



Contextual Methodology in the Social Sciences: Historiography, Middle-Range-Theory, & Models

Frederick Betz

Adjunct Professor Portland State University

Abstract

For a cross-disciplinary social science, methodology needs to effectively integrate research across the different social science disciplines. This is an important issue for the social sciences disciplines to be practically useful for policy issues which apply to a whole society. We propose (1) an integrative methodology which grounds middle-range social science theories, upon an empirical basis of modeling historical events. As in all of science, explanation is the key to the validation of theory – all theory should be based upon empirical evidence. Theory not constructed upon nor validated by experiment/observation is methodologically speculative and not proven true. Histories of events in a society can provide empirical grounds for social science theory, as kinds of ‘natural’ societal experiments.

Key Words: Methodology, Social Sciences, Historiography, Grounded Theory, Case Analysis, Societal Models

INTRODUCTION

Theory which is not true in a particular societal context can be harmful. This was dramatically illustrated in the 2007-08 Global Financial Crisis, for which central bank regulators in both the U.S. and Britain had argued against government regulation of financial derivatives on the basis of a theory – the economic theory of ‘perfection’ in financial markets, as a ‘price equilibrium’. The perfect market theory had been shown to be valid for commodity markets but not for financial markets. And this had long been argued by John Maynard Keynes and Hyman Minsky. But their analysis of the inherent instability of financial markets had been ignored by mainstream US and UK economists.

The question is why? The answer is that the social sciences tradition has not always validated theory by using (1) middle-range perceptual scale for theory, (2) societal modeling, and (3) case studies in history. We examine this methodological approach, illustrating it with two previously published historical case studies: (1) of the Global Financial Crisis of 2007-08 and (2) of patrimonialism in modern and ancient China. Although these case studies were previously published (Betz, 2014) and (Betz, 2014a), we use the cases to illustrate our focus here on methodology.

METHODOLOGICAL ISSUES

With the advances of the social sciences in the last century, two methodological issues about historiography and social science epistemology have come to the fore:

1. What is the basic relationship of historical studies of society to empirical evidence for social science theory?
2. How can historical evidence contribute to the integration of disciplinary social science into a cross-disciplinary whole perspective on society?

For example, Roger E. Backhouse and Philippe Fontaine wrote about history and social science: "The literature on historiography is large and diverse. From characterizing the main stages in historical research to picking out "great men," from identifying leading schools and main ideas to clarifying the differences between professional and lay historians, from describing what historians write about to explaining their methods, from noting the significance of history for the social sciences to pointing out the usefulness of the social sciences to historians The essential starting point is the rise of the social sciences since the Second World War Social sciences achieved their more significant place in economic, political, social, and cultural life, in large part, through cross-disciplinary engagements guided by a common problem-oriented approach. . . ." (Backhouse and Fontaine, 2014)

This quote highlights the methodological point that it is important to construct not merely 'disciplinary' social science theory but also 'cross-disciplinary' societal science, as the latter facilitates a 'problem-oriented' approach. All societies are totalities, of which each social science discipline sees only a narrow perspective, providing only a slice through a society's history. Real policy issues (problem-oriented approaches) need societal theory to deal with the whole of a society.

Also for integrating theory across the social sciences, a middle-range perspective on social theory is necessary -- because this allows for contextual discrepancies in reality to the 'ideal-type' social theory (normative explanation). For example, Robert Merton argued for theory construction in the social sciences to be aimed at a scale of perspective upon societal processes which could be directly validated by empirical observation. This approach is in contrast to a large-scale perspective on all societies, a so-called 'grand theory'. The classic example in sociology of 'grand theory' is Karl Marx's Dialectical Materialism of history. But Marx's theory has never been validated, empirically, for any specific society at a specific time. Marxists, such as Lenin in Russia and Mao in China, each modified the theory to Russian and Chinese contexts, so as to apply it to non-industrial societies.

