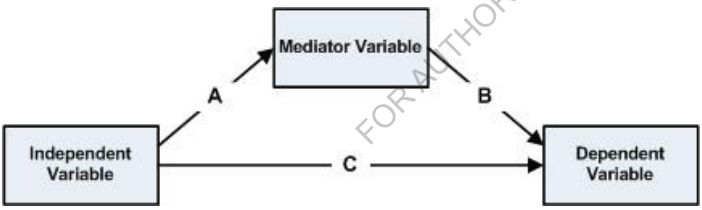
The win-win-win equilibrium "hlp", -the 3-part agreement situation, including the COMMUNITY) may be:

1. ***A global interpretation of all interactive PROCESS***
2. ***An idea that contributes the cultural, political, natural etc people's cohesion***
3. ***A Principal-Agent Theory, as the Principal (local People) ...their government by their vote***
4. ***A LMX, as the leader (Government) exchange priorities with the People (Members of STATE***
5. ***An "arbitration Theory", as COMMUNITY intermediates in the state-members relations***
6. ***A "mediation theory", as the "win-win-win papakonstantinidis model" is a theory that understands the cultural order - more simply, culture - not as the totality of the essential works of a society, nor as the general state of a given civilization, but as the ensemble of properly human capacities which, absent pathological conditions, all human beings share regardless of their historical epoch or geographical setting All the above theories converge to "mediation": Mediation is a dynamic, structured, interactive process where a neutral third party assists disputing parties in resolving conflict through the use of specialized communication and negotiation techniques. All participants in mediation are encouraged to actively participate in the process. Mediation is a "party-centered" process in that it is focused primarily upon the needs, rights, and interests of the parties. The mediator uses a wide variety of techniques to guide the process in a constructive direction and to help the parties find their optimal solution.***
7. ***According to the social-historical theory, interaction between individuals plays a major role in building the human being. It is through such interpersonal relationships that the individual's psychological development takes place. Therefore, in school education, interaction with teacher and with classmates is essential; in addition, their mediation along the educational process is an extremely relevant factor to achieve goals. Mediation also includes use of tools and signs in the social context, enabling the development of superior psychological processes.***

*T**hree** points, consists the concept of this work (a) the **market**, (b) human **behavior** and (c) the **game** as a field of human behavior, in and during the bargain (risk, gene fighter, risk aversion) introducing a **triangular perspective** that characterizes the presentation: LEADER EU Initiative, as well as the Local Action Group's Philosophy have been based on this idea. The basic idea is very simple: Suppose there are only, three **(3)** people around the planet where everyone is trying to optimize his/her personal situation, in a continuous bargain with other 2, (competitors) by using the instrumental rationality as a "tool of mind" Each of the 3 is quite indifferent for the other two situation, or feelings. In that case, it should be proved that*

*the **best response for each of them is to call the other two in the pure and absolute cooperation** for their own survival.*

*The "prize" of each of their Mixed Individual Strategies (decisions) is his/her survival (as a total): You can imagine-now- the local community survival as the result of the cooperation among 3-pole local power poles (PAC)-see part ii win-win-win papakonstantinidis' applications towards a common goal (Community Survival in a globalized world) The European "tool" for this, is the L.E.A.D.E.R EU Initiative (since 1991). From this point of view, it is assumed that **each of the PAC members** is **"Buyer"** and **"Seller"** of the same need (survival) of the others simultaneously (in accordance with Spais, 2012). Based on this simple concept, the 3-pole (**P**eople **A**uthorities, **C**onsumers) active behavior produces outcomes -ensuring that the **PAC** equilibrium may exist thus promoting the collective PAC choice (Sen, 1984)- through cooperation, despite the existence of the "Impossibility Theorem" (Arrow, 1950). Considering this idea, we may say that the role of the suggested "win-win-win papakonstantinidis model" is the integration of the (PAC)'s multifold system, in its development perspective. Therefore, "PAC equilibrium" is the key-point of the paper, as it meets all the community development conditions. This triangular layout defines the necessity of the "sensitization process", which is introduced as the "integrated information" in the local development process. Besides, it is argued that local involvement in the development process is going through constant sensitization of the local population. The Sensitization could be taught as "added information" (Papakonstantinidis, 2004). From this point, the "behavior side" is considered.*



Papakonstantinidis, 2017

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Case studies:

1. *Rural tourism-the PAC model*
2. *Sensitization: Responder feeling/behavior AND the win-win-win approach*

Rural tourism-the PAC model[86]

*The continuous conflict between the three (3) main bargaining power poles at the local level i.e local **P**eople (and their interests lobbies), local **A**uthorities and the **C**onsumers of tourism services shapes the landscape of its management and operation. This conflict landscape is directly correlated with the development dynamical trends coming especially from the rapid rate of world urbanization: Market forces based on **I**nstant **R**eflection **I**ndividual **M**ixed **S**trategies **(IRIMS)** between the three power poles i.e Local **P**eople, Local **A**uthorities and tourism services' **C**onsumers **(P. A. C.) shape the local space unity** by a continuous dynamic evolution. This evolution positively influences the community development towards its spatial integration, during the process of community tourism at the local level. Given the above:*

a. *May the rural development be viewed as the result of a continuous conflict among local power poles' (people, authorities, organizations, regions) for the domination over the rural tourism activity? How, local interests -which converging in a local goal- should be achieved by the same market rules?*
b. *Is the 3ple PAC involvement, able to create equilibrium point in a payoffs matrix coming from "best responses", of the three (3) players? How the 3-ple PAC equilibrium is different (if it is) from that of the 2-players game? Is any possibility, the PAC system to produce conflict equilibria in a globalized and competitive world? What is the possibility ensuring the max profit for each of them ["Pareto efficiency"], so that none of the PAC members have any interest to change his/her strategy, without losses for him/herself and for the others?*
c. *Could, a 3-ple pole system influence the world economic and social system?*
d. *Could the behavior of bargainers (locally) being changed resulting rural development process' spillover feedback? Should, a 3-ple pole system influence the world economic and social system?*
e. *Could the behavior of bargainers (locally) being changed resulting rural development process' spillover feedback?*

Case study 2: SENSITIZATION

[86] Papakonstantinidis LA (2013) **Involving communities in rural tourism: A "win-win-win papakonstantinidis model" methodological approach and the examination of two Women Rural Tourism Cooperatives' Case Studies**- WORLD CONFERENCE, TITLED "Communities as a part of sustainable rural Tourism – success factor or inevitable burden? **10th – 11th September 2013 in Kotka, Finland-** Communities As A Part Of Sustainable Rural Tourism – Success Factor Or Inevitable Burden? Proceedings Of The Community Tourism Conference, 10th – 11th September 2013 In Kotka, Finland

We have to examine what of the 3 approaches, i.e responder feelings, responder behavior and the win-win-win papakonstantinidis approaches fits well in a working community

We adopt the Chi Square test for each of the three approaches

Case Study:

RESEARCH ID :

Field: Decision Making

Sample: 213 high level educated staff with high level hierarchy positions

PELOPONNESUS INDUSTRY

PERIOD : [2018 -01-01 till 2018-12-31]

1

AREA	STATISTIC CATEGORIZATION	TIME PERIOD	SAMPLE	m-education post graduated	m-profession agro-business leaders
PELOPONNESUS industry	**STRATIFICATION**	**1-1-2018 till 31-12- 18**	**213**	**107**	**106**

1a

2

The sample	Agribusiness CEO	Agribusiness leaders	marketing planners	dealers	Post graduate Students [MBA]	Students In marketing schools
Nr	1	7	78	112	4	11

THE QUESTIONAIRE

3

		AGES			*Respond Feelings ACCEP*	*Responde Behavior REJECT*	*The win-win-win papakonstantinidis*
		18	25	34			
1.1	*I work in a non well defined MARKETING SPACE with no organized frame and so it's impossible to take decisions*						
1.2	*New MARKETING technologies will surely come along to make decision easier*						
1.3	*I do not know, if my rejection has potential harm to the one who proposes*						
1.4	*If business is forced to spend a lot of money, for conflict resolution inside the company*						
1.5	*As an MBA student, just don't have the time to worry on potential harm to proposer, coming from my actions*						*XXX*
.1.6	*I think I do take care for the proposer by the SENSITIZATION Method* [88]						
1.7	*I try to pass the message that I would be embarrassed if people I know were sad from my behavior in the enterprise*						
1.8	*I try to organize my business so as to avoid tensions between my employees*						
1.9	*Local governments should provide more incentives for people to*						
1.10	*Marketing Message for cooperation in business, the local community, the sellers-buyers relations*						

$$\chi_c^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

The chi-square formula: **interdependence between human variables**

METHOD:

0=Observing Payoffs

E= Expected Payoffs

[87] The 'GREEK STATISTICAL AYTHORITY"-2013

[88] Papakonstantinidis LA (2002) "The **S**ensitized **L**ocal **C**ommunity" **(SLC)** DARDANOS/GUTENBERG/TYPOTHITO [six editions FIRST EDITION: EVRYTANIA S.A (1980) , 2nd SELF-EDITION, "To Anapodon", 1994, 3rd Edition NIKAL-MAREL, 1995,4th edition DIMITROPOULOS/5-6 EDITIONS DARDANOS/GUTENBERG/TYPOTHITO, 2000-2002

5

BEHAVIOR	OBSERVED	EXPECTED **frequencies**	RESIDUAL (OBS−EXP)	(OBS−EXP)²	COMPONENT=(OBS−EXP)²/EXP
1	29	21,3	7,7	59,29	
2	24	21,3	2,7	7,29	
3	22	21,3	0,7	0,49	
4	19	21,3	−2,3	5,29	
5	21	21,3	−0,3	0,09	
6	18	21,3	−3,3	10,89	
7	19	21,3	−2,3	5,29	
8	20	21,3	−1,3	1,69	
9	23	21,3	1,7	2,89	
10	18	21,3	−3,3	10,89	
TOTAL	213	213			

6

BEHAVIOR	OBSERVED	EXPECTED **frequencies**	RESIDUAL (OBS−EXP)	(OBS−EXP)²	COMPONENT=(OBS−EXP)²/EXP
1	29	21,3	7,7	59,29	2,7835680
2	24	21,3	2,7	7,29	0,3422535
3	22	21,3	0,7	0,49	0,0230048
4	19	21,3	−2,3	5,29	0,2483568
5	21	21,3	−0,3	0,09	0,0044225
6	18	21,3	−3,3	10,89	0,5112676
7	19	21,3	−2,3	5,29	0,2483568
8	20	21,3	−1,3	1,69	0,0793427
9	23	21,3	1,7	2,89	0,1356807
10	18	21,3	−3,3	10,89	0,5112676
TOTAL	213	213	25.6		4.888....

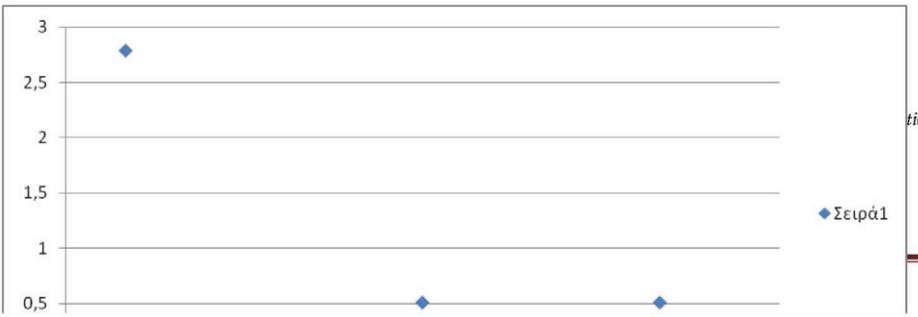
7

$$\chi_c^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

BEHAVIOR	OBSERVED	EXPECTED frequencies	RESIDUAL (OBS–EXP)	(OBS–EXP)^2	$\chi_c^2 = \sum \frac{(O_i - E_i)^2}{E_i}$	notes[89]
1	2	3	4	5	6	7
1	29	**21,3**	7,7	**59,29**	**2,7835680**	
2	24	21,3	2,7	7,29	0,3422535	
3	22	21,3	0,7	0,49	0,0230048	1,618[90]
4	19	21,3	-2,3	5,29	0,2483568	
5	21	21,3	-0,3	**0,09**	**0,0044225**	**Max/min (61,8)[91]**
6	18	21,3	-3,3	10,89	0,5112676	
7	19	21,3	-2,3	5,29	0,2483568	
8	20	21,3	-1,3	1,69	0,0793427	
9	23	21,3	1,7	2,89	0,1356807	
10	18	21,3	-3,3	10,89	0,5112676	
TOTAL	213	213			**4,888...**	**4.888/2.78**

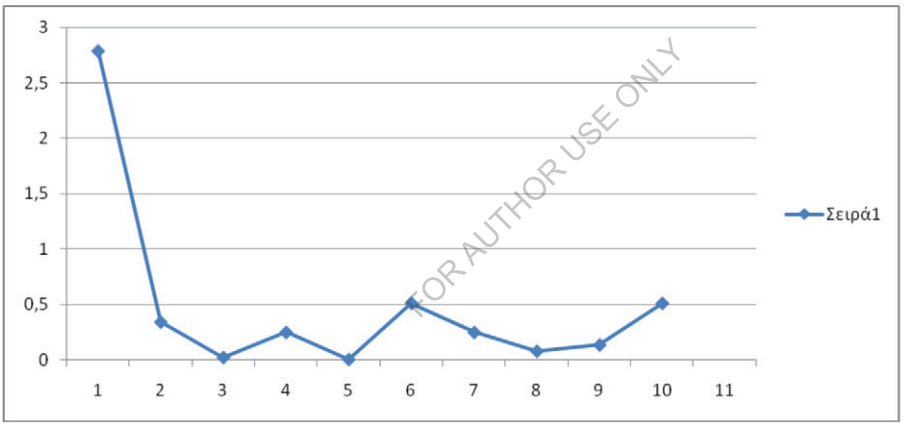
8

GRAPH:



tion): "economic

9



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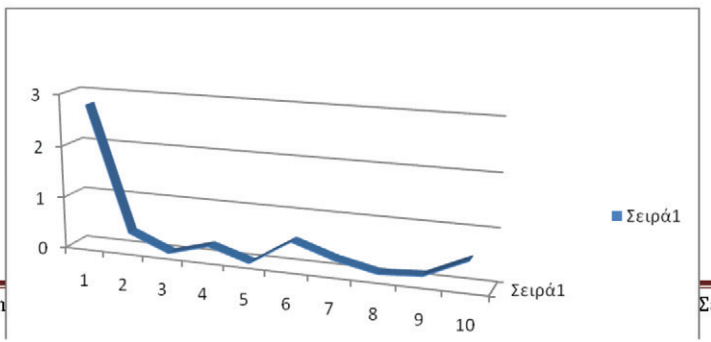

11....

[92]

THE QUESTIONAIRE

		Respond Feelings	Responde Behavior	The win-win-win papakonstantinidis
1.1	I work in an organization with no organized frame and so it's impossible to take decisions			
1.2	New MARKETING technologies will surely come along to make decision aligned with feelings			
1.3	I cannot control my feelings			

[92] In any CHI SQUARE variables, two (at least) values have a φ=1.618, or h_{ip}=1.888.. relation

1.4	I'm anxiety due to psychological pressure			
1.5	As an MBA student I've no time to control my nervous			
1.6	I think I do take care my feelings by the SENSITIZATION Method [93]			
1.7	I try to pass the message of sensitizes feelings			
1.8	I try to control my feelings toward gain much money			
1.9	CSR, based on good feelings			
1.10	Marketing Message for cooperation in business based on sensitized feelings			

3

Findings:

$\chi^2(N = 213,...0,09) = 0,0044225 - the$
near...to...H_o

Correspondingly

$\chi^2(N = 213,..7,29) = 03422535$
(Responder Feelings)
and

$\chi^2(N = 213,...1,69) = 0,0793427$ *(Responder Behavior)*

	better interpretation of phenomena	*Usefulness*
Responder Feelings	χ^2**=0,345**	*partially meets some human feelings*
Responder Behavior	x^2**=0,0793**	*It covers a typical pattern of behavior*
The win-win-win papakonstantinidis approach	x^2**=0,0044**	*It covers the sensitized human behavior resulting from a continuous and painful sensitization process*

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[93] Papakonstantinidis LA (2002) "The **S**ensitized **L**ocal **C**ommunity" **(SLC)** DARDANOS/GUTENBERG/TYPOTHITO [six editions FIRST EDITION: EVRYTANIA S.A (1980) , 2nd SELF-EDITION, "To Anapodon", 1994, 3rd Edition NIKAL-MAREL, 1995,4th edition DIMITROPOULOS/5-6 EDITIONS DARDANOS/GUTENBERG/TYPOTHITO, 2000-2002

MAIN QUESTIONS

*The continuous conflict between the three (3) main bargaining power poles at the local level i.e local **P**eople (and their interests lobbies), local **A**uthorities and the **C**onsumers of tourism services shapes the landscape of its management and operation. This conflict landscape is directly correlated with the development dynamical trends coming especially from the rapid rate of world urbanization: Market forces based on **I**nstant **R**eflection **I**ndividual **M**ixed **S**trategies **(IRIMS)** between the three power poles i.e Local **P**eople, Local **A**uthorities and tourism services' **C**onsumers **(P. A. C.) shape the local space unity** by a continuous dynamic evolution. This evolution positively influences the community development towards its spatial integration, during the process of community tourism at the local level. Given the above:*

(a) *May the local-rural COMMUNITY development be viewed as the result of a continuous conflict among local power poles' (people, authorities, organizations, regions) for the domination over the rural tourism activity? How, local interests -which converging in a local goal- should be achieved by the same market rules?*

(b) *Is the 3ple PAC involvement, able to create equilibrium point in a payoffs matrix coming from "best responses", of the three (3) players? How the 3-ple PAC equilibrium is different (if it is) from that of the 2-players game? Is any possibility, the PAC system to produce conflict equilibria in a globalized and competitive world? What is the possibility ensuring the max profit for each of them ["Pareto efficiency"], so that none of the PAC members have any interest to change his/her strategy, without losses for him/herself and for the others?*

(c) *Could, a 3-ple pole system influence the world economic and social system?*

(d) *Could the behavior of bargainers (locally) being changed resulting rural development process' spillover feedback? Should, a 3-ple pole system influence the world economic and social system?*

(e) *Could the behavior of bargainers (locally) being changed resulting rural development process' spillover feedback?*

The continuous conflict between the three main bargaining power poles at the local level (state services, elected local authorities, local people and its interests lobbies) shape the landscape of its management and operation. The 3-Pole roles –especially in Greece- are not so clear As a result, each of them intervenes in the other responsibilities' space. Each of them cancels the efforts undertaken by other and thus the output is very poor. This conflict landscape is directly correlated with the development trends, coming especially from the rapid rate of world urbanization :

Over the second half of the 20th century, we have seen the continuous transformation of the world's population from rural to urban (Kenneth Wilkinson, 1991, Ramonet Ignacio, 2000,), and this change is likely to continue in decades to come. It is obvious that cities and local communities are not alone nor operate independently each-other. In a globalized world, cities and local communities are interconnected and mutually affected each- other Natural Environment and the form of cities / local communities is shaped by the trends of urbanization, changes in employment, immigration trends, and also from the standard production and marketing (Oikonomou- Kafkalas, 1922a, Ankerl Guy, 1986). Urbanization in the People's Republic of China- for example- increased in speed following the initiation of the reform and opening policy. By the end of 2010, the mainland of the People's Republic of China had a total urban population of 665.57 million or 49.68 percent of the total population Rural-to-urban population fraction has continued to decline dramatically over the last two decades. In 2001, 64% of the population resided in rural areas, down from 74% in 1990. Meanwhile, the annual population growth rate was estimated at 0.59% (United Nations World Prospects Report 2006 estimate), and approximately 94% of the population occupies 46% of the land Besides, community population (or a percentage % of population) may move from home to workplace and back, even aboard (beyond national boarders) In the "world village" any place/ community/municipality/big city etc may concern to be interconnected and interactive with the other communities thus affected each-other, in a world decision making In this frame, big cities and communities are displayed by their" technical" characteristics, rather than those of "cohesive societies" Now, the point is to prove and highlight the necessity of converting a technical-territory community view, in a more conceptual "behavioral" community, highlighting bargaining behavior within the community The paper argues that this converting behavior could be realized only by using the same market rules (competitive- conflict instrumental rationality's behavior), that should converge the three bargaining power poles' interests competitive behavior in a NEW local sensitized cooperative behavior. So, behavioral analysis should be broached in order, the suggested "win-win-win papakonstantinidis model and its usefulness be highlighted,

in respect to local communities' management and its resulted development. This is the scope of this paper: Starting from the common work (Spais G, Papakonstantinidis L,. Papakonstantinidis S: 2009) analysis, paper focuses on two different points: (a) the win-win-win papakonstantinidis model short description and (b) the "path" from technical-territory community in behavioural Community through sensitization (the 3rd win) as the result of methodological "keys"-below- application in the local development process. In real terms, the "win-win-win papakonstantinidis model" is launched as a new methodological tool for conflict resolution, mainly in

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EPILOG

The proposal of the "win-win- win papakonstantinidis" model may give some new ideas for a post-capitalist economic organization[94]

The "view of social bargaining", launched by the win-win-win concept, is about adjusting the expected bargaining results from some set of possible adjustments, see CSR[95]

There is strong theoretical support in terms of triple (A-B-C) bargaining while there are allocation rules that require that certain contractions of the feasible set are irrelevant in terms of the expected end result (such as the dominance of one of them over others).

Possible breakdown of negotiations as a result of disagreement with one of the three introduces the law on democracy in human relations

2019-25-10

[94] Papakonstantinidis LA (2018) "The win-win-win papakonstantinidis model: Towards a new equilibrium?"- BOOK , LAMBERT ACADEMIC PUBLISHING, 978-613-9-44761-9

[95] Papakonstantinidis LA (2018) "CSR: An application of the win-win-win papakonstantinidis model" BOOK , LAMBERT ACADEMIC PUBLISHING, 978-613-9-96708-7

REFERENCES

[1] *Nash, John (1950) "The Bargaining Problem" Econometrica 18 (2): 155–162.*

[2] *Nash John (1951) "Non cooperative Game Theory (annals of Mathematics,1951 Vol. 54, No. 2 (Sep., 1951), pp. 286-295*

[3] *Neumann John von and Oscar Morgenstern (1944)" Theory of Games and Economic Behavior, published in 1944 by Princeton University Press, 2007 RETRIVE) "Theory of Games and Economic Behavior"60th Anniversary Commemorative Edition (2007) 60th Anniversary Commemorative Edition John von Neumann & Oskar Morgenstern (With an introduction by Harold Kuhn and an afterword by Ariel Rubinstein Nasar, S.-Kuhun 1998. A Beautiful Mind. New York: Simon and Schuster.*

[4] *Nash, J.F., Jr. 1950. Equilibrium points in n-person games. Proceedings of the National Academy of Sciences, USA 36, 48–9.*

[5] *Nash, J.F., Jr. 1953. Two-person cooperative games Econometrica 21, 128–40.*

[6] *Nash, J.F., Jr. 1995. Autobiography Les Prix Nobel The Nobel Prizes 1994, ed. T. Frangsmyr Stockholm: Nobel Foundation. Online*

[7] *Neumann, J. von 1928. Zur theories der gesellschaftsspiele. Mathematische Annalen 100, 295–320. English translation by S. Bergmann in Contributions to the Theory of 8 Nash, John Forbes (born 1928) Games IV, ed. R.D. Luce and A.W. Tucker Princeton: Princeton University Press, 1959.*

[8] *Papakonstantinidis LA (2013) The Intermediate Community: A Behavioral / Bargaining Approach For Conflict Resolution At The Local Level/ Bayesian Analysis EUROMED World Conference- Proceedings. P. 1443*

[9] *Papakonstantinidis LA (2012) The 'Win-Win-Win Papakonstantinidis Model' as a Bargaining Solution Analysis for Local Government Decision from Territory-Community to 'Behavioral' Community: The Case of Greece*

[10] *Papakonstantinidis LA (2016) Volume II titled "The "win-win-win papakonstantinidis model" VOLUME II: COLLECTION social choice, social welfare: theoretical background 2016 RESEARCH GATE-Papakonstantinidis LA (1997): the "S.H.I.E.L.D model" (the Sensitive Harmonic Integrated Endogenous Local Development")- Presentation Book of Proceedings "World Conference "Tourismo Verde", Rome, 1997*

[11] *Papakonstantinidis L.A(2002-August 14) "The win-win-win model" Euracademy Guide The Visby University-Gotland-SW*

[12] *Papakonstantinidis, L. (2004). "Sensitization as a form of knowledge creation and the Win-Win-Win Model…" Scientific Review of Applied Research, Vol VIII, No 2 /2003, pp 89-108, ISSN 1106-4110*

[13] *Papakonstantinidis LA (2013) "Involving Communities In Rural Tourism: A "Win-Win-Win Papakonstantinidis Model" Methodological Approach Case Studies: Women Rural Tourism Cooperatives: A) Gargaliani, Peloponnesus Area (South-West Gr) B) Wert (Women Entrepreneurs In Rural Tourism) EU Program : Win – Win –Win Papakonstantinidis Model" As A Recognized (In European- Wert Net- Level) Rural Tourism Methodological Tool" Book Proceedings Pp 80-109 Reports 108 Communities As A Part Of Sustainable Rural Tourism – Success Factor Or Inevitable Burden? Proceedings Of The Community Tourism Conference, 10th – 11th September 2013 Kotka, Finland Merja Lδhdesmδki Ja*

[14] *Wilkinson, K. (1991). The Community in Rural America Greenwood Press:NYC*

[15] *Papakonstantinidis LA (2016) "The "win-win-win papakonstantinidis model" VOLUME II: COLLECTION social choice, social welfare: theoretical background" RESEARCH GATE, 2016/NOV*

[16] *Pareto. Vilfredo (1896) Cours d 'Économie Politique Professé a l'Université de Lausanne Vol. I, 1896; Vol. II, 1897*

[17] *Pareto. Vilfredo (1906) Manual of Political Economy 1906*

[18] *Ricardo David (1817) the Principles of Political Economy and Taxation London John Murray 1st Ed 1817\ edition*

[19] *Rousseau Jean Jacque (1762) , "Du Contract Social ou Principes du droit politique" AMSTERDAM MARK MICHEL REY MD CCL XII Retrieved EDITION, Euvres complètes, éd. B. Gagnebin et M. Raymond, Gallimars, 1961-1995, 5 volumes*

[20] *Sen, Amartya K. 1970 [1984], Collective Choice and Social Welfare, ch. 3, "Collective Rationality." p. 33, and ch. 3*, "Social Welfare Functions.*

[21] *Smith Adam (1776/1778). An Inquiry into the Nature and the Causes of the Wealth of Nations 2 (2 ed) London: W. Strahan; T.Cadell. Retrieved 10 March 2015 via Google Books*

[22] *Mill John Stuart 1806 – 1873)\ treatise Principles of Political Economy (1848) Hamburg: Verlag von Otto Meissner. Retrieved 15 June 2016 – via e-rara.ch (ETH-Bibliothek Zürich).; Marx, Karl (1885*

[23] *Mill John Stuart (1806) Principles of Political Economy with some of their Applications to Social Philosophy William J. Ascley ed -first Pub Date, 1848) Also, Mill John Stuart The Collected Works of John Stuart Mill, edited by John M. Robson (Toronto: University of Toronto Press, London: Routledge and Kegan Paul, 1963–91), in 33 volumes, and are given by volume and page. B*

[24] *Mill John Stuart, Alan M. Dershowitz RETR (2008) On Liberty and Utilitarianism Paperback, Bantam Classic Reissue, Published May 1st 2008 by Bantam Classics B*

[25] *Papakonstantinidis LA (1997): the "S.H.I.E.L.D model" (the Sensitive Harmonic Integrated Endogenous Local Development")- Presentation Book of Proceedings "World Conference "Tourismo Verde", Rome, 1997*

[26] *Papakonstantinidis L.A(2002-August 14) "The win-win-win model" Euracademy Guide The Visby University-Gotland-SW*

[27] *Papakonstantinidis, L. (2004). "Sensitization as a form of knowledge creation and the Win-Win-Win Model…" Scientific Review of Applied Research, Vol VIII, No 2 /2003, pp 89*

[28] .Stiglitz , J. (1987). "The causes and consequences of the dependence of quality on prices", Journal of Economic Literature, vol. 25, pp. 1–48

[29] Stochr, W. and Taylor, R. (1981). "Development from Above, or Below?" Wiley-Chichester Ed, 1981

[30] Theocharis, R. (1959). "On the stability of the Cournot solution on the oligopoly problem" Review of economic Studies 1959;27:133–4

[31] Thirion, S. (2000). "Flag Theme and Local Development", LEADER Magazine, European Observatory for the Leader EU initiative- 2000, Fall, Bruxelles iss 8 Aug 2000 (p.p

[32] Ulen, T. (1999). "Rational Choice Theory in Law and Economics" Northwestern University Law Review vol 95 issue 4 Northwestern University School of Law Printed in U.S.A

[33] Varoufakis, Y. (2006)"Game Theory": (trnsl) Edition: DARDANOS-GUNDEBERG pp 136-167

[34] Wilkinson, K. (1991) The Community in Rural America Greenwood Press: New York, NY Lap 31-01-2019

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Leonidas A. Papakonstantinidis
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PART OF THE BOOK 2

The Importance of Mental Health Services,

Recognition of Potential Stigmatization, &

Relation to the Win-Win-Win Papakonstantinidis Model

Sandy Aziz, Ph.D., LPC, NCC

Adjunct Professor at Montclair State University

Abstract

The importance of mental health services has been an ongoing topic of western discussion. Cultural stigmatization has been an underlying theme in most ethnic communities. This paper explores the significance of mental health, the perception of potential stigmatization and its correlation to the Win-Win-Win Papakonstantinidis Model.

It is important to understand useful terminology.

- *COPTIC: The word "Coptic" means "Egyptian" and originates from the Pharaonic name "Ha - ka - ptah" which means "The house of The Spirit of Ptah," a most highly revered deity in Egyptian mythology. It later evolved into the Greek word "Aigyptos," and when the Arab invasion of Egypt occurred, invaders shortened "aigyptos" to "qibt."*
- *ORTHODOX: Stemming from the Greek "orthos" meaning "straight" and "doxa" meaning "opinion," to practice orthodoxy means having straight or unwavering faith.*
- *RELIGIOSITY: Adherence to a religion's beliefs and practices*

There are obvious benefits of mental health irrespective of one's cultural and socio-economic differences.

Emotional health can affect several aspects of an individual's life including relationships, health, and work, to name a few. Mental health practitioners target emotional health in an effort to help their clients solve presenting issues or heal from past traumas with a focus on improving the qualities of the individual (e.g., psychological, physical or spiritual factors) and factors in their environment (e.g., family, society and cultural groups). Additionally, according to the Anxiety and Depression Association of America (ADAA), 40 million Americans over the age of 18 suffer from an anxiety disorder. It is the most common mental illness in America, and although can it can be highly treatable, only 36.9% of people seek treatment. Something as simple as sitting down with a counselor once a week, or perhaps biweekly, can improve the quality of one's life by offering them practical steps to becoming more content and actively participating in their lives.

Counseling Services & the Win-Win-Win Papakonstantinidis Model

To correlate counseling services and the Win-Win-Win Papakonstantinidis Model we must first identify (A) the client, (B) the mental health professional, and (C) the community in which both A and B reside. The client is the individual being served in the therapeutic relationship and it is through that relationship that he/she is able to grow and heal. A mental health professional is a licensed individual providing treatment to a client. This can be in the form of a counselor, physiatrist, phycologist or even a school guidance counselor. Finally, a community is the environment and/or social network in which the client exists.

The mental health professional benefits from the therapeutic relationship both financially and through the emotional satisfaction gained from helping clients improve and grow. The mental health professional is additionally able to benefit due to the support of the community through referrals and acknowledgement. In turn, the community is able to benefit from the mental health professional through his/her advocacy efforts and from the services he/she provides to community members. The empowered client also benefits from the community through forming relationships, receiving community support, and getting the emotional benefit of contribution. Ultimately, the community is able to benefit from the contributions of a healed empowered client who is better equipped to serve within the community. There exists a triangular Win-Win-Win effect in which all three parties (A, B, & C) benefit from each other.

Religiosity and Mental Health

Religiosity has been shown to affect attitudes towards psychological distress, the ways of dealing with psychological distress, and views or stigmas related to help-seeking from mental health professional. This has been shown to vary among differing denominations and ethnic groups. (e.g., Abe-Kim, Gong, & Takeuchi, 2004; Moreno & Cardemil, 2013).

Awareness of the Potential for Stigma & Education: *Religiosity and Attitudes Toward Psychological Health, Distress, and Help-Seeking Among Coptic Orthodox Parishioners (*

Six members of the Coptic Orthodox Church where interviewed and their answers were analyzed. The focus of the study was an analysis of six Heuristic phenomenological dialogues (focused on capturing

experience). The main question that was asked was, "How does religious orientation influences attitudes toward psychological distress and help-seeking?"