Social theory which can be empirically validated in specific historical situations is called a 'middle-range' theory -- at a scale of perception and generalization which can be tested in a specific societal context. At this scale, the societal contexts from history are needed for establishing the validity or invalidity of theory. Robert C. Merton and Zvi Bodie commented upon 'historical context': "(We) propose a functional approach to designing and managing the financial systems of countries, regions, firms, households, and other entities. This is a synthesis of the neoclassical, neo-institutional, and behavioral perspectives. Neoclassical theory (middle-range theory) is an ideal driver to link science and global practice in finance because its prescriptions are robust across time and geopolitical borders. By itself, however, neoclassical theory (middle-range-theory) provides little prescription or prediction of the institutional structure of financial systems—that is, the specific kinds of financial intermediaries, markets, and regulatory bodies that will or should evolve in response to underlying changes in technology, politics, demographics, and cultural norms. The neoclassical model (middle-range-theory) therefore offers important, but incomplete, guidance to decision makers" (Merton and Bodie, 2005)

What Merton and Bodie meant by the phrase 'neoclassical theory' is that social science theory (in their case, economic theory) needs to be constructed as valid in any society at any time -- but not without context. They called neoclassical theory as 'important but incomplete' -- incomplete until societal context is added. This is because the 'functional processes' of the

institutional structures in specific societies may deviate from 'ideal processes' (neoclassical theory) -- due to behavior or 'inefficiencies' of that society at that time. Behavioral patterns can create departures for the predictions (projections) of the neoclassical middle-range generalizations.

All social theory generalized to any social structure/function (structural functionalism) is context-dependent upon specific institutional contexts. Middle-range societal theory provides an 'ideal' theory of how structure-functions can operated in any society-- but is modified by an institutional context of the society.

Ideal social theory is context-independent; but empirically-real social theory is context-dependent. This is why historiography in the form of 'historical case studies' is empirically vital to the social sciences – to provide the context-dependency of any social theory. An important issue is: how to empirically verify ideal social theory – normative theory?

In this paper, we depict how establishing the validity of social theory methodologically requires three elements: (1) theory be formulated at a middle-range perspective, (2) theory be validated by cases of historical societal experience, and (3) models of societal events provide the analytical framework to connect theory to history.