Eight themes were noted:

1. *Culture informs religiosity where both were inseparable.*
2. *Experiencing psychological distress.*
3. *Sources of psychological distress or root causes of psychological problems related back to childhood abuse/neglect, genetics, poor physical health, drugs, trauma, poverty, being mocked or rejected by church community, or being far from God.*
4. *Attitudes toward psychological distress religiously where participants reported their own views which were mostly either positive or ambivalent. They then reported their views of the attitude of the larger Coptic Orthodox community which was mostly negative siting the derogatory term "magnoon" meaning "crazy" in Arabic.*
5. *Devotion to the church where all participants expressed their love for their faith and how they found it invaluable.*
6. *Dealing with psychological distress religiously. The common theme was to pray and/or read the Bible. The Bible says that people who trust in God don't feel anxious or sad. The subjects were grateful for everything and valued talking to their priest about any aspect of their life.*
7. *"Carrying the cross" which is a phrase used to imply that everyone suffers and furthermore that it is the Christian's duty to suffer. This has even been applied in cases of domestic violence or abuse.*
8. *Priests as Psychological counselors are widely accepted as the paramount figure for parishioners. They go to the priests for anything and everything although many priests do not have adequate training to treat mental disorders.*

Results suggest that many Coptic Orthodox followers who experience psychological distress are reluctant to share their experiences with their community due to stigmatization. Several other studies have found that followers of various traditions often prefer counseling services from their clergy over mental health professionals (Hardy, 2014).

References

Abe-Kim, J., Gong, F., & Takeuchi, D. (2004). Religiosity, spirituality, and help-seeking among Filipino Americans: Religious clergy or mental health professionals? Journal of Community Psychology, 32(6), 675-689. doi: 10.1002/jcop.20026

Anxiety and Depression Association of America. (n.d.). Facts & statistics. Retrieved from https://adaa.org/about-adaa/press-room/facts-statistics

Aziz, S. G. (2019). Religiosity and attitudes toward psychological health, distress, and help-seeking among coptic orthodox parishioners. Dissertation Abstracts International: Section B: The Sciences and Engineering. ProQuest Information & Learning. Retrieved from http://search.ebscohost.com.ezproxy.montclair.edu:2048/login.aspx?direct=true&db=psyh&AN=2019-00352-218&site=ehost-live&scope=site

Hardy, K. (2014). Which way did they go? Uncovering the preferred source of help-seeking among African-American Christians. Social Work & Christianity, 41(1), 3-15. Retrieved from http://www.academia.edu/8566741/Which_way_did_they_go_Uncovering_the_preferred_source_of_help-seeking_among_African-American_Christians

Moreno, O., & Cardemil, E. (2013). Religiosity and mental health services: An exploratory study of help seeking among Latinos. Journal of Latina/o Psychology, 1(1), 53–67. doi: 10.1037/a0031376

Papakonstantinidis, L., (2002). The sensitized community. Athens, Greece: Typothito Edition.

Papakonstantinidis, L., (2007). Win-win-win methodology on rural tourism activities: Good practices from Greece. Asian Journal of Hospitality and Tourism, 1(1): 95–120.

Papakonstantinidis, L., (2012). The intermediate community: A behavioral/bargaining approach for conflict resolution at the local level – Bayesian analysis. International Journal of Research in Commerce, IT and Management, 2(1): 1–6.

PART OF THE BOOK 3

S.Ternyik

THE ESSENTIAL PAPAKONSTANTINIDIS

ABSTRACT[96]:

My contribution is built around the total work of Professor Papakonstantinidis in an abstract, key-statements form , in units 1-10

KEY STATEMENTS:

_____

UNIT 1=

The eternity symbol, in rainbow colors, points to the final, everlasting and scientific value of Papakonstantinidis' research work as dedicated educator, economist and humanist, in the classical tradition of ancient Greek community philosophy.

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[96]

This is the written didactic resource sheet to the oral presentation, held on Oct.25, 2019, in Athens

The presentation has 10 units, which try to reconstruct the work of Prof. Leonidas A. Papakonstantinidis of Greece

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UNIT 2=

The artistic method of Victor Shklovsky is applied; S.Ternyik gives the work of Papakonstaninidis a strange and unfamilar outlook, the whole audience is enabled to perceive win/win/win model from an eternal and essential viewpoint, personal time is cut out and the scientific meaning is made timeless.

UNIT 3=

The 3 images of this unit do represent three distinctive means to memorize and reconstruct a discovery process. The flight recorder (black box) is a technical instrument to know about a travelled route; producing essences (here: rose into oil) is a natural method to capture the hidden forces of the physical world; the Luz bone signifies, in theological terms, the undestroyable quality (spirit) of a human being.

UNIT 4=

The flow diagram shows the process of value creation in a free economy by win/win/win bargaining as opposed to the commanded economy via win/lose distributions, leading to overall value deprivation in a human society. Decisive parameters are mentioned and the creative flow is explained.

UNIT 5=

Values do create a society, not technology, and business is an organ of this sensitization process. A medical analogy is introduced to understand the sensitization process as emotion and cognition. The sensitive transition from voting to bargaining is mentioned, applying both bargaing and negotiation methods.

UNIT 6=

The medical analogy of a full sensitization process is continued, with respect to protocol and natural language. Nash's model and the actual agreement point is highlighted, with special reference to real life (i.e. the dialectics of receiving/gaining and giving/taking).----------

UNIT 7=

The intellectual history of marginalist economic thought is presented as international mosaic, with personal respect to Prof. Leonidas' work process (Socrates, Bernoulli, Menger, Nash, Samuelson, Mahajan).

UNIT 8=

The scientific development of cooperative game studies (players, payoffs, rules, consequences) is portrayed in an applied manner, pointing to the study of human behavior as a game (which is a mix of rational/logical and emotional/value-driven decisions of involved agents).

UNIT 9=

S.Ternyik elaborates about his many efforts to promote the win/win/win model of Papakonstantinidis and the educational barriers to be taken. He notes the dominance of non-cooperative human behavior in the economic world as opposed to cooperative bargaining solutions for the human community and society.

UNIT 10=

The links to 3 vital publications are presented, e.g. the Donousa Miracle Interview, which S.Ternyik created in the winter of 2018/2019, for the promotion of the win/win/win model.

PART OF THE BOOK 4

Evergetes: Benefaction as an application of the win-win-win papakonstantinidis model

Anastos Dimitropoulos

Lawyer

Abstract

World system has been constructed on two poles

A two poles system is composed by the private and the public sector

Evergetes (benefactors) or even more the Evergetes' Actions, (benefaction) lies between the private and public sectors of the economy

From this point of view, benefaction is represented by the "middle "win" of the brilliant "win-win-win papakonstantinidis model" as it lies between the private and the public sector

Benefaction is, thus, the action which is needed for the human action integration round the three (3) –not only two- sectors

Introduction

A benefactor (from Latin bene, meaning 'good', and factor, meaning 'maker') is a person who gives some form of help to benefit a person, group or organization (the beneficiary), often gifting a monetary contribution in the form of an endowment to help a cause. Benefactors are humanitarian leaders and charitable patrons providing assistance in many forms, such as an alumnus from a university giving back to a college or an individual providing assistance to others.

BENEFACTION

- *providing assistance or other supportive action, free of charge*
- *an act of conferring a benefit; the doing of good; a good deed: He is known throughout the region for his many benefactions.*
- *the benefit conferred; charitable donation: to solicit benefactions for earthquake victims*
-

From the other hand,

- *Marketing education is a degree program option where students learn how to move products from concept to consumer. Learn more about what marketing education entails in this lesson. The discipline of marketing is built upon three areas of interdisciplinary content. These foundations of economics, human resource skills, and marketing concepts*
- *Marketing profession: The action or business of promoting and selling products or services, including market research and advertising. On the distance between the two forms of marketing, the (1) win-win-win papakonstantinidis model and (2) HREP are building on.*
- *The "win-win-win papakonstantinidis model" is – more than a methodological tool for conflict resolution and "measuring" social welfare, based on deviations- a mechanism for a new bargaining ethic, taking into consideration the Community profit , (the "C' factor) regarding grades of freedom, into the bargain and during the bargain, thus strengthening social cohesion, solidarity, and respect for others.*

First of all, "benefactors' actions" or benefaction is related with ethical priorities, it belongs to ethical priorities

From Papakonstantinidis LA work[97] it is noted that "Ethical Priorities, of High Risk, under the condition of a free market High Risk Ethical Priorities (HREP) are "payoffs" expected by people who dedicate time money, or even their own lives in implementing of an ethical priority; for example, to save a human life-see at "doctors without borders" who every day risk their lives, to save another life. As "free will" is the greatest human conquest, these doctors want to be in war zones; it is not imposed. The definition is approached through the register of its characteristics:

Let's start from a paradigm, "Doctors without borders" activities, especially those in war zones, could be considered as of "High Risk Ethical Priorities" due to their not only saving lives but one more, endangering their own lives. These scientists could choose their "profession environment" in good hospitality, far from the war zones. But they prefer to serve there, putting their lives at risk – endangering their own lives. This is the compendium of self-sacrificing and solidarity.

Saving a life is extreme "Ethical Priority" but doing it by endangering your own life is the holistic view of the High Risk Ethical Priority (HREP). Here, people from marketing Profession who promote this task, who are looking for new doctors in war zones also refer to HREP, if they have to lose their positions, due to this promotion.

From the above mentioned, we can summarize that:

HREP is the people's actions by their own choice and decision, vs. the micro-economic rational behavior except for some few cases, HREP overcome rationality and thus cannot be included in economic thought; HREP follows the "free will" philosophy, where the western democracies are based on;

HREP is included in the "romantic" view of life, meeting self-sacrifice, bravery, value humanity, respect, recognition;

Finally, HREP is "out of market rule" and thus, cannot be measured.

ANALYSIS

[97] Leonidas A. Papakonstantinidis "Marketing Gaps and Intersections, Between Education and Social Practice: the "Win-Win-WinPapakonstantinidis Model " and the High -Risk Ethical Priorities (HREP)"International Journal of Innovation and Economics Development, vol. 4, issue 2, pages 7-23, June 2018

"The rich men must be useful to the state" Dimosthenis said.

The benefaction, the sponsorship and philanthropy are really basic institutional attitudes of human offer to the others through the centuries.

However, none of these institutions stayed the same through the centuries. Every society confronted them in a different way. The phenomenon of the offer appeared at the beginning during the Greek-roman antiquity which bequeathed it to the Christian West.

Benefactor is a clear Greek word that cannot be translated. I the Greek history the benefactor (evertgetes) is one of the main factors of the Greek culture.

In Ancient Greece the institution of sponsorship was a public and obligatory duty for every citizen and particularly for the most eminent of them.

The citizen was obliged to work and offer the surplus of its work to investments in favor of the society.

The Homo Hellenicus corresponds to the ideal union of the Homo Ethicus (benefaction) and the Homo Economicus (enterprising) instead of the greedy economy and the technological autism of our era.

The philanthropy is not realized only by signing checks or buying lots. It depends on the time you spend for the service of the humanity.

Between the two sectors that define our lives there is a third sector called the citizen sector. This social sector includes the citizen who is acting voluntarily or the profit of its community, city or nation.

This sector contains also millions of non-profit companies, organisms, groups and associations with incredibly different beliefs and goals. The professor Peter Drucker named the sector of citizens the most developing industry of U.S.A.

The most important in this sector are the foundations whose the role is to help the state by transforming the charity into investment and producing human and spiritual capital being the "seed financing" for a great number of the organisms of the third sector.

The Company of Greek Evergetes pursuits by acting to the promotion of the benefactors (evergetes) work during this difficult period for our country promoting the volunteerism and the community help against the poverty and the social exclusion.

The term "High Risk Ethical Priorities (HREP)" is launched by Papakonstantinidis LA (2018),into the socio-economic perspective data[98], it expresses the hopeful expectation of the author on reconstructing a new word, in which "Ethical Priorities" will have the role of the market, with some important market constraints- for its operation. That is quite different from the competitive capitalistic perception (competitive market, under the constraints of minimum ethical market conditions). In the first case, people act with the "Ethic Rule's expected payoffs In the second case, payoffs (or incentives for someone to participate in a deal or bargain) are the expected individual profit The "Ethical" side is introduced by the form of "bargaining constraints" (i. e law rules against the violence in bargain and during the bargain).

[98] Leonidas A. Papakonstantinidis "Marketing Gaps and Intersections, Between Education and Social Practice: the "Win-Win-Win Papakonstantinidis Model " and the High -Risk Ethical Priorities (HREP)"International Journal of Innovation and Economics Development, vol. 4, issue 2, pages 7-23, June 2018

Today, the point is to prove and highlight the necessity of converting a technical-territory community view, in a more conceptual "behavioral" community, highlighting bargaining behavior within the community. The presentation argues that this converting behavior could be realized only by using the same market rules (competitive-conflict instrumental rationality's behavior), that should converge the three bargaining power poles' interests competitive behavior in a NEW local sensitized cooperative behavior. So, the behavioral analysis should be broached in order, the suggested "win-win-win papakonstantinidis model and its usefulness be highlighted, in respect to local communities' management and its resulted development. This is the scope of this paper: Starting from the common work (Spais G, Papakonstantinidis L, Papakonstantinidis S: 2009) analysis, paper focuses on two different points: (a) the win-win-win papakonstantinidis model short description and (b) the "path" from technical-territory community in behavioral Community through sensitization (the 3rd win) as the result of methodological "keys"-below- application in the local development process. In real terms, the "win-win-win papakonstantinidis model" is launched as a new methodological tool for conflict resolution, mainly in the local development strategy and decision making.

3. Aim of the contribution

The aim of this theoretical contribution (if it exists) is to highlight the "SENSITIZATION ability" that every one of us either relates to refugees, or in countries, whether in claiming or even in our daily transactions. It is time to stop looking only personal interest or "individual defense" in the form of the suggested "the win-win-win papakonstantinidis model" focusing on the development of small villages and the SMEs networking, inside the total quality management (TQM).

In particular, the proposal deals with collecting, classifying and comparing the theoretical material from various sources on the functioning of Social Welfare Function (SWF), towards building a strong case with logical and coherent arguments, towards the one Triple Pole (A-B-COMMUNITY) Equilibrium (TPE), different from N.E, that leads to the Social Bargaining Solution" (SBS) and coincide with the "optimal" Community Collective Choice (CCC) in order to create a highly versatile tool, "the win-win-win papakonstantinidis model" of well-formed formulas (wffs).

Coming from its applications, the ambition is to create a series of new policy tools to strengthen social welfare, despite the "impossibility theorem" (K. Arrow 1955). There are several arguments that through "a simultaneous, reflective, strong effective (Pareto), Flexible, fair (Rawls), collective (Amartya Sen) Social Welfare Function (SWF) in the frame of a General Equilibrium (Walras), incompatibilities that incorporate the values of equality, justice, harmony, symmetry, and the hypothesis, of self-organization (Papakonstantinidis) as well as the hypothesis of self-supporting bargaining solution in a community level, should exist and be the only one: the win-win-win equilibrium Win-win-win papakonstantinidis situation is proposed as an extension of both "non-cooperative game" and the principal-agent problem (also known as agency dilemma or theory of agency) under the constraints put by the five theorems. Especially, Pareto efficiency, as an economic state where resources are allocated in the most efficient manner Pareto efficiency is obtained when a distribution strategy exists where one party's situation cannot be improved without making another party's situation worse. Pareto efficiency does not imply equality or fairness. Also known as "Pareto

optimality" (INVESTOPEDIA). Also, the theory of justice focuses on the "veil of ignorance", along with the original position, is a method of determining the morality of a particular issue (e.g., slavery) based upon the following thought experiment: parties to the original position know nothing about their particular abilities, tastes, and position within the social order of society. When such parties are selecting the principles for the distribution of rights, positions, and resources in the society they will live in, the veil of ignorance prevents them from knowing about who they will be in that society.

Also known as "Pareto optimality" (INVESTOPEDIA). Also, the theory of justice focuses on the "veil of ignorance", along with the original position, is a method of determining the morality of a certain issue (e.g., slavery) based upon the following thought experiment: parties to the original position know nothing about their particular abilities, tastes, and position within the social order of society. When such parties are selecting the principles for the distribution of rights, positions, and resources in the society they will live in, the veil of ignorance prevents them from knowing about who they will be in that society.

Donation, or/and benefaction are close related with a direct involvement, also in SMEs :

This direct involvement may then form the basis for the creation of formal or informal local partnerships which may undertake aspects of the development the SMEs common strategies around the flag theme. That could be led to SMEs networking around the "flag theme" Conflict resolution which could occur between SMEs should be arranged by the "new" methodological tool, suggested by the presenter: It is the well-known win-win-win model –Papakonstantinidis LA.

Literature Review: Ethical Priorities: Aspects of "Moral Philosophy"

The "Good" Coming from God

Ancient Greek Philosophy focused on the "Society" and the "human being" as a part of the society: They tabled "man" in the Society, not in a separate logic On the opposite, Thomas Hobbes focused on "individual". That was a huge change from the one syllogism to another : Citizens in Greek Athens and Sparta were peer in their class: They have only 3 responsibilities: (i) to vote their Laws in "Ecclesia of Dimos" (ii) to go to war for fighting and (iii) to follow their Philosophical Academy (where they were). One more, in Sparta the healthy young men were separated from their families and involved in society, were educated in the art of war. Over than two and a half -at least, in Europe- thousand (2500) years (starting from the written history's period) people have involved in timeless philosophical, focusing in "human happiness" and the social welfare; first of all, there is not a commonly accepted definition concerned either "social welfare" or "happiness" or even "good Here "Community as total GOOD".

The Greek Ancient Philosopher Socrates (469-399 b.C)[99] believed that self-knowledge was sufficient to live a good life. He concerned that "knowledge is equivalent to virtue. People can reach absolute knowledge say, follow the correct method. One has to seek knowledge and wisdom before the other private interests. The knowledge sought as a means of moral action. The logic is a prerequisite to living a good life. Our true

[99] *May, H. (2000) "On Socrates Wadsworth"/Thomson Learning, p. 20.*

happiness depends on whether you do what is right. You cannot be happy if you act in contrary to what you believe ".

Aristotle (384-322) Aristotle's emphasis was on good reasoning combined with his belief in the scientific method forms the backdrop for most of his work. For example, in his work in ethics and politics, Aristotle identifies the highest good with intellectual virtue; that is, a moral person is one who cultivates certain virtues based on reasoning.

Aristotle: The Nicomachean Ethics[100][101]
The Nicomachean Ethics is widely considered one of the most important historical, philosophical works and had an important impact upon the European Middle Ages Aristotle argues that the correct approach for studying such controversial subjects as Ethics or Politics, which involve discussing what is beautiful or is to start with what would be roughly agreed to be true by people of good upbringing and experience in life and to work from there to a higher understanding. A contemplation about good living, because it also aims to create a good living. It is therefore connected to Aristotle's other practical work, the Politics, which similarly aims at people becoming good. Ethics is about how individuals should live better, while the study of politics is from the perspective of a law-giver, looking at the good of a whole community. Taking this approach, Aristotle begins by saying that the highest good for humans, the highest aim of all human practical thinking, is eudaimonia, a Greek word often translated as well-being or happiness. Aristotle, in turn, argues that happiness is properly understood as an ongoing and stable dynamic a way of being in action (energeia) specifically appropriate to the human "soul" (psyxi) at its most "excellent" or virtuous (virtue translates arête in Greek). If there are several virtues, then the best and most complete or perfect of them will be the happiest one. An excellent human will be a person good at living life, who does it well and beautifully (kalos). Aristotle says that such a person would also be a serious (spoudaios) human being, in the same sense of "serious" that one contrasts serious harpists with other harpists. He also asserts as part of this starting point that virtue for a human must involve reason in thought and speech (logos) as this is an aspect (an ergon, literally meaning a task or work) of human living. The character here translates ēthos in Greek, related to modern words such as ethics, ethical and ethos. Aristotle does not, however, equate character with habit (ethos in Greek, with a short "e") because real character involves conscious choice, unlike habit. Instead of being a habit, the character is a hexis like health or knowledge, meaning it is a stable disposition which must be pursued and maintained with some effort. However, good habits are described as a precondition for good character.

A starting point for the west Europe philology is divided into two (2) main philosophical currents (although were guided by those bases provided by the classical ancient Greek thought):

Classical Utilitarianism, which started with the slogan "The greatest happiness for the greatest number" and

Welfare Economics, which is supposed to increase national welfare Example:

[100] "Aristotle" (1998) entry in Collins English Dictionary Harper Collins Publishers, 1998

[101] Ross, David (1925). Aristotle The Nicomachean Ethics: Translated with an Introduction. Oxford: Oxford University Press. Re-issued 1980, revised by J. L. Ackrill and J. O. Urmson.

Thomas Hobbes (1588-1679). The pure state of nature or "the natural condition of mankind" was deduced by the 17th-century English philosopher in "Leviathan" in his earlier work on the Citizen". Hobbes argued that all humans are by nature equal in faculties of body and mind (i.e., no natural inequalities are so great as to give anyone a "claim" to an exclusive "benefit).

David Hume (1711-1776) Beginning with his "A Treatise of Human Nature" (1739), Hume strove to create a total naturalistic "science of man" that examined the psychological basis of human nature In opposition to the rationalists who preceded him, most notably Rene Descartes he concluded that desire rather than reason governed human behavior.

Immanuel Kant (1724-1804) Kant argued that the necessary features of our minds structure our experiences. In his view, the mind shapes and structures experience so that, on an abstract level, all human experience shares specific essential structural features.

J. J. Rousseau (1712-1778) Rousseau claimed that the state of nature was a primitive condition without law or morality, which human beings left for the benefits and necessity of cooperation. As society developed, a division of labor and private property required the human race to adopt institutions of law. In the degenerate phase of society, man is prone to be in frequent competition with his fellow men while also becoming increasingly dependent on them. This double-pressure threatens both his survival and his freedom. According to Rousseau, by joining together into civil society through the Social Contract and abandoning their claims of natural right individuals can both preserve themselves and remain free. This is because submission to the authority of the general will of the people as a whole guarantees individuals against being subordinated to the wills of others and also ensures that they obey themselves because they are, collectively, the authors of the law.

Classical utilitarianism: The origins of utilitarianism are often traced as far back as the Greek philosopher Epicurus but, as a specific school of thought, it is generally credited to Jeremy Bentham (1748-1832) (Utilitarianism) Utilitarianism retains the Epicurean view that humans naturally seek pleasure and avoid pain,)

J.Bentham (1748-1832) : Utilitarianism theory-cardinal utility function) became a leading theorist in Anglo-American philosophy of law Bentham's utilitarianism is based on some assumptions like, Each knows best what is good for him/her, Each should decide him/herself in private matters, The welfare of an individual doesn't depend on other individual's welfare.

On the other hand, John Stuart Mill was better known as the author of Principles of Political Economy (1848), a work that tried to show that economics was not the "dismal science" that its radical and literary critics had supposed. Its philosophical interest lay in Mill's reflections on the difference between what economics measured and what human beings valued.

John Rawls (A Theory of Justice 1971). Rawls belongs to the social contracts tradition. However, Rawls' social contract takes a different view from that of previous thinkers. Specifically, Rawls develops what he claims are principles of justice through the use of an artificial device he calls the Original position in which

everyone decides principles of justice from behind a veil of ignorance. This "veil" is one that essentially blinds people to all facts about themselves so they cannot tailor principles to their advantage:

Capitalism: The historical context of classical economics was the age of enlightenment the French Revolution (1789-1799) and the Industrial Revolution Classical economics is widely regarded as the first modern school of economic thought It is the idea that free markets can regulate themselves. Its major developers include Adam Smith, David Ricardo, Thomas Malthus and John Stuart Mill Adam Smith's The Wealth of Nations in 1776 is usually considered to mark the beginning of classical economics. The school was active into the mid 19th century and was followed by neoclassical economics in Britain beginning around 1870. Classical economists attempted and partially succeeded to explain economic growth and development. The Wealth of Nations (1776)

Karl Marx (1818-1883) Marx's theories about society, economics and politics – the collective understanding of which is known as "Marxism" hold that human societies progress through class struggle a conflict between an ownership class that controls production and a dispossessed laboring class that provides the labor for production.

Mahatma Gandhi (1869–1948) quotes:
"Happiness is when what you think, what you say, and what you do are in harmony.

"Quotes":

"When it (violence) appears to do good, the good is only temporary; the evil it does is permanent."
Happiness is when what you think, what you say, and what you do are in harmony."
"Hate the sin, love the sinner."
"I believe in equality for everyone, except reporters and photographers."
"You must not lose faith in humanity. Humanity is an ocean; if a few drops of the ocean are dirty, the ocean does not become dirty."
"Victory attained by violence is tantamount to a defeat, for it is momentary."
"An eye for an eye makes the whole world blind."

Neoclassical Economics
Neoclassical economics is a term variously used for approaches to economics focusing on the determination of prices, outputs, and income distributions in markets through supply and demand often mediated through a hypothesized maximization of utility by income-constrained individuals and of profits by cost-constrained firms employing Neoclassical economics is conventionally dated from William Stanley Jevons's "Theory of Political Economy" (1871), Carl Menger' s Principles of Economics (1871) , and Leon Walras' s "Elements of Pure Economics" (1874 – 1877) . These three economists have been said to have promulgated the marginal utility revolution or Neoclassical Revolution.

Marginal utility
Instead of the price of a good or service reflecting the labor that has produced it, it (the price) reflects the marginal usefulness (utility) of the last purchase. This meant that in equilibrium, people's preferences determined prices, including, indirectly the price of labor.

Consumers act rationally by seeking to maximize the satisfaction of all their preferences. People allocate their spending so that the last unit of a commodity bought creates no more satisfaction than the last unit bought of something else

Assumptions (for welfare)
• Social Welfare may be the end of the "social welfare process (the ideal case) The utilities of consumers are independent

$$W = f(U_A, .. U_B)$$

• A social welfare function exists.

Acceptance of Valerio Capraro thesis. (Capraro Valerio 2013) "Humans have attitude to cooperation by nature, and the same person may act more or less cooperatively depending on the particular payoffs" "Utility" may be used mainly in its "marginal" situation: very small "utils" by which decision taken: Marginal utility is the additional satisfaction a consumer gains from consuming one more unit of a good or service.

$$\lim_{x \to 0} \frac{\Delta y}{\Delta x} = \frac{dy}{dx} = f'(x)$$

References

Nash, Jr., John F. 1950a. "The bargaining problem" Econometrica 18:155-162

Papakonstantinidis LA (2002) "the win-win-win model" Euracademy Summer School Visby University SW (Aug 14): The term "Community" is used for different means as village, city, state union of states, common Values, traditions, common History, ..anything that concerns "Social Cohesion".

J.F. Nash (1951) "the non-cooperative game theory-Econometrica, 1951

INVESTOPEDIA –DEFINITION conflict of interest inherent in any relationship where one party is expected to act in another's best interests The problem is that the agent who is supposed to make the decisions that would best serve the principal is naturally motivated by self-interest, and the agent's own best interests may differ from the principal's best interests. The agency problem is also known as the "principal–agent problem."-also, see at Joseph E. Stiglitz and Andrew Weiss (1981) Credit Rationing in Markets with Imperfect Information The American Economic Review Vol. 71, No. 3 (Jun., 1981), pp. 393-410

Dorion Louis-André(2013), L'Autre Socrate. Études sur les écrits socratiques de Xénophon, Paris, Les Belles Lettres, 2013

May, H. (2000) "On Socrates Wadsworth"/Thomson Learning, p. 20.

Leonidas A. Papakonstantinidis "Marketing Gaps and Intersections, Between Education and Social Practice: the "Win-Win-Win Papakonstantinidis Model " and the High -Risk Ethical Priorities

(HREP)"International Journal of Innovation and Economics Development, vol. 4, issue 2, pages 7-23, June 2018

"Aristotle" (1998) entry in Collins English Dictionary Harper Collins Publishers, 1998

Τσάτσος Κωνσταντίνος (1980) Η κοινωνική φιλοσοφία των αρχαίων Ελλήνων, σσ. 176-258, Εστία, 19803η

Ross, David (1925). Aristotle The Nicomachean Ethics: Translated with an Introduction. Oxford: Oxford University Press. Re-issued 1980, revised by J. L. Ackrill and J. O. Urmson.

PART OF THE BOOK -5

***The conflict between Classical and New-classical Schools of Thought,* by the prism of the win-win-win papakonstantinidis model;**

from MARX to ARROW

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Abstract

This paper analyzes the conflict between classical and new-classical concept. Especially focuses on the conflict between enlighten dipole MARX-ARROW's theories on social welfare

Key-worfs

The win-win-win papakonstantinidis model, social welfare, social share, VOTING the impossibility theorems, BARGAINING Marxism

VOTING

Introduction

Voting *is a method for a group, such as a meeting or an electorate, to make a collective decision or express an opinion, usually following discussions, debates or election campaigns. Democracies elect holders of high office by voting. Residents of a*

place represented by an elected official are called "constituents", and those constituents who cast a ballot for their chosen candidate are called "voters". There are different systems for collecting votes.

Voting games[1] are especially important in social sciences. The main concerned of voting game is to measure the power of a individual or some groups of voting bodies. Different voting procedures are used to take decisions in different voting bodies. Some of few such voting bodies are the United Nations Security Councils, International Monetary Fund etc.

By voting power of an individual voter, we mean his capability to alter the outcome of the voting procedure by changing his position on the proposed bill.

Suppose we have three candidates, Alice, Bob and Chris (A, B and C). If a majority of voters prefer A to B, and a majority prefers B to C, then it would appear obvious that there must be a majority who prefer A to C. This combination of two results is known as transitivity. But [102]

[102] Ritu Dutta "A STUDY ON LINEAR STRUCTURE INCOOPERATIVE GAME THEORY" Ph.D Thesis, Department of Mathematics Dibrugarh UniversityDibrugarh-786004 Assam, India 2018

Condorcet showed that it may fail to hold. It is possible that more prefer C to A, resulting in a cycle of preferences, A before B before C before A.

The New-classical School of Thought rejected any idea of social welfare and more importantly proved with the mathematical logic that social welfare is impossible (Arrow Kenneth: The Impossibility Theorem, 1950)

the Impossibility theorem (Arrow)

The Arrow's impossibility theorem, or Arrow's paradox is an impossibility theorem stating that when voters have three or more distinct alternatives (options), no ranked order voting system can convert the ranked preferences of individuals into a community-wide (complete and transitive) ranking while also meeting a pre-specified set of criteria. These pre-specified criteria are called unrestricted domain, non-dictatorship, Pareto efficiency, and independence of irrelevant alternatives.

The theorem is named after economist Kenneth Arrow, who demonstrated the theorem in his doctoral thesis and popularized it in his 1951 book Social Choice and Individual Values. The original paper was titled "A Difficulty in the Concept of Social Welfare"

The First Theorem states that a market will tend toward a competitive equilibrium that is weakly Pareto optimal when the market maintains the following three attributes: (a) complete markets - No transaction costs and because of this each actor also has perfect information, and (b) price-taking behavior - No monopolists and easy entry and exit from a market. (c) bot dictatorship

Furthermore, the First Theorem states that the equilibrium will be fully Pareto optimal with the additional condition of(1) local non-satiation of preferences (2)No two market allocations give any market actor equal satisfaction.

This concept includes the term "Homo Economicus" as to show, human rational behavior Homo Economicus is an inadequate description of human behavior. Welfare Economics will have to be reassessed in the light of empirical findings. All the important theories in this field (in particular the general equilibrium theory) depend on the relation between behavior and welfare through the intermediary of preferences Pareto (1848-1923) introduced -among many others- the concept of Pareto Efficiency and helped develop the field of microeconomics- ordinal utility function By using the same paradigm of three (3) persons , as Arrow used, due to our attempts to overcome the typical bargaining situation (win-win) solved by Nash (Nash Equilibrium, NE) this work intends to prove that "social welfare" can coexist with the capitalist economic model but if based on a "tri-polar" (instead of bipolar) perception of any interaction between people, local communities, organizations, states, blocs Member ...including the Community (The Intermediate Community)

The Second Theorem states that, out of all possible Pareto optimal outcomes, one can achieve any particular one by enacting a lump-sum wealth redistribution and then

letting the market take over. In other words, the second fundamental theorem states that given further restrictions, any Pareto efficient outcome can be supported as a competitive market equilibrium These restrictions are stronger than for the first fundamental theorem, with convexity of preferences and production functions a sufficient but not necessary condition. A direct consequence of the second theorem is that a benevolent social planner could use a system of lump sum transfers to ensure that the "best" Pareto efficient allocation was supported as a competitive equilibrium for some set of prices. More generally, it suggests that redistribution should, if possible, be achieved without affecting prices (which should continue to reflect relative scarcity), thus ensuring that the final (post-trade) result is efficient. Put into practice, such a policy might resemble pre-distribution Because of welfare economics' close ties to social choice theory Arrows impossibility Theorem is sometimes listed as a third fundamental theorem

According to the "Impossibility Theorem (Kenneth Arrow (1951) , "Social Choice" does not exists: It is impossible and more persons to agree each-other: "If we exclude the possibility of interpersonal comparisons of utility, then the only methods of passing from individual tastes to social preferences which will be satisfactory and which will be defined for a wide range of sets of individual orderings are either imposed or dictatorial."

Now, our attempts are focused on finding a "new" "social welfare form..".. treating the community as a whole as an aggregate entity that participates in a social welfare game(Prof Creg Tovey, RG,2016)

Pre-supposes

Socrates' -the greatest Greek Philosopher- "elencho", as he recognizes in Plato's Apology (from apologia, "defense"), made him unpopular. Lycon (about whom little is known), Anytus (an influential politician in Athens), and Meletus, a poet, accused Socrates of not worshipping the gods mandated by Athens (impiety) and of corrupting the youth through his persuasive power of speech. In his Meno, Plato hints that Anytus was already personally angry with Socrates. Anytus has just warned Socrates to "be careful" in the way he speaks about famous people (94e). Socrates then tells Meno, "I think, Meno, that Anytus is angry, and I am not at all surprised. He thinks.that I am slandering those men, and then he believes himself to be one of them" (95a) This is not surprising, if indeed Socrates practiced philosophy in the way that both Xenophon and Plato report that he did by exposing the ignorance of his interlocutors.