ILLUSTRATION – HISTORICAL CASE OF ECONOMIC THEORY FAILURE IN 2007

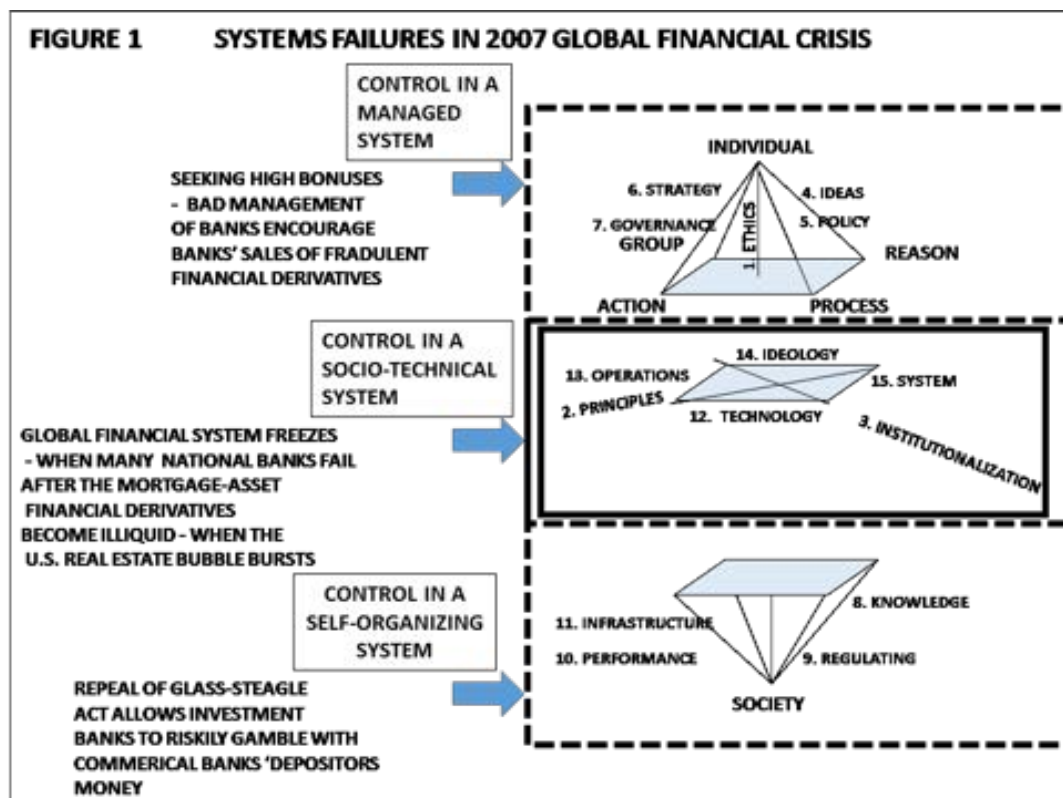
As an illustration of this methodology, we summarize a case analysis of the Global Financial Crisis of 2007-08, earlier published by the author in a model of societal control. (Betz, 2014). The case is methodologically important because it provided direct evidence of the non-validity of a widely accepted middle-range theory of perfect markets, which had been taught in mainstream economics. Here was the methodological problem. Before the crisis, the chair of the U.S. Federal Reserve System, Alan Greenspan, and the governor of the British Central Bank, Mervyn King, both used the theory of a perfect financial market, in order to avoid governmental regulation of a new financial product in that market, derivatives and credit-default-swaps. But in 2007, U.S. mortgage derivatives (called CDOs) collapsed the U.S. financial system and threatened to collapse the British and German financial systems; simultaneously, the credit-default-swaps bankrupted one of the world's largest insurance firms, AIG. The economic 'ideal theory' didn't work in 'reality'.

At the time, an article in The New York Times then summarized the crisis: "The first shoe (of the global financial implosion) to drop was the collapse in July 2007 of two hedge funds, owned by Bear Stearns, that had invested heavily in the subprime market." (NY Times, Dec 2008) Banks, such as Bear Stearns had been making up bonds to be sold as a Collateralized Debt Object (CDO). These CDOs contained some good, low-risk 'prime' mortgages but often also as much as 60% bad and risky 'sub-prime' mortgages. The bank's funds had deliberately mixed prime with sub-prime mortgages in their bonds to increase the size and number of bonds. This resulted in the CDOs being contaminated with high risk. The buyers of the bonds did know this, instead they had been told the CDO derivatives were low risk, based upon AAA bonds. The fund managers said that the mixture of sub-primes 'spread the risk', but this was misleading as they really only increased risk – so much so that Bear Stearns would collapse when the CDO market collapsed.

And the methodological problem in the economics discipline got more confused. Greenspan, King, and the mainstream U.S. economists should have known about the inherent instability of financial markets (imperfect financial markets). Their inherent instability had been called out

years ago in the economics discipline: Fisher in 1903 and Keynes in 1938 and Minsky in 1968. But mainstream economics theorists in the 1950s to 2007, ignored them. They rediscovered Minsky in 2009. The 2007-08 crisis provided overwhelming evidence for the validity of Hyman Minsky's price-disequilibrium theory for financial markets. (Minsky, 1975)

A model of the societal crisis event can assist the analysis of a historical event, by examining 'control issues' in the societal event. Through a model analysis, this historical societal event can have its explanations sorted into three kinds of controls: socio-technical-system-control, managed-system-control, and self-organizing-system-control. Figure 1 summarizes the three kinds of control which failed in the societal event of the 2007-08 financial crisis. (Betz, 2014)



The analysis of this case is important to economic theory because it provides direct evidence that the middle-range theory of perfect financial markets is empirically invalid. The financial market of derivatives was unstable, going to a financial bubble and collapse, instead of a price equilibrium. Neoclassical economic theory had held that no external control over markets (not regulation) is needed because all markets 'automatically' control in a price equilibrium.

In a structure-functional analysis, financial markets are components in the socio-technical functional system of a society, which is the financial system. All industrialized societies have institutionalized infrastructures in which social activities-processes occur and are institutionalized as a 'system' in a society, a 'socio-technical system'. The control issue is why this socio-technical-system of finance did not work properly in the economic system of the world. There is not a single causal explanation but several functional explanations.

The (15.System) of the financial socio-technical-system consisted of a global banking system operated with financial derivatives (13.Operations), sold in the information (12.Technologies) of computers and Internet. The Group performing these derivative operations consisted of

banks in different countries, which sold the derivatives in financial transactions. However in this Process, the investments were not safe because they violated a basic principle of risk management, low risk (2.Principles), by including high-risk sub-prime mortgages in the derivatives. The Action of selling the derivatives resulted in bankruptcies of banks, into which governments had to intervene to save their economies. Economic theory of the perfect market was used as a rationale (14.Ideology) to justify these operations, arguing that all markets are perfect and require no regulation. The (3.Institutionalization) of hedge funds into the financial/banking system created an unregulated part of the U.S. banking system, some of which turned to selling fraudulent strategic investment vehicles (SIVs) based upon short-term-financing for leverage.

Why exactly had this socio-technical financial system failed? This is explained in the upper pyramid of the analytical model of organizational control in the financial institutions, banks, acting in the event. Banks and hedge-funds are organizations directly managed by an individual leader, a president or a chief-executive-officer CEO. In the financial socio-technical system, the banks and hedge-funds conducted financial transactions within a financial regulatory infrastructure run by government regulatory agencies. The actions (and inactions) of directly-managed banks (and regulatory agencies) together indirectly-controlled the performance of the financial socio-technical system. Failure of responsible management (greed and fraud) in banks and hedge-funds contributed to a highly-leveraged, poor-quality derivatives market, which froze-up (stopped financial transactions); and then some hedge-funds and banks failed. As shown in the bottom pyramid, this occurred within a financial infrastructure of poor regulation. Regulatory officials (with bad and irresponsible judgment) failed to enforce proper regulations -- which should have controlled the financial abuse. In a society, socio-technical systems are never directly controlled -- but only indirectly-controlled, by means of direct-control in commercial organizations and/or regulatory agencies.

Thus the collapse of the socio-technical financial system was due to a government failure to regulate the derivatives market. This collapse provides evidence for the conclusion that financial markets can be unstable, when unregulated. Over this theoretical issue of the inherent stability/instability, the economics profession had divided into two schools. Neoclassical economists believed that all markets were perfect; while Keynesians argued the financial markets were imperfect, unstable. Afterwards, did all economists finally agree on the inherent stability of financial markets? No.

For example in 2009, a year after the financial crisis, the economist Paul Krugman wrote: "It's hard to believe now, but not long ago economists were congratulating themselves over the success of their field. Those successes — or so they believed — were both theoretical and practical, leading to a golden era for the profession. . . . Few economists saw our current crisis (of 2007-08) coming, but this predictive failure was the least of the field's problems. More important was the profession's blindness to the very possibility of catastrophic failures in a market economy. . . . There was nothing in the prevailing models suggesting the possibility of the kind of collapse that happened last year in 2008. . . . Macroeconomists (remain) divided in their views. The main division was between those who insisted that free-market economies never go astray and those who believed that economies may stray now and then (but that any major deviations from the path of prosperity could and would be corrected by the all-powerful Fed). Neither side was prepared to cope with an economy that went off the rails despite the Fed's best efforts. . . . And in the wake of the crisis, the fault lines in the economics profession have yawned wider than ever." (Krugman, 2009)