Socrates practiced philosophy, in an effort to know himself, daily and even in the face of his own death. In Plato's Crito, in which Crito comes to Socrates' prison cell to persuade Socrates to escape, Socrates wants to know whether escaping would be just, and imminent death does not deter him from seeking an answer to that question. He and Crito first establish that doing wrong willingly is always bad, and this includes returning wrong for wrong (49b-c). Then, personifying Athenian law, Socrates establishes that escaping prison would be wrong. While he acknowledges that he was

wrongly found to be guilty of impiety and corrupting the youth, the legal process itself ran according to law, and to escape would be to "wrong" the laws in which he was raised and to which, by virtue of being a life-long Athenian, he agreed to assent.

SOSIAL WELFARE

SOCIAL WELFARE ASSUMPTIONS

We 'll try, now, to prove that "social welfare" is feasible if we focus on "bargaining" instead the voting: that means "cooperation" instead "individuality"

1. *The production functions are independent. These rules out joint products and external economies and diseconomies in production*
2. *The utilities of consumers are independent.*
3. *The ownership of factors, that is, the distribution of the given L and K between the two consumers, is exogenously determined.*
4. *A social welfare function, W=f (UA, UB), exists.*

But this work may be an "extension Nash", as it includes the profit side the "win" for all the people (not the rest of the people), coming from any bargain between two: the proposal system tends to maximize the profit gained for all the parties in a bargain

"Social welfare" is the end (the ideal end) of the agreement between 2 on that point profits for any "bargainer, including the Community- the "C" factor:

A social problem is an issue within the society that makes it difficult for people to achieve their full potential. Poverty, unemployment, unequal opportunity, racism, and malnutrition are examples of social problems.

*SOCIAL WELFARE situations especially strategic decision making in a number of fields and domains (biology, psychology, management, marketing, history- especially in interpretation of historic events It proves that building social capital at local level mainly depends on social trust links among local people: Social cohesion based on social capital may be measured by the diversification Rate (R *) from strict globalization rules: From this point of view, local people's intervention should be useful, so as to diversify these "rules" at local level adjusting win methodology [Papakonstantinidis Model] should facilitate local people to "readjust" bargaining globalization rules locally, through a sensitization process: Community is defined as a discrete spatial /cultural entity, as their people's sensitization process' is going to its limit ....*

From this point of view, MARXISM and the Greek Ancient Philosophy are the main FIELDS towards a win-win-win (ideal) situation, as both of them introduce to (i) the upper level of sensitization in the case of decision-making, (ii) a "path" to social justice, (iii) the basic process for sensitizing local population on the development, around a local "flag theme" (iv) a way to "feel free" through involvement in the development process (v) to develop "new" bargaining behavior (vi) to convert conflict into cooperation. (vii) As the sensitization process

tends to infinity, then the limit of the A-B-C bargaining relations tend to the absolute collaboration. That's the end of the real social welfare process

BARGAINING-GAME

It is necessary to analyze the Nash "non-cooperative- instant reflection game" /or a "win-win perception" as follow: Non-co-operative game is a game between two (2) players/ individuals who have opposite interests (Aumann, 1987). Each player makes his own choices, based on instant reflections' rational movements and his physical cleverness. The game (bargain) is determined by the result (pay-off) and not by player's expectations. It presupposes best choices by both players towards meeting individual interests ("winning strategies"- Harsanyi, 1973). Players (negotiators) do not regret, a posteriori, from their own decision taken, based on personal choices, during the bargain. Each of the players knows a priori that the other negotiator (or player) is as clever as he is. During the bargain, "mutual respect" between the two bargainers to each other's best choices' is necessary. It is recognized that the more DETERMINED to break down the negotiation (= less utility), the more satisfied (=better shares) - the more risk, the more profit.

The win-win-win papakonstantinidis model is the limit-up of a continuous sensitization procedure, at any (A-B) bargainers symbolized by the three sequences', i.e

You can imagine the successive steps towards sensitization as a series of sequence terms that converges to a limit

The boundaries of these sequences, since they represent "sensitization levels", also form a new ***W „sequence***

We prove that this new sequence consists of their limits

as "sensitization sequences" converges at some point to the ideal limit -up (the perfect society, or the society of angels) then all three limits of the un.vn, zn sequences a, b and the

community, C, respectively forming a new-unique sequence, which converges in a ***new L limit which can be measured as the deviation from the ln2 =1+1/n+1, 1/n+2…1/2n***

Behavioral Economics

In their limit, we have:

Indeed,

You can imagine the successive steps towards sensitization as a series of sequence terms that converges to a limit

The boundaries of these sequences, since they represent "sensitization levels", also form a new

Definitions:

Definition 1: Rationality

It is the manner in which people derive conclusions when considering things deliberately. It refers to the conformity of one's beliefs with one's reasons to believe, or with one's actions with one's reasons for action (Habermas, J. 1984). However, the term "rationality" tends to be used differently in different disciplines, including specialized discussions of economics, sociology, psychology, and political science A rational decision is one that is not just reasoned, but is also optimal for achieving a goal or solving a problem In philosophical terms rationality should be concerned as the "exercise of reason" It involves a cognitive process where each step follows in a logical order from the one before. It is based on thinking through and weighing up the alternatives to come up with the best potential result (Stanford Encyclopedia of Philosophy 2008) Historicist Theories of Rationality, 2008).

Definition 2: Instrumental Rationality

In social and critical theory, instrumental rationality is often seen as a specific form of rationality focusing on the most efficient or cost-effective means to achieve a specific end, but not in itself reflecting on the value of that end. Thus, to the extent that rationality is concerned with critically evaluating actions, instrumental rationality tends to focus on the 'hows' of an action, rather than its 'whys' Accordinto Karl Emil Maximilian Weber (1864-1920) social action should be distinguished between four different types of rationality)Weber M, 1984). The first, which he called Zweckrational (Rational Purpose) or purposive/instrumental rationality is related to the expectations about the behavior of other human beings or objects in the environment. The second type, Weber called Wertrational or value/belief-oriented. The third type was on the borderline of what Weber considered "meaningfully oriented." The fourth was traditional, determined by ingrained habituation. These kinds of rationality were ideal types.

Instrumental Rationality, as the "orthodox" bargaining behavior according to Nash and his followers New-Liberalism quite free market "ideology" /globalization Base Colin F. Camerer (2003) defines the behavioral games theory: "Behavioral game theory is about what players actually do. It expands analytical theory by adding emotion, mistakes, limited foresight, doubts about how smart others are, and learning to analytical game theory.

Definition 3: Behavior

The term behavior has many meanings. It can mean the complex action of a human or other animal based on volition or instinct. (James Andreoni et al. 2008). It can mean the largely predictable actions of a simple mechanical system or the complex action of a chaotic system (Craig W. Reynolds 2000) : The manner in which one behaves. The actions or reactions of a person or animal in response to external or internal stimulation , a : the manner of conducting oneself b : anything that an organism does involving action and response to stimuli c : the response of an individual, group, or species to its environment , the way in which someone behaves; also : an instance of such behavior , the way in which something functions or operates manner of behaving or acting,,

Definition 4: Interactive Behavior

Interaction is a kind of action that occurs as two or more objects have an effect upon one another. The idea of a two-way effect is essential in the concept of interaction, as opposed to a one-way causal effect. " A kind of groups action, having an impact output on status organizing processes in decision making in other groups whose members differ in external status (Berker J, Cohen, Zeldich 1972 Jun) or even,,, "the kind of action which describes conditions influencing the display of gender- related behavior is presented as a supplement to existent models of sex differences. (Deaux, Kay; Major 1987) A closely related term is interconnectivity which deals with the interactions of interactions within systems: combinations of many simple interactions can lead to surprising emergent phenomena. Interaction has different tailored meanings in various sciences Interaction behavior is an important indicator of the underlying relationship between individuals. On the basis of overt behavior we often make inferences and interpretations and arrive at an understanding of its meaning and significance for the individuals involved. This kind of knowledge is possible when we have accurate presentations and descriptions of observable behavior.

…

Bargaining:
Bargaining Behavior

> ***A.*** *Bargain is defined as a form of energy (Papakonstantinidis, 2002, Aug) between two distinguishable entities with different expectations and controversial interests, where each part intends to sovereign. Another definition (Uchendu, Victor(1967) is "Bargaining or haggling is a type of negotiation in which the buyer and seller of a good or service dispute the price which will be paid and the exact nature of the transaction that will take place, and eventually come to an agreement Bargainers' behavior is shaped by many factors, but instrumental rationality may be the dominant criterion. At any case, recent literature provides us with the relation between knowledge and behavior. Practically, the social relationship "imitates" the survival conflict in Nature, which presupposes the distinguish entities separate acquired*

independent presence and action, in a whole "planet system" based on complementarity solidarity, and altruism This action is directed by the motive of gaining an individual profit. (Nash J.F Nasar & Kuhn, 2001) As for the tendency to conflict, it: refers to the tendency to competition (Spais, Papakonstantinidis and Papakonstantinidis, 2009) between the two parts of the bargain with different expectations and controversial interests, results from the combination: a. the case of the distinguishable entity, b. mistrust of each distinguishable entity and c. tendency to improvement. Based on the above, the motive of individual benefit leads with mathematic precision to the conflict, the tendency to sovereignty and from there to a competition climate, which is the corner stone of our economic system. The bargaining problem is about a two-person bargaining situation involves two individuals (Von Neumann and Morgenstern, 1947), who have the opportunity, either to be competitors to each other (win-lose), or to make coalitions, or even to create pure individual strategies, based on bargainers' instant reflection behavior (win-win) (Nash, 1950; Arrow and Debreu, 1954; Aumann, 1987; Crawford, 1997 Nash (1951) focused on payoff shares/utilities combination. Bargain may result in

either agreement or disagreement (Nash, Nasar and Kuhn, 2001). Utility expresses the constraint or the "fear factor" of disagreement for the negotiator who desires negotiations to be led in agreement more than the other one. Who needs more, negotiation leading to an agreement expects more utility, but - probably has been a central research topic in economics for over five decades and has become an interesting issue in many fields in recent years.

B. *Bargaining or haggling is a type of negotiation in which the buyer and seller of a good or service debate the price and exact nature of a transaction. If the bargaining produces agreement on terms, the transaction takes place. Bargaining is an alternative pricing strategy to fixed prices.*

Behavioral theory

The personality theory in bargaining emphasizes that the type of personalities determine the bargaining process and its outcome. A popular behavioral theory deals with a distinction between hard-liners and soft-liners. Various research papers refer to hard-liners as warriors, while soft-liners are shopkeepers. It varies from region to region. Bargaining may take place more in rural and semi-urban areas than in a metro city

Bargaining games *refer to situations where two or more players must reach agreement regarding how to distribute an object or monetary amount. Each player prefers to reach an agreement in these games, rather than abstain from doing so. However, each prefers that the agreement favor their interests.*

Distributive bargaining[2] *describes a scenario where two parties are trying to divide up a fixed resource, usually in a competitive fashion. They go back and forth until there is a final solution with a winner, who claimed the most value, and a loser, who got less value. That's why this form of bargaining is thought of as a win-lose situation or zero-sum game. Many wins have to be balanced by your losses or vice versa.*

Integrative bargaining : *a type of bargaining in which all parties involved recognize that there are common problems requiring mutual resolution in more details, Integrative bargaining (also called "interest-based bargaining," "win-win bargaining") is a negotiation strategy in which parties collaborate to find a "win-win" solution to their dispute. This strategy focuses on developing mutually beneficial agreements based on the interests of the disputants.*

"Integrative refers to the potential for the parties' interests to be [combined] in ways that create joint value or enlarge the pie." Potential for integration only exists when there are multiple issues involved in the negotiation. This is because the parties must be able to make trade-offs across issues in order for both sides to be satisfied with the outcome

So there exists the possibility of an agreement between 2, so that, none of the two should be unhappy for his/her choice [103]

[103] David Whitsett (01/2018) "What is Distributive Bargaining? - Definition & Examples Chapter 3 / Lesson 2 Transcript

In contrast to distributive bargaining is integrative bargaining. Instead of thinking only of dividing the proverbial pie, integrative bargaining seeks to expand the pie so everybody can get enough. This is a more cooperative style of bargaining because the desired outcome is greater than what either party could get on their own Integrative bargaining is often used in families and in business situations where a long-term relationship is important.

MARXISM in the sharing problem

Interests include the needs, desires, concerns, and fears important to each side. They are the underlying reasons why people become involved in a conflict.

***Karl Marx (1818-1883)** Marx's theories about society, economics and politics - the collective understanding of which is known as "Marxism" hold that human societies progress through class struggle a conflict between an ownership class that controls production and a dispossessed laboring class that provides the labor for production.*

In Das Kapital (1867), Marx proposes that the motivating force of capitalism is in the exploitation of labor, whose unpaid work is the ultimate source of surplus value. The owner of the means of production is able to claim the right to this surplus value because he or she is legally protected by the ruling regime through property rights and the legally established distribution of shares which are by law only to be distributed to company owners and their board members. The historical section shows how these rights were acquired in the first place chiefly through plunder and conquest and the activity of the merchant and "middle-man". In producing capital (produced goods), the workers continually reproduce the economic conditions by which they labour. Capital proposes an explanation of the "laws of motion" of the capitalist economic system, from its origins to its future, by describing the dynamics of the accumulation of capital, the growth of wage labour, the transformation of the workplace, the concentration of capital, commercial competition, the banking system, the decline of the profit rate, land-rents, et cetera.

***The critique of the political economy of capitalism proposes that:** Wage-labor is the basic "cell-form" (trade unit) of a capitalist society. Moreover, because commerce as a human activity implied no morality beyond that required to buy and sell goods and services, the growth of the market system made discrete entities of the economic, the moral and the legal spheres of human activity in society; hence, subjective moral value is separate from objective economic value. Subsequently, political economy - the just distribution of wealth and "political arithmetick" about taxes—became three discrete fields of human activity: economics, law and ethics, politics and economics divorced.[citation needed]*

"The economic formation of society [is] a process of natural history". It is thus possible for a political economist to objectively study the scientific laws of capitalism, given that its expansion of the market system of commerce had objectified human economic relations; the use of money (cash nexus) voided religious and political illusions about its economic value and replaced them with commodity fetishism, the belief that an

https://study.com/academy/lesson/what-is-distributive-bargaining-definition-examples.html-

object (commodity) has inherent economic value. Because societal economic formation is a historical process, no one person could control or direct it, thereby creating a global complex of social connections among capitalists.[citation needed] The economic formation (individual commerce) of a society thus precedes the human administration of an economy (organized commerce).

The structural contradictions of a capitalist economy, the gegensatzliche Bewegung, describe the contradictory movement originating from the two-fold character of labour and so the class struggle between labor and capital, the wage labourer and the owner of the means of production. These capitalist economic contradictions operate "behind the backs" of the capitalists and the workers as a result of their activities and yet remain beyond their immediate perceptions as men and women and as social classes.[3]

The economic crises (recession, depression, et cetera) that are rooted in the contradictory character of the economic value of the commodity (cell-unit) of a capitalist society are the conditions that propitiate proletarian revolution - which The Communist Manifesto (1848) collectively identified as a weapon, forged by the capitalists, which the working class "turned against the bourgeoisie, itself".

In a capitalist economy, technological improvement and its consequent increased production augment the amount of material wealth (use value) in society while simultaneously diminishing the economic value of the same wealth, thereby diminishing the rate of profit-a paradox characteristic of economic crisis in a capitalist economy. "Poverty in the midst of plenty" consequent to over-production and under-consumption

After two decades of economic study and preparatory work (especially regarding the theory of surplus value), the first volume appeared in 1867 as The Production Process of Capital After Marx's death in 1883, from manuscripts and the first volume Engels introduced Volume II: The Circulation Process of Capital in 1885; and Volume III: The Overall Process of Capitalist Production in 1894. These three volumes are collectively known as Das Kapital.