As another example, in 2009, the U.S. Congress established an inquiry to investigate the Global Financial Crisis of 2008; and Phil Angelides was appointed Chairman of the U.S. Congress Financial Crisis Inquiry Commission. In 2011, Angelides talked about his experience: "I came into my position as chairman of the commission with what I thought was a reasonable understanding of the American financial system, and I had this quaint notion that it was a system designed to allocate capital to the economy for the purposes of creating jobs in enterprise and long-term sustained wealth for our society. I must tell you that over the course of the last year and half, I, along with my fellow commissioners, undertook a journey of revelation. As we did our investigation, we were surprised, we were shocked, and we were fascinated and often appalled at what we found. I often felt as if I had entered my local community bank, had opened a door that I wasn't supposed to open, and when I opened it, I saw a casino floor as big as New York, New York. And, I may add, that unlike Claude Raines in Casablanca, I was truly shocked at the level of gambling that was going on in Wall Street." (Angelides, 2011)

Why had not the U.S. central bank system paid proper attention to the emergence of casino banking, in the system they were supposed to be regulating? Binyamin Appelbaum wrote: "The Fed (Federal Reserve System) began 2007 still deeply immersed in complacent disregard for problems in the housing market. Fed officials knew that people were losing their homes. They knew that subprime lenders were blinking out of business with every passing week. But they did not understand the implications for the broader economy. . . August 2007 was the month that the Fed began its long transformation from somnolence to activism." (Appelbaum, 2013)

What was the 'soporific' which had put the Fed to sleep? It was the 'mainstream economic theory' which had assumed all markets were perfectly self-regulating (even financial markets). This soporific was not only in U.S. regulatory policy but also in British. Sir Mervyn King (Governor of the Bank of England in 2007) said: "With the benefit of hindsight, we (Bank of England) should have shouted from the rooftops that a system had been built in which banks were too important to fail, that banks had grown too quickly and borrowed too much, and that so-called 'light-touch' regulation hadn't prevented any of this." (Giles, 2012)

As another example of reaction after the crisis, Howard Davies thought major change was required in economics: "Such reworking of economic models should be based upon history and more broadly based: ". . . there should be more teaching of economic history . . . The study of economics should be set in a broader political context, . . . But it is not clear that a majority of the profession yet accepts even these modest proposals. The so-called 'Chicago School' has mounted a robust defense of its rational- expectations-based approach, rejecting the notion that a rethink is required. The Nobel laureate economist Robert Lucas has argued that the crisis was not predicted because economic theory predicts that such events cannot be predicted. So all is well." (Davies, 2012)

Also in 2012, Charles J. Whalen, wrote: "The financial crisis that ran from late 2007 through early 2009 did more than traumatize the world economy; it drew widespread attention to some major shortcomings of conventional economics." (Whalen, 2012) These 'major shortcomings' were methodological: (1) inability of economics to validate theory on experiment, (2) narrow-mindedness of the discipline, and (3) ignoring of the proper methodology for contextualizing 'ideal-type' societal theory.

ILLUSTRATION: HISTORICAL CASE OF PATRIMONIALISM IN REFORMING MODERN CHINA

To understand that proper methodology and cross-disciplinary theory is important not only to economics but also to sociology and political science, we next illustrate the methodological approach in a historical case study of patrimonialism, in modern and ancient China. This case and its analysis as patrimonialism was published in (Betz, 2014a), and for full details of the case, one can refer to that paper. Here we are using the case only to illustrate the methodological importance of 'models' to empirical validation of middle-range societal theory.

Francis Fukuyama has written about the middle-range political theory of patrimonialism: "Virtually all peoples on earth owed primary obligations not to a state but to kinfolk; and they settled disputes not through courts but through a system of retributive justice; and they buried their dead on property held collectively by groups of kin." (Fukuyama, 2011) The challenge of the state is to institutionalize power and justice in society beyond the cultural conditions of 'kinship'. The building of a 'state' extends the political system of a society beyond the boundaries of kin and tribes.

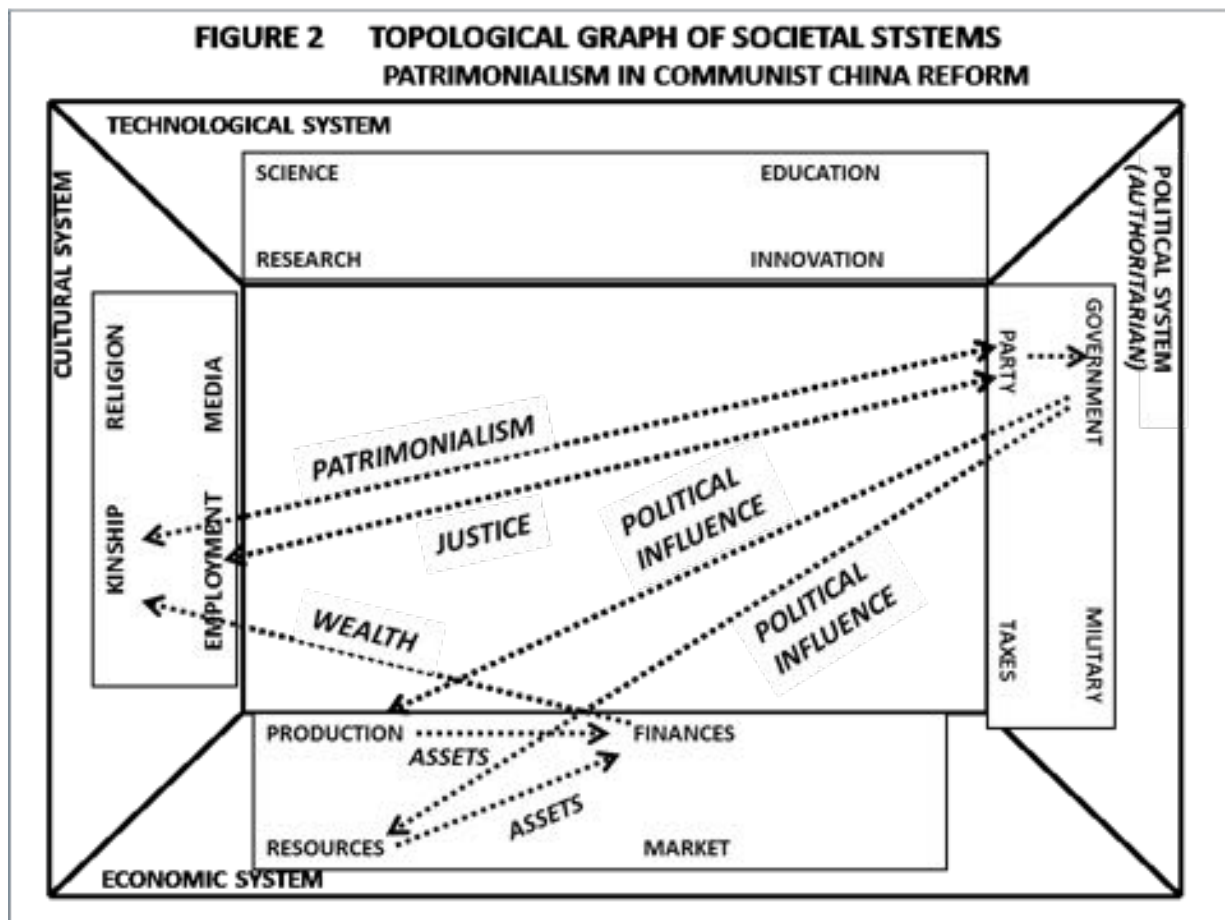
In traditional communist dogma, Marx called a communist state a 'dictatorship of the proletariat'. But in the context of Russia, Lenin changed the dogma to a 'dictatorship by professional revolutionaries in the name of a proletariat'. In the context of China, Mao Zedong's changed the dogma to a 'dictatorship by professional revolutionaries in the name of a peasantry'. After Mao's death, Deng Xiaoping began a reform of the Chinese economy toward a 'Chinese socialism which accommodated capitalism -- while still retaining a communist government. Deng's contribution to communist theory can be seen as (1) removing 'dictatorship' from the form of a communist government and (2) replacing the ideological concept of 'class-struggle' with an idea of 'classes-cooperating-together-for-national-development'. Historically, Mao was most interested in 'class-struggle' as the dynamics of society; whereas Deng was more interested in 'national-development' for prosperity and strength.