Marxism *"The relations of capital assume their most externalized and most fetish-like form in interest-bearing capital We have here , money creating more money, self-expanding value, without the process that effectuates these two extremes. In merchant's capital, , there is at least the general form of the capitalistic movement, although it confines itself solely to the sphere of circulation, so that profit appears merely as profit derived from alienation; but it is at least seen to be the product of a social relation, not the product of a mere thing. (...) This is obliterated in, the form of interest-bearing capital. (...)*

From this point of view, MARXISM and the Greek Ancient Philosophy are the main FIELDS towards a win-win-win (ideal) situation, as both of them introduce to (i) the upper level of sensitization in the case of decision-making, (ii) a "path" to social justice, (iii) the basic process for sensitizing local population on the development, around a local "flag theme" (iv) a way to "feel free" through involvement in the development process (v) to develop "new" bargaining behavior (vi) to convert conflict into

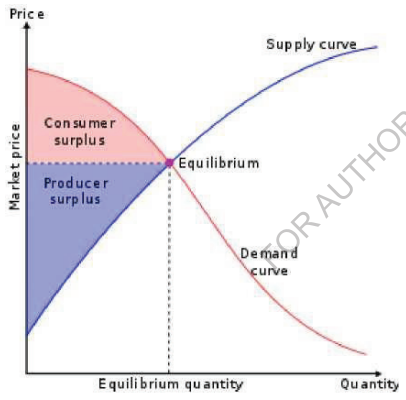
cooperation. (vii) As the sensitization process tends to infinity, then the limit of the A-B-C bargaining relations tend to the absolute collaboration. That's the end of the real social welfare process

That's the point

The suggested "win-win-win papakonstantinidis model" could be as a bargaining "extension" or The Integrative plus (Integrated+) bargaining, where the in-win equilibrium is not enough, as it doesn't response in the world question, the "social welfare, the environmental protection: By the win-win A-B bargaining may both win, but there is no answer about 7 billion people, who are not bargainers in this A-B bargainers' instant relation

This note is a very important as it introduces the necessity of sensitizing all people around a common ETHIC value In Greek Legislation there is an article, in" Obligations Law" concerning the "good trading practices" What the win-win-win papak. model " proposes, is to re-motivate this article of the Obligation Law

Graph: A typical bargaining situation **Consumer Surplus** and **Producer Surplus** converge by the win-win strategies in the **equilibrium point**



It has been proved (Papakonstantinidis, 2018)[3] *that:*

[3] Papakonstantinidis LA "CSR : An application of the "win-win-win papakonstantinidis model" (BOOK) LAMBERT Publishing (2018)

The three mathematical sequences, for A,B,C i.e $u_A,..v_B,z_C$ *converge in a,b,c for which we accept that*

$$a \prec b \prec c \prec \ell n2$$

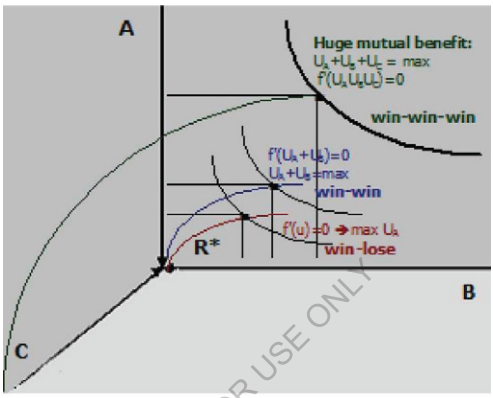
Generally speaking,

Papakonstantinidis Ia,2018

$$\lim_{n\to\infty} u_n \le \lim_{n\to\infty} v_n \le \lim_{n\to\infty} z_n \le \ell n.2$$

CONCLUDING,

It has been proved that "social welfare" exists and can coexist with the capitalist economic model, if and only if it will be based on the contradiction of the relevant



Papakonstantinidis Ia,2003

literature, thus leading in a 3-polar "contract" between any parties, including the Community (The Intermediate Community- the "C" factor), in a 3-dimensional space.

If it is true, then it will be feasible a social welfare policy in a new world that will not resemble the current (centralized structure)

In particular, the proposal deals with the collecting, classifying and comparing the theoretical material from various sources on the functioning of Social Welfare Function (SWF), towards building a strong case with logical and coherent arguments, towards the one Triple Pole (AB-COMMUNITY) Equilibrium (TPE), different from N.E, that leads to the Social Bargaining Solution" (SBS) and coincide with the "optimal" Community Collective Choice (CCC) in order to create a highly versatile tool, "the win-win-win papakonstantinidis model" of well-formed formulas (wffs),

Coming from its applications, the ambitious is to create a series of new policy' tools to strengthen social welfare, despite the "impossibility theorem" (K. Arrow 1955) I

supported with arguments, that through "a simultaneous, reflective, strong effective (Pareto), Flexible, fair (Rawls), collective (Amartya Sen) Social Welfare Function (SWF) in the frame of a General Equilibrium (Walras), incompatibilities that incorporate the values of equality, justice, harmony, symmetry, and the hypothesis, of self-organization (Papakonstantinidis) as well as the hypothesis of self-supporting bargaining solution in a community level, should exist and be the only one: the win-win-win equilibrium Win-win-win papakonstantinidis situation is proposed as an extension of both "non-cooperative game" and the principal- agent problem (also known as agency dilemma or theory of agency) under the constrains put by the five theorems Especially, Pareto efficiency , as an economic state where resources are allocated in the most efficient manner Pareto efficiency is obtained when a distribution strategy exists where one party's situation cannot be improved without making another party's situation worse. Pareto efficiency does not imply equality or fairness. Also known as "Pareto optimality" (INVESTOPEDIA) Also, the theory of justice focuses on the "veil of ignorance", along with the original position, is a method of determining the morality of a certain issue (e.g., slavery) based upon the following thought experiment: parties to the original position know nothing about their particular abilities, tastes, and position within the social order of society. When such parties are selecting the principles for distribution of rights, positions, and resources in the society they will live in, the veil of ignorance prevents them from knowing about who they will be in that society.

REFFERENCES

- *Arrow Kenneth 1951, 2nd ed., 1963 Social Choice and Individual Values, Yale University Press*
- *Papakonstantinidis Leonidas A. "CSR: An application of the "win-win-win papakonstantinidis model" (BOOK) LAMBERT Publishing (2018)*
- *Barbarousi Christina-Papakonstantinidis LA (2018) A Social Welfare Economics Proposal Through Bargaining Theory: a Win-Win-Win Papakonstantinidis Model*

  Approach Inserting Overall Arbitrator Player to the Local Development Game- INTERNATIONAL CONFERENCE OF DEVELOPMENT AND ECONOMY- ICODENCON, 2018-MINUTES

- *Eisenhardt, K.M.. (1989). "Agency Theory: An Assessment and Review". The Academy of Management Reivew, 14(1), 57-74 DEFINITION: T.he principal- agent problem, in political science and economics, (also known as agency dilemma or the agency problem) occurs when one person or entity (the "agent") is able to make decisions on behalf of, or that impact, another person or entity*
- *Godel Kurt (1930). "Die Vollstandigkeit der Axiome des logischen Funktionenkalkuls". Monatsheftefur Mathematik (in German) 37*
- *Godel Kurt,(1931) ' " Uber formal unentscheidbare S " atze " der Principia*

mathematica und verwandter

- *Myerson, R.B. 1999. 'Nash equilibrium and the history of economic theory. Journal of Economic Literature 37,1067-82.*
- *Nasar, S.-Kuhun 1998. A Beautiful Mind. New York: Simon and Schuster.*
- *Nash, J.F., Jr. 1950. Equilibrium points in n-person games. Proceedings of the National Academy of Sciences, USA 36, 48-9.*
- *Nash, J.F., Jr. 1950. Non-cooperative games. Doctoral dissertation, Princeton University Nash, J.F., Jr. 1950. The bargaining problem. Econometrica 18, 155-62*
- *12. Nash, J.F., Jr. 1951. Non-cooperative games Annals of Mathematics 54, 28695*
- *Nash, J.F., Jr. 1953. Two-person cooperative games Econometrica 21, 128-40.*
- *Nash, J.F., Jr. 1995. Autobiography Les Prix Nobel The Nobel Prizes 1994, ed. T. Frangsmyr Stockholm: Nobel Foundation. Online*
- *Neumann, J. von 1928. Zur theories der gesellschaftsspiele. Mathematische Annalen 100, 295-320. English translation by S. Bergmann in Contributions to the Theory of 8 Nash, John Forbes (born 1928) Games IV, ed. R.D. Luce and A.W. Tucker. Princeton: Princeton University Press, 1959.*
- *Neumann, J. von and Morgenstern, O. 1944. Theory of Games and Economic Behavior Princeton: Princeton University Press (2nd edn 1947).*
- *Papakonstantinidis LA (2013) The Intermediate Community: A Behavioral / Bargaining Approach For Conflict Resolution At The Local Level/ Bayesian Analysis EUROMED World Conference- Proceedings.....P. 1443*

- *Papakonstantinidis LA (2012) The 'Win-Win-Win Papakonstantinidis Model' as a Bargaining Solution Analysis for Local Government Decision from Territory- Community to 'Behavioral' Community: The Case of Greece*
  Papakonstantinidis LA (2016) Volume II titled "The"win-win-win

  papakonstantinidis model"

- *VOLUME II: COLLECTION social choice, social welfare: theoretical background 2016 RESEARCH GATE*
- *Papakonstantinidis LA (project2016-2020) Social Welfare: Collection of bibliographic references and the win-win-win papakonstantinidis model- Project*
- *Papakonstantinidis LA "Involving communities in rural tourism: A "win-win-*
  win papakonstantinidis model" methodological approach and the examination of two Women Rural Tourism Cooperatives' Case Studies IJRCM , VOL No 2, 2012/1,issue no 1

- *Papakonstantinidis LA (2017) The win-win-win papakonstantinidis model: the Community's key-role in bargaining problem: Political Game as a function of "Bargaining" ''Principal-Agent" and "Ultimatum" game : The "rainbow concept" in the Political Bargain under publication*
- *Papakonstantinidis LA: the "S.H.I.E.L.D model" Presentation Book of*

Proceedings "World Conference "Tourismo Verde", Rome, 1997

- *Papakonstantinidis L.A "Sensitization and Involving the Community. A Rural Development Application of the Win-Win-Win Model" Scientific Review of Economic Sciences (TEI- Epirus Scientific Review) issue 6/2004 pp 177-192*
- *Papakonstantinidis L.A "Operations Management by a hypercube & win-win-win perspective: A Local Development Approach" Journal of Applied Economics and Management, Volume 2, issue 2,/ 2004, pp 111-130, ISSN 0972- 8937, JAEM- INSTITUTE OF ECONOMICS AND FINANCE, Bundelkhand University, Jansi*
- *Papakonstantinidis L.A "Win-Win-Win Model and Sensitization Process"- Journal of Space and Community- Hungarian Academy of Sciences/Regional Studies Dpt*
- *Papakonstantinidis L.A "Forecasting the Tourism Impact through the 2008 Messinian Thruway- Simple Linear Regression, the Holt-Winters Method and Sensitization"- Part of the Book under the general title "New Facets of Tourism Management" ABHIJEET PUBLICATIONS (Dr Robinet Jacob- The Editor) Delhi 110 094 ISBN 81-88683-70-1 , subject No "14"- pp 194-258*
- *Papakonstantinidis L.A "The win-win-win model" - "Developing Sustainable Rural Tourism" Thematic guide- chap 7.9 World Seminar, European Network "Euracademy", Gotland-Sweden, 10-17 August 2002 σύστημα κριτών , καταχώρηση στο www.euracademy.org.*
- *Papakonstantinidis L.A "Building the Social Capital and Local Capacities in Rural Areas- The Animation Process"- Presentation in the World Congress NOV 6, 2003 [Hungarian Academy of Sciences, Centre for Regional Studies] στη πόλη Gyor της Ουγγαρίας με τον τίτλο " Capacity Building and Local Animation" - Thematic Guide "Euracademy" -p 15*
- *Papakonstantinidis L.A "Sensitization & the win-win-win model: An answer to Globalization's Impact on Local Communities and Common Perceptions of the World Tendencies- Case Study : Community Redefinition- Tychero Evros" I.S.A) - RC 26 (Sociotechnics and Sociological Practice) under the title, " Social Capital and Transformations in the Age of Globalization". Molyvdos/ Lesbos Isle & Aegean University/ The Sociology Dept, Jun, 11-14, 2004 (ISA- RC 26)*
- *Papakonstantinidis L.A New trends in Regional Policy: Territory-Space Definition by a 3-level Bargaining Approach- The Win-Win-Win Model. Case Study: The LEADER EU Iniative Application in Greece" presentation "Regional and Rural Development Interface" (13-15 Maiou 2004) στο Babes-Bolyai University, Faculty of Economics - Cluj-Napoca Romania, European Program titled "Reabalk European Project".*
- *Pareto Vilfredo (1906) Manual of Political Economy. 1906*

- *25. Pareto Vilfredo (1896) Cours d' Economic Politique Professe a l' Universite de Lausanne. Vol. I, 1896,Vol. II, 1897.*
- *Rawls John .(1958) "Justice as Fairness. The Philosophical Review", Vol. 67, No. 2 (Apr., 1958), pp. 164- 194. Stable URL:.*
- *Sen Amartya K., 1970, Collective Choice and Social Welfare, ch. 3.4*
- *Smith Adam(1776). An Inquiry into the Nature and the Causes of the Wealth of Nations "1 (1 ed.). London: W. Strahan. Retrieved2012-12-07., volume 2 via Google Books*
- *Smith Adam (1778). An Inquiry into the Nature and the Causes of the Wealth of Nations 2 (2 ed.) London: W. Strahan; T.Cadell. Retrieved 10 March 2015 via Google Books*
- *Simon Herbert A, (1972). "Theories of Bounded Rationality," Chapter 8 in C. B. McGuire and R. Radner, eds., Decision and Organization, Amsterdam: North- Holland Publishing Company.*
- *Simon Herbert A (1987) "Behavioral Economics" The New Palgrave: A Dictionary of Economics 1. pp. 221-2*
- *Skinner, B. (1938). The Behavior of Organisms: An Experimental Analysis. New York: Appleton- Century pp 61-75*
- *Spais, G. and Papakonstantinidis, L. (2011). "An application of the win-win-win Papakonstantinidis model as an innovative bargaining solution analysis in cooperative sales promotion campaigns". Proceedings of the 4th Annual Euromed Conference of the Euromed Academy of Business, pp.1724-1744.*
- *Spais, G., Papakonstantinidis, L. and Papakonstantinidis, S. (2009) 'An innovative bargaining solution analysis for vertical cooperative promotion management decisions', Innovative Marketing, Vol. 5, No. 3, pp.7-29.*
- *Spokos V-Papakonstantinidis LA: The win-win-win papakonstantinidis model": Theoretical Aspects*
- *Stiglitz , J. (1987). "The causes and consequences of the dependence of quality on prices", Journal of Economic Literature, vol. 25, pp. 1-48*
- *Varoufakis Yanis: Game Theory, GUTENBERG*

PART OF THE BOOK -6

The win-win-win papakonstantinidis model: influences from the Greek Ancient Philosophy the case of local development

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ABSTRACT:

In this paper we aim to: if and how the win-win-win papakonstantinidis model incorporates some of the Greek Ancient Philosophy's perception Especially, it focuses on the ancient "GOOD" ARETI, ETHOS-ETHICAL, MORAL words, from the prism of the win-win-win papakonstantinidis model

Key-words

Philosophy, local development, flag theme, the win-win-win papakonstantinidis model, moral, ethos, ethical behavior, social welfare

INTRODUCTION

Nowadays, one can easily observe that there is no trace of political, public discourse, a scientific idea, a decision in general that does not fit into the market logic and easy enrichment

ANALYSIS

We can easily compare Social choice (y) as a function of social behaviour (x) : y=f(x) AND

Social behaviour (x) as a function of social choice (y): x=f(y), as the table above

ASSUMPTIONS

1. *A Descriptive Psychology DP (Ossorio P.G 1995) conceptual framework with Bergner notes/ comments 1, 2) in relation with Applied Behavioral Analysis (ABA) and individual deliberative and consistent rational choice's perception (Thomas S. Ulen 1999) emphasizing the "Instrumental Rationality" (Weber M 1910/1978) and J. F. Nash,. 1950 & 1951) could satisfactory interpret bargaining behavior, inside the community, and thus be helpful for drawing paper's conclusions and formulating our proposals*
2. *There is interaction between behavior and bargain. Behavior occurs in any reaction-bargain. There is no bargain without behavior. There is no behavior without interaction/ bargain (Papakonstantinidis, 2011)*
3. *The main hypothesis is that development (especially, local development) may be sighted as the output of the bargaining trends.*
4. *Each of the three poles interacts with other within the bargain*
5. *Bargainers Decisions are taken into consideration of conditional probability: In probability theory, the "conditional probability of A given B" is the probability of A if B is known to occur[1] (Bayesian Anal)*
6. *Each of the three (3) power poles seeks maximum benefit, from their actions, making-for this purpose- their best /optimal instant reflection individual winning strategies (instrumental rationality- Nash 1950). Otherwise there is not a bargain between the poles*
7. *Social interactions regularly lead to mutually beneficial transactions that are sometimes puzzling*
8. *Bargaining is strongly correlated with bargainers behavior [Xiao - Ping Chen and Chao C. Chen (2010), Zhang J. and alle (2012)]*

9. *We could imagine the intra-community relations as a continuous bargain between 3 by 2- It is rather a dynamic "winning strategies instant*

reflections" game, based on competitive interaction relations

10. ***All players have complete information about the game being played.- J. F. Nah, "instrumental rationality", 1950***

11. ***Each player has a subjective probability distribution over the alternative possibilities - (Harsanyi, 1967),***

12. ***If a type is associated with several states but cannot distinguish between the states, it assigns a probability distribution over the set of types. If a type is associated with only one state, then that type believes with certainty that it is in that state (Dunford Michael 1988)***

13. ***All individuals are indifferent between any two probability distributions over social states - Pareto efficiency[104] (Pareto, 1916 & Stiglitz Joseph E, 1987)***

14. ***Sensitization is a form of knowledge and at the same time a practical information which could be taught, thus influence (among the others) the human behavior (Papakonstantinidis, 2007 coming from 20 years' experience on the Leader EU Program application in Greece)***

A. ***Theoretical Framework: "win-win-win papakonstantinidis model"***

1. *win-win perception: based on when each side of a dispute feels they have won. Since both sides benefit from such a scenario, any resolutions to the conflict are likely to be accepted voluntarily. The process of integrative bargaining aims to achieve, through cooperation, win- win outcomes.*

Social behavior is not recognized as an acceptable one in the bargain, thus deriving unfair results: That means, "who needs the agreement as the result of a bargain, has to loose in shares, by accepting any result". Information may be the "link" between knowledge creation and the bargaining process. In particular, "Information" is a power factor in pure individuals winning strategies (Aumann, 1987). The more information, the better winning strategy, the more profit. Each of the players (negotiators), starting negotiations with the other, expects to gain the maximum profit. Interaction, based on instant reflection individual winning strategies, is the base of the Nash Non Cooperative Games Theory.