Yet in Deng's reform, there is evidence of the recurrence of a middle-range political-sociological theorem of 'patrimonialism'. For example in 2014, Michal Forsythe, Chris Buckley and Jonathan Ansfield wrote about Chinese-kinship-and-government-corruption: "Zhou Yongkang, a member of China's ruling Politburo Standing Committee from 2007 to 2012, is the subject of one of the highest-level corruption investigations in the history of the People's Republic of China. Several members of his family, over the years Mr. Zhou was in power, made investments in companies with ties to the China National Petroleum Corp., the state oil company formerly run by Mr. Zhou, although there is no evidence to show that Mr. Zhou was personally involved in the dealings." (Forsythe, Buckley and Ansfield, 2014) The pattern of 'families-of-high-government-officials-becoming-very-wealthy' had emerged in the economic reform in China.

The path to reform in China was to liberalize the economy with increasing capitalism, while still having government remain a one-party authoritarian regime. In this mixed path of communism-capitalism, relatives of prominent government officials found opportunities to gain control of private companies and acquire wealth. Michal Forsythe, Chris Buckley and Jonathan Ansfield wrote: "The finances of the families of senior leaders are among the deepest and most politically delicate secrets in China. The party has for years followed a tacit rule that relatives of the elite could prosper from the country's economic opening, which rewarded loyalty and helped avert rifts in the leadership." (Forsythe, Buckley and Ansfield, 2014)

Of the investigation begun about Zhou Yongkang, they wrote: "(Zhou's) son landed contracts to sell equipment to state oil fields and thousands of filling stations across China. His son's mother-in-law held stakes in pipelines and natural gas pumps from Sichuan Province in the west to the southern isle of Hainan. And his sister-in-law, working from one of Beijing's most prestigious office buildings, invested in mines, property, and energy projects. In thousands of pages of corporate documents describing these ventures, the name that never appears is his own: Zhou Yongkang, the formidable Chinese Communist Party leader who served as China's top security official and the de facto boss of its oil industry. But President Xi Jinping has targeted Mr. Zhou in an extraordinary corruption inquiry, a first for a Chinese party leader of Mr. Zhou's rank, and put his family's extensive business interests in the cross hairs." (Forsythe, Buckley and Ansfield, 2014)

A middle-range social theory of 'patrimonialism' is a cultural pattern that can reoccur in all societies, crossing culture into politics. One can show how a societal-systems model makes clear the observational validation of theory, in this case of the communist-reform in modern China. The stasis of modern Chinese society can be modeled in graph theory format as the connections in the society between the functional-structural systems of the society, Figure 2. The societal-system model depicts four sub-systems of a society: economic system, cultural system, political system and technological system. (We will review later how this model is constructed and results in the following graphic form -- with 124 connections within and between subsystems.) The dotted arrows denote the important connections in the societal model to explain the empirical case of wealth building by Chinese communist officials' families.