[104] In a Pareto efficient economic system no allocation of given goods can be made without making at least one individual worse off

An examination of the historical evolution of bargaining and game theories (the last 300 years, from the first pioneers Waldegrave, Cournot, Walras, Edgeworth, Bertrand, Neumann and Stackelberg to Nash and Harsanyi and their influences to widely acknowledged scholars of the cooperative advertising literature such as Berger, He, Huang, J0rgensen, Prasad, Sethi, Villas-Boas, Zaccour (the last 40 years, see Spais, 2012) we can safely state that it is revolutionary approach, as the "triple-pole" approach is examined for the first time in the 300 years of scientific development of bargaining and game theories

B. GREEK PHILOSOPHY

Philosophy (from Greek φιλοσοφία, philosophia, literally "love of wisdom" is the study of general and fundamental problems concerning matters such as existence, knowledge, values, reason, mind, and language. The term was probably coined by Pythagoras (c. 570-495 BCE). Philosophical methods include questioning, critical discussion, rational argument, and systematic presentation. Classic philosophical questions include: Is it possible to know anything and to prove it? What is most real? Philosophers also pose more practical and concrete questions such as: Is there a best way to live? Is it better to be just or unjust (if one can get away with it)? Do humans have free will?

Historically, "philosophy" encompassed any body of knowledge. From the time of Ancient Greek philosopher Aristotle to the 19th century, "natural philosophy" encompassed astronomy, medicine, and physics. For example, Newton's 1687 Mathematical Principles of Natural Philosophy later became classified as a book of physics. In the 19th century, the growth of modern research universities led academic philosophy and other disciplines to professionalize and specialize. In the modern era, some investigations that were traditionally part of philosophy became separate academic disciplines, including psychology, sociology, linguistics, and economics.

C. SOCRATES (469-399 B.C.E.)

He wrote nothing, so what stories and information we have about him come to us primarily from Xenophon (430-354 B.C.E.) and Plato. Both Xenophon and Plato knew Socrates, and wrote dialogues in which Socrates usually figures as the main character, but their versions of certain historical events in Socrates' life are sometimes incompatible. We cannot be sure if or when Xenophon or Plato is reporting about Socrates with historical accuracy. In some cases, we can be sure that they are intentionally not doing so, but merely using Socrates as a mouthpiece to advance philosophical dialogue (Doring 25). Xenophon, in his Memorobilia, wrote some biographical information about Socrates, but we cannot know how much is fabricated or embellished. When we refer to Socrates, we are typically referring to the Socrates of one of these sources and, more often than not, Plato's version.

Socrates' elenchos, as he recognizes in Plato's Apology (from apologia, "defense"), made him unpopular. Lycon (about whom little is known), Anytus (an influential politician in Athens), and Meletus, a poet, accused Socrates of not worshipping the

gods mandated by Athens (impiety) and of corrupting the youth through his persuasive power of speech. In his Meno, Plato hints that Anytus was already personally angry with Socrates. Anytus has just warned Socrates to "be careful" in the way he speaks about famous people (94e). Socrates then tells Meno, "I think, Meno, that Anytus is angry, and I am not at all surprised. He thinks.. .that I am slandering those men, and then he believes himself to be one of them" (95a) This is not surprising, if indeed Socrates practiced philosophy in the way that both Xenophon and Plato report that he did by exposing the ignorance of his interlocutors.

Socrates practiced philosophy, in an effort to know himself, daily and even in the face of his own death. In Plato's Crito, in which Crito comes to Socrates' prison cell to persuade Socrates to escape, Socrates wants to know whether escaping would be just, and imminent death does not deter him from seeking an answer to that question. He and Crito first establish that doing wrong willingly is always bad, and this includes returning wrong for wrong (49b-c). Then, personifying Athenian law, Socrates establishes that escaping prison would be wrong. While he acknowledges that he was wrongly found to be guilty of impiety and corrupting the youth, the legal process itself ran according to law, and to escape would be to "wrong" the laws in which he was raised and to which, by virtue of being a life-long Athenian, he agreed to assent.

Plato's Phaedo presents us with the story of Socrates' last day on earth. In it, he famously claims that philosophy is practice for dying and death (64a). Indeed, he spends his final hours with his friends discussing a very relevant and pressing philosophical issue, that is the immortality of the soul. Socrates is presented to us as a man who, even in his final hours, wanted nothing more than to pursue wisdom. In Plato's Euthyphro, Socrates aims to dissuade Euthyphro from indicting his own father for murder. Euthyphro, a priest, claims that what he is doing - prosecuting a wrongdoer - is pious. Socrates then uses his elenchos to show that Euthyphro does not actually know what piety is. Once he is thoroughly confused and frustrated, Euthyphro says, ""it is a considerable task to acquire any precise knowledge of these things [that is, piety]" (14b). Nevertheless, Euthyphro offers yet another definition of "piety." Socrates' response is the key to understanding the dialogue: "You could tell me in far fewer words, if you were willing, the sum of what I asked...You were on the verge of doing so, but you turned away. If you had given that answer, I should now have acquired from you sufficient knowledge of the nature of piety" (14c1-c4). It is, in other words, the very act of philosophizing - the recognizing of one's own ignorance and the search for wisdom - that is piety. Socrates, we are told, continued this practice even in the final hours of his life.

The Greek Ancient Philosopher Socrates (469-399 b.C) believed that self-knowledge was sufficient to live a good life. He concerned that "knowledge is equivalent to virtue. People can reach absolute knowledge say, just follow the correct method.. One has to seek knowledge and wisdom before the other private interests. The knowledge sought as a means of moral action. The logic is a prerequisite to live a good life.

During his life Socrates was predominantly interested in ethics .

A. *Self-knowledge is a sufficient condition to the good life. Socrates identifies*

knowledge with virtue. If knowledge can be learned, so can virtue. Thus, Socrates states virtue can be taught.

B. He believes "the unexamined life is not worth living." One must seek knowledge and wisdom before private interests. In this manner, knowledge is sought as a means to ethical action.

C. What one truly knows is the dictates of one's conscience or soul: these ideas form the philosophy of the Socratic Paradox

II. Socrates' ethical intellectualism has an eudaemological character.

A. Socrates presupposes reason is essential for the good life.

1. One's true happiness is promoted by doing what is right.

2. When your true utility is served (by tending your soul), you are achieving happiness. Happiness is evident only in terms of a long-term effect on the soul.

3. The Socratic ethics has a teleological character - consequently; a mechanistic explanation of human behavior is mistaken. Human action aims toward the good in accordance with purpose in nature.

B. Socrates states no one chooses evil; no one chooses to act in ignorance.

1. We seek the good, but fail to achieve it by ignorance or lack of knowledge as to how to obtain what is good.

2. He believes no one would intentionally harm themselves. When harm comes to us, although we thought we were seeking the good, the good is not obtained in such a case since we lacked knowledge as to how best to achieve the good.

3. Aristotle's criticism of Socrates belief that no one intentionally harms oneself is that an individual might know what is best, and yet still fail to act rightly.

C. Socrates' influence extends to many different subsequent ethical theories in the Western World. Some specific aspects of Socrates' ethical influence is shown in the following chart.

A. If evil were never done deliberately or voluntarily, then evil would be an involuntary act and consequently no one could properly be held responsible for the evil that is done.

B. Since, on Socrates' view, the good is that which furthers a person's real interests, it will follow that if the good is known, people will seek it. But many times people do not.

C. If moral laws were objective and independent of feelings, and if knowledge were to be identified with virtue, then it would seem to follow that moral problems are always capable of rational resolution. But often they are not.

D. Psychiatric evidence shows sometimes people behave in an entirely self-damning manner. For example, St. Paul said, "For I do not do the good I want,

but the evil I do not want is what I do."

E. If Sigmund Freud's psychoanalytical theory is correct, we are often unaware of rationalizing unethical actions in order to maintain our self-respect. That is, this kind of defense mechanism leads to self-deceptive. With respect to Freud's definition, Margaret Boden points out, "Insofar as defence mechanisms are employed by normal, neurotic, and psychotic personalities, they may be regarded as universal features of the human mind."

PLATO

Plato's Ethics: An Overview, STANFORD ENCYCLOPEDIA of PHILOSOPHY First published Tue Sep 16, 2003; substantive revision Wednesday December 6, 2017 https://plato.stanford.edu/entries/plato-ethics/Plato Athens (c.370 BC): Born 428/427 or 424/423 BCAthens, Greece Died 348/347 BC (age c. 80)

Plato (/'pleitou/;[a] Greek: Πλάτων[a] PMton, pronounced [pM.to:n] in Classical Attici, was a philosopher in Classical Greece . Virtue Ethics Contemporary philosophers still disagree on what exactly the term "ethics" means. Many such philosophers today consider ethical language to be nothing more than a moral fiction. Nevertheless, the general consensus in the field diverges among three major branches: consequentialism, deonto-logicalism and virtue ethics. The first two are relatively recent ideas, but virtue ethics has been around since the time of Plato. Virtue ethics focuses on the idea that what we call good is not dependent on the actions we take (deonto-logicalism) nor the results of those actions (consequentialism), but instead focuses on the person that we are. To a virtue ethicist like Plato, actions are only good to the extent that virtuous persons take such actions. When Plato talks about what is good, he always means for us to think of an ideal good person. In this way, Plato would agree wholeheartedly with the basic idea of the "What Would Jesus Do?" movement since the focus is on what a good person is rather than what good actions or good consequences are .

Eudaimonia and Arete

For Plato, ethics comes down to two basic things: eudaimonia and arete. Eudaimonia, or "well -being," is the virtue that Plato teaches we must all aim toward. The ideal person is the person who possesses eudaimonia, and the field of ethics is mostly just a description of what such an ideal person would truly be like. However, achieving eudaimonia requires something extra, which Plato calls arete, or excellence. Possessing arete is the way that one can reach a state of eudaimonia. A person with arete is a person who has the character traits that would lead to a eudaimonious life. If given enough time, the set of virtues will help anyone to become eudaimonious. Most of Plato's writings about ethics focuses on what arete is, with the idea that if one can figure that out, then eudaimonia will follow shortly after.

What Is Arete?

Plato's earliest ideas on arete revolve around the question whether each positive character trait we might name would be a part of arete. For example, is courage part of arete? Surely so, Plato argues, since we would hardly call a cowardly person's life

eudaimonious. However, maybe courage is only an effect of a eudaimonious life and not a cause. Questions like this plague the early Plato, but by his middle period, he seems to have decided on arete being nothing more than just pure knowledge. Knowledge of all things is important, but none is more important than knowledge of knowledge itself, which Plato considers to be the ultimate virtue and a necessary component for any individual to achieve eudaimonia. Perhaps shockingly to modern readers, Plato also includes several other items as necessary conditions for eudaimonia, including luck and wealth. Plato argued that a community has three parts which are guardians, producers, and soldiers and each part performs a particular function.

For a community to be just, every element has to perform the role to the best capacity, which is a good worth. The same characters and elements will materialize in the state; have to exist in every person. Someone might respond to Plato's argument that if the good worth of a community were not in a person, it would be hard for the community to uphold itself. The understanding is that a community is just a collection of people who have formed a sense of laws on living collectively; thereby, every individual would introduce some elements, values and functions into the community. Since every person contributes to the community, those aspects that are present in the community, ought to have come from the person, thereby, souls have three different elements.

The two graph + table form the base of mutual influence between knowledge creation and the flag them, which takes the central thesis in local development:

Capacity building is the key-point in producing the dialogue, on local development process, based on networking SMES , for the reasons that:

STATEMENT
Ethical bargain, knowledge creation, social choice-social behavior are cornerstones of the local development process through the Sensitization process. In its limit, Sensitization leads in an integrated form of full collaboration around the flag theme locally

1. *capacity building is about "stimulating learning" (Moseley, 2003)*
2. *learning by doing-but not in isolation- is often extremely effective*
3. *the challenge for capacity builder is to create situations in which learning occurs as a by-product of someone responding to a challenge*

From this point of view, "development" -especially rural and local development- might be a sustained and sustainable process of economic, social, cultural and environmental change, designed to enhance the long term well-being of the whole by networking (Wilkinson, 1991, Swarebrooke, 1999, Papakonstantinidis, 2002, Moseley, 2003).

Among different definitions on "capacities building", the paper starts this dialogue from the definitions of capacity building provided by professor Moseley (2003):

a) "Increasing the stock of skills, knowledge and readiness to act."

b) "Promoting the development of social capital (institutions and networks etc.) in order to produce positive social outcomes."

c) Networking SMES around a FLAG THEME in the small place

• *As it concerns the first definition, "Readiness to act" relates to a host of other things to do with motivation confidence, resources, the removal of constraints etc*

• The second definition includes reference to the purpose of capacity building and it also states unambiguously that capacity building is about increasing one of the 'four capitals" (the social capital) whereas it is arguable that it is also concerned with enhancing human capital, i.e individual people and not just the 'glue" that binds them.

• The Third DEFINITION, ie 'networking" may lead to 'coalitions" around a flag theme, thus promoting the integrated and endogenous development, at local level

SMEs involvement: First steps towards networking

Based on these definitions may be expressed the major question:

How can we involve SMEs to implement community objectives?

In my mind, scientific community should take into consideration two approaches to answer this question:

I How does SMEs take part of capacity building in local society?

I How SMEs should be promoted to increase their own capacity by networking?

1. *The first direction leads us the implementation of community objectives by public- private partnership.*
2. *The second direction increases the competitiveness of local SMEs and this may ensure the better off of local community.*

Both directions must be concerned by a 'society involvement perception", including FIVE (5) methodological steps [according to the 'ladder"]:

□ *Information*

I Sensitization

I Participation

□ *Direct involvement*

□ *Partnershi*

p In particular:

1. *A first step is information by which people and SMEs at local level are told about what is possible to be done, in terms of complementary activities, locally and what it might to do for their area*

2. *The next step may be sensitization, by which SMEs are encouraged to reflect on the character of their area; the natural, cultural and human resources of the area*

3. *This may, then lead to active participation in the debate upon the development of SMEs area, around a "Flag Theme", or "common interests, by a more social character , thus making their first steps towards coalitions, by creating a "common strategy" in some fields. Flag Theme should to be an innovative idea, coming from the studying of nature, or from an historical fact - reproducing a custom, a myth, an historical name or event. It may be, even a fantastic event, which may be attractive for tourists Flag Theme may be resulted as the outcome of the common work during the sensitisation and the animation process. Some examples from Greece/Europe are referred below: "Odyssea" - Aegean Sea "Arktouros" (Pindos Mountain)), "Forest of Dadia" (Evros), "Zagorohoria" (Epiros), "Flag of Greek Revolution" Kalavryta», "Twelve Gods in Olympos" (Pieria), "Faragi Samarias" (Crete), "Pindos Crossing" etc or using names from history i.e «Apidotia» (Nafpaktos),; thematic routes" i.e "Oil Roads", or "Silk-town" (Soufli); or even a fantastic place, as the "Pirot Sea' for people who asking for adventures, or the «love valley» to attract people in love , etc. In those cases, local activities are round the Flag theme for each place, thus providing it with its identity; through diversification, as a most popular tourist destinations.*

4. *This, in turn may provoke the direct involvement of people and SMEs at local level in pursuing and contributing to their common fields*

   This direct involvement may then form the basis for the creation of formal or informal local partnerships which may undertake aspects of the development the SMEs common strategies around the flag theme. That could be led to SMEs networking around the "flag theme" Conflict resolution which could occur between SMEs should be arranged by the "new" methodological tool, suggested by the presenter: It is the well-known win-win-win model - Papakonstantinidis LA

Type of Knowledge-1	Type of Knowledge-2	Synthesis	Resulted Behavior
tacit	tacit	Sympathetic	Socialization
tacit	codified	Conceptual	Externalization
codified	tacit	Procedural	Internalization
codified	codified	Systemic	Networking
sympathetic	systemic	Conceptual	Sensitization
systemic	systemic	Procedural	**Strategic**

Papakonstantinidis, 2003

KNOWLEDG CREATION-KNOWLEDGE TRANSFER

Graph: Five steps towards Community Cohesion's Case (C-C-C)[3]

partnership

Involvement

Participation

sensitization

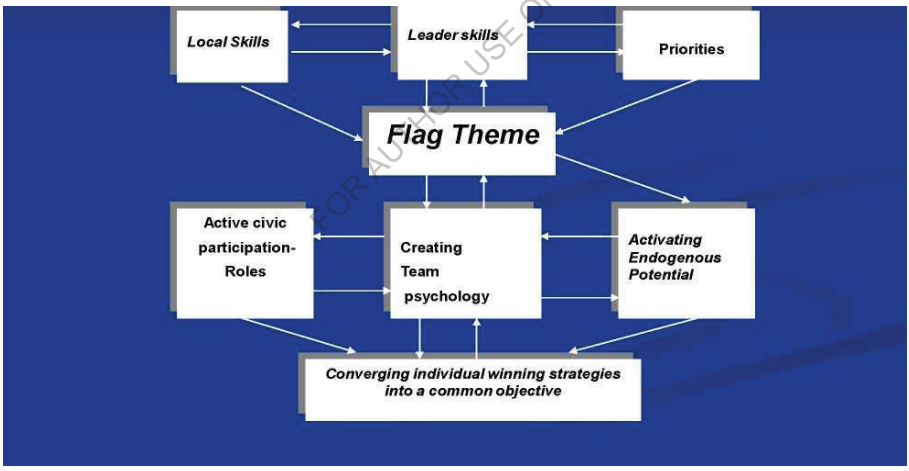
Information

3

Arnstein ladder , 1967

References

FLAG THEME



PAPAKONSTANTINIDIS,2002

References

References

- *Kraut, Richard (August 16, 2017). "Socrates". Encyclopedia Britannica. Encyclopedia Britannica, Inc. Retrieved 20 November 2017.*
- *Jones, Daniel; Roach, Peter, James Hartman and Jane Setter, eds. Cambridge English Pronouncing Dictionary. 17th edition. Cambridge UP, 2006.*
- *Easterling, P. E. (1997). The Cambridge Companion to Greek Tragedy. Cambridge University Press. p. 352. Retrieved 19 November 2017.*
- *Smith, Nicholas D.; Woodruff, Paul (16 November 2000). Reason and Religion in Socratic Philosophy. Oxford University Press. p. 154. Retrieved 19 November 2017. 469 or 468 (corresponding to the fourth year of the 77th Olympiad), according to Apollodorus...But the year of Socrates's birth is probably only an inference from...Plato [who] has Socrates casually describe himself as having lived seventy years.*
- *James Rachels, The Legacy of Socrates: Essays in Moral Philosophy Columbia University Press, 2007 Accessed November 24th, 2017*
- *Gregory Vlastos (1991). Socrates, Ironist and Moral Philosopher. Cornell University Press. p. 43..*
- *Moral Philosophy - The Discovery of Ethics : Socrates Jacques Maritain Center Accessed November 24th, 2017*
- *Peter Singer (1985) - Encyclopedia Britannica Chicago, 1985, pp. 627-648 Accessed November 24th, 2017*
- *Anne Rooney - The Story of Philosophy: From Ancient Greeks to Great Thinkers of Modern Times(search page) Arcturus Publishing, 6 January 2014*
- *Charles H. Kahn (1998) - Ethics - p.42 Cambridge University Press 4 May 1998 Accessed December 22nd, 2017*
- *Stern, T (2013) - Philosophy and Theatre: An Introduction - ix Routledge 2013*
- *Kofman, Sarah (1998). Socrates: Fictions of a Philosopher. p. 34.*
- *Arrow Kenneth 1951, 2nd ed., 1963 Social Choice and Individual Values, Yale University Press*
- *Papakonstantinidis Leonidas A. "CSR: An application of the "win-win-win papakonstantinidis model" (BOOK) LAMBERT Publishing (2018)*
- *Barbarousi Christina-Papakonstantinidis LA (2018) A Social Welfare Economics Proposal Through Bargaining Theory: a Win-Win-Win Papakonstantinidis Model Approach Inserting Overall Arbitrator Player to the Local Development Game-*

References

- *Eisenhardt, K.M.. (1989). "Agency Theory: An Assessment and Review". The Academy of Management Reivew, 14(1), 57-74 DEFINITION: T.he principal-agent problem, in political science and economics, (also known as agency dilemma or the agency problem) occurs when one person or entity (the "agent") is able to make decisions on behalf of, or that impact, another person or entity*
- *Nash, J.F., Jr. 1950. Equilibrium points in n-person games. Proceedings of the National Academy of Sciences, USA 36, 48-9.*
- *Nash, J.F., Jr. 1950. Non-cooperative games. Doctoral dissertation, Princeton University Nash, J.F., Jr. 1950. The bargaining problem. Econometrica 18, 155-62*
- *12. Nash, J.F., Jr. 1951. Non-cooperative games Annals of Mathematics 54, 28695*
- *Nash, J.F., Jr. 1953. Two-person cooperative games Econometrica 21, 128-40.*
- *Nash, J.F., Jr. 1995. Autobiography Les Prix Nobel The Nobel Prizes 1994, ed. T. Frangsmyr Stockholm: Nobel Foundation. Online*
- *Neumann, J. von 1928. Zur theories der gesellschaftsspiele. Mathematische Annalen 100, 295-320. English translation by S. Bergmann in Contributions to the Theory of 8 Nash, John Forbes (born 1928) Games IV, ed. R.D. Luce and A.W. Tucker. Princeton: Princeton University Press, 1959.*
- *Neumann, J. von and Morgenstern, O. 1944. Theory of Games and Economic Behavior Princeton: Princeton University Press (2nd edn 1947).*
- *Papakonstantinidis LA (2013) The Intermediate Community: A Behavioral / Bargaining Approach For Conflict Resolution At The Local Level/ Bayesian Analysis EUROMED World Conference- Proceedings……P. 1443*
- *Papakonstantinidis LA (2012) The 'Win-Win-Win Papakonstantinidis Model' as a Bargaining Solution Analysis for Local Government Decision from Territory- Community to 'Behavioral' Community: The Case of Greece*

(2016) Volume II titled "The"win-win-win papakonstantinidis model" VOLUME II: COLLECTION social choice, social welfare: theoretical background 2016 RESEARCH GATE

- *Papakonstantinidis LA (project2016-2020) Social Welfare: Collection of bibliographic references and the win-win-win papakonstantinidis model- Project*
- *Papakonstantinidis LA "Involving communities in rural tourism: A "win-win-win papakonstantinidis model" methodological approach and the examination of two Women Rural Tourism Cooperatives' Case Studies IJRCM , VOL No 2, 2012/1,issue no 1*
- *Papakonstantinidis LA (2017) The win-win-win papakonstantinidis model: the Community's key-role in bargaining problem: Political Game as a function of "Bargaining" "Principal-Agent" and "Ultimatum" game : The "rainbow concept" in the Political Bargain under publication*
- *Papakonstantinidis LA: the "S.H.I.E.L.D model" Presentation Book of Proceedings "World Conference "Tourismo Verde", Rome, 1997*

- *Papakonstantinidis L.A "Sensitization and Involving the Community. A Rural Development Application of the Win-Win-Win Model" Scientific Review of Economic Sciences (TEI- Epirus Scientific Review) issue 6/2004 pp 177-192*
- *Papakonstantinidis L.A "Operations Management by a hypercube & win-win-win perspective: A Local Development Approach" Journal of Applied Economics and Management, Volume 2, issue 2,/ 2004, pp 111-130, ISSN 0972- 8937, JAEM- INSTITUTE OF ECONOMICS AND FINANCE, Bundelkhand University, Jansi*
- *Papakonstantinidis L.A "Win-Win-Win Model and Sensitization Process"-Journal of Space and Community- Hungarian Academy of Sciences/Regional Studies Dpt*
- *Papakonstantinidis L.A "Forecasting the Tourism Impact through the 2008 Messinian Thruway- Simple Linear Regression, the Holt-Winters Method and Sensitization"- Part of the Book under the general title "New Facets of Tourism Management" ABHIJEET PUBLICATIONS (Dr Robinet Jacob- The Editor) Delhi 110 094 ISBN 81-88683-70-1 , subject No "14"- pp 194-258*
- *Papakonstantinidis L.A "The win-win-win model" - "Developing Sustainable Rural Tourism" Thematic guide- chap 7.9 World Seminar, European Network "Euracademy", Gotland-Sweden, 10-17 August 2002 σύστημα κριτών , καταχώρηση στο www.euracademy.org.*
- *Papakonstantinidis L.A "Building the Social Capital and Local Capacities in Rural Areas- The Animation Process"- Presentation in the World Congress NOV 6, 2003 [Hungarian Academy of Sciences, Centre for Regional Studies] στη πόλη Gyor της Ουγγαρίας με τον τίτλο " Capacity Building and Local Animation" - Thematic Guide "Euracademy" -p 15*
- *Papakonstantinidis L.A "Sensitization & the win-win-win model: An answer to Globalization's Impact on Local Communities and Common Perceptions of the World Tendencies- Case Study : Community Redefinition- Tychero Evros" I.S.A) - RC 26 (Sociotechnics and Sociological Practice) under the title, " Social Capital and Transformations in the Age of Globalization". Molyvdos/ Lesbos Isle & Aegean University/ The Sociology Dept, Jun, 11-14, 2004 (ISA- RC 26)*
- *Papakonstantinidis L.A New trends in Regional Policy: Territory-Space Definition by a 3-level Bargaining Approach- The Win-Win-Win Model. Case Study: The LEADER EU Iniative Application in Greece" presentation "Regional and Rural Development Interface" (13-15 Maiov 2004) στο Babes-Bolyai University, Faculty of Economics - Cluj-Napoca Romania, European Program titled "Reabalk European Project".*
- *Pareto Vilfredo (1906) Manual of Political Economy. 1906*

References

- *25. Pareto Vilfredo (1896) Cours d' Economie Politique Professe a l' Universite de Lausanne. Vol. I, 1896,Vol. II, 1897.*
- *Rawls John .(1958) "Justice as Fairness. The Philosophical Review", Vol. 67, No. 2 (Apr., 1958), pp. 164- 194. Stable URL:.*
- *Sen Amartya K., 1970, Collective Choice and Social Welfare, ch. 3.4*
- *Smith Adam(1776). An Inquiry into the Nature and the Causes of the Wealth of Nations "1 (1 ed.). London: W. Strahan. Retrieved2012-12-07., volume 2 via Google Books*
- *Smith Adam (1778). An Inquiry into the Nature and the Causes of the Wealth of Nations 2 (2 ed.) London: W. Strahan; T.Cadell. Retrieved 10 March 2015 via Google Books*
- *Simon Herbert A, (1972). "Theories of Bounded Rationality," Chapter 8 in C. B. McGuire and R. Radner, eds., Decision and Organization, Amsterdam: North- Holland Publishing Company.*
- *Simon Herbert A (1987) "Behavioral Economics" The New Palgrave: A Dictionary of Economics 1. pp. 221-2*
- *Skinner, B. (1938). The Behavior of Organisms: An Experimental Analysis. New York: Appleton- Century pp 61-75*
- *Spais, G. and Papakonstantinidis, L. (2011). "An application of the win-win-win Papakonstantinidis model as an innovative bargaining solution analysis in cooperative sales promotion campaigns". Proceedings of the 4th Annual Euromed Conference of the Euromed Academy of Business, pp.1724-1744.*
- *Spais, G., Papakonstantinidis, L. and Papakonstantinidis, S. (2009) 'An innovative bargaining solution analysis for vertical cooperative promotion management decisions', Innovative Marketing, Vol. 5, No. 3, pp.7-29.*
- *Spokos V-Papakonstantinidis LA: The win-win-win papakonstantinidis model": Theoretical Aspects*
- *Stiglitz , J. (1987). "The causes and consequences of the dependence of quality on prices", Journal of Economic Literature, vol. 25, pp. 1-48*
- *Varoufakis Yanis: Game Theory, GUTENBERG Ed, Athens*

PART OF THE BOOK -7

Win- Win- Win Papakonstantinidis Model
References

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Introduction

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The purpose of the "Win-Win-Win Papakontsantinidis Social Collaboration" theory is to redefine the perspective we see in modern society, their business and their evolution.
The new data we see shaped by the evolution of new technologies is affecting and shaping society and the modern business environment.
The result is a redefinition of the relationship between state-owned businesses and society. The emergence of social media has abolished the walls that we knew so far today that we can communicate, learn and participate in events more actively than traditional media.
Thus shaping an acting society that seeks a role and place in developments.
"Win-Win-Win Papakontsantinidis Model Social Collaboration" with its 3pole social trading system redefines the relationship of the two parties (Win - Win) by integrating a third player who has so far been missing the evolutionary chessboard whose social factor observer makes it a participant and a modifier of developments.

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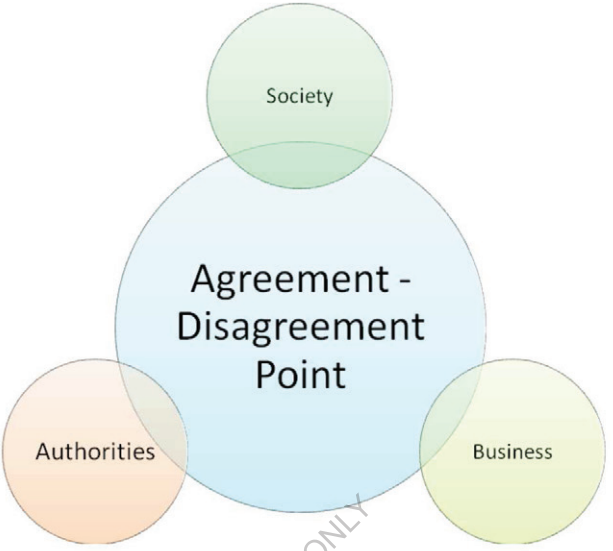
References



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3-win..1 based on marginal action-reaction disagreement point
Sensitization matrix

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- *In the action - reaction of the players in the negotiation to reach an agreement or not you have to take into account not only the interests of each party and that defines its bottom line but also its behavior. That is, its culture, its habits, its customs, its traditions, its cultural and cultural level that shape its lifestyle.*

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- *Win-Win - Win in tourism*

- *The contribution of tourism to the global economy is enormous.*

- *His contribution to GDP States are primarily a lever for growth*

- *Man's tendency to travel and gain from his travels will continue to increase in the 21st century. The traveler will seek out new experiences from the places they visit, discovering their culture, tradition, gastronomy, lifestyle, cultural and cultural diversity.*

- *New developments in tourism coupled with the dynamic tendency of local communities to become more involved in the tourism market dictate the reshaping of the tourism product - service. From the one-dimensional perception of the sun and the sea to the holistic experience of the guest.*

- *The "Win-Win-Win Papakonstantinidis model" with its 3-pole market analysis model bridges the international tourism trend with the local dynamics you are developing today.*

- *The ongoing conflict between the three main poles ie local authorities, local Reference agencies and consumers (tourists) is shaping the landscape of tourism management and operation today.*

- *The 3pole system of Local Authorities (Local Communities, Associations, Institutions, etc.) - Local Tourism Service Providers - Tourist Service Consumers (PACs) bring the 3rd factor (WIN) into the negotiation by integrating tourism and contributing to the development of tourism the tourism economy as well as the local economy by highlighting the communities as part of the tourism product and making the visitor a community. This way we will move from Tourism to Tourism by creating a diverse tourism system*

- *P.A.C.*

- *Bibliography :*

- *REPORTS 108 COMMUNITIES AS A PART OF SUSTAINABLE RURAL TOURISM - SUCCESS FACTOR OR INEVITABLE BURDEN? PROCEEDINGS*

OF THE COMMUNITY TOURISM CONFERENCE, 10TH - 11TH SEPTEMBER 2013 IN KOTKA, FINLAND:

- *INVOLVING COMMUNITIES IN RURAL TOURISM: A "WIN-WIN-WIN PAPAKONSTANTINIDIS MODEL" METHODOLOGICAL APPROACH p. 80 - 109*

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- *Note :*

- *At this point, I would like to thank my professor, Leonidas Papakonstantinidis, for the honor that he has given me in participating in this great work.*

References