There is an explanatory connection between the party and the government, since the Chinese Communist Party controls the Chinese Government in an authoritarian fashion. Arrows of political influence denote how government officials can influence productive and resource assets in the economic system as financial gains by the kin of a government official. These financial gains appear as wealth connecting these family kin in the cultural plane to economic assets in the economic plane. The importance of modeling the societal subsystems and their connections allows the display of the many explanations (connections) possible in understanding a society's stasis (steady state). We note that in this structural-functional model of a society, there is no single causal explanation of a societal event; but there are up to 124 explanations (connection between functional subsystems in a society).

These set of connections (explanations), in this context of Deng's reforms in China, are between the political, economic, and cultural planes. They provide a systems representation of the theory of 'patrimonialism' in this context (a middle-range-theory about the tension between state and kinship in modern China). Thus the reasoning for the investigation into Zhou Yongkang's wealth was a worry by a new leader in the government that 'patrimonialism' was undermining the Chinese peoples' perception of proper justice in the government of China by the Communist Party -- vastly unequal wealth opportunities attainable by kinship and membership in the Communist party.

In 2014, Xi Jinping was principle leader in the Chinese government: General Secretary of the Communist Party of China, President of the People's Republic of China, and Chairman of the Central Military Commission. After all these years of the close ties between the government by senior communist officials and the economic development of their relatives, why did Xi decide to allow the investigation of Zhou Yongkang? Forsythe, Buckley and Ansfield suggested: "But another school of thought is that Mr. Xi considers the enormous agglomeration of wealth by spouses, children and siblings of top-ranking officials a threat to China's stability by encouraging mercenary corruption and harming the party's public standing. Those people say he has pushed the Zhou investigation beyond traditional bounds to signal that the rules have changed and that top leaders will be held responsible for their family's business activities, even though Mr. Xi's own family members have been among those who have grown rich. If that is so, the case has the potential to alter the political compact of China's boom years." (Forsythe, Buckley and Ansfield, 2014)The amount of wealth held by relatives was huge, as much as \$160 million of Zhou's wealth.

Michael Forsythe wrote: "President Xi Jinping of China vowed to hunt "tigers" as well as "flies" in his drive to rid the ruling Communist Party of corruption, and on Thursday he defanged the most dangerous tiger yet — Zhou Yongkang, the nation's former chief of domestic security. Mr. Zhou was convicted of abuse of power, accepting bribes and revealing state secrets, and was sentenced to life in prison." (Forsythe, 2015)This pattern (of accumulating wealth through relatives while occupying major government posts) appears to have been widespread in modern China (as well as in ancient China) – patrimonialism.

POLITICAL THEORY AND SOCIETAL MODELING

In this graph model of the connection of 'kinship' in the cultural system of modern Chinese society to that of the communist 'party' of the authoritarian Chinese government, we can clearly see the connection of 'patrimonialism', historically occurring in the context of modern China. This allows us to identify a political theory in the present that has recurred in the history of China. Political institutions and connections between the subsystems of the society are necessary to explain the condition of stability/instability in a given period of a society. The

graphic analysis of this societal stasis emphasizes that explanatory connections between societal sub-systems are principal contributors to societal stability/instability. In this case of 'patrimonialism', the connections are between the cultural-political-economic systems of Chinese society, which has raised some high-level worries in the government about the stability of communist party control over contemporary China. Methodologically, the comparison of empirical observation to middle-range theory is facilitated by a systems-models of societal phenomenon.

A systems model is particularly appropriate to Fukuyama's middle-range theory of patrimonialism, because Fukuyama viewed societal stability as a kind of systems 'balance'. In this balance between state and family, the principle of 'patrimonialism' was an important and recurrent factor in Chinese history. 'State' is a principle concept in the political subsystem; and 'Family' is a principle concept in the cultural subsystem. Patrimonialism is an explanatory connection between the political and cultural systems of a society.

Currently China is still in the form of a kind of communist government (although with an opposition in Hong Kong, wishing to introduce democracy into China). Fukuyama's principle political concern has been about 'democracy' as the proper form of a modern state. For a democratic government, Fukuyama identified three aspects that are essential to its institutionalization: authority, law, accountability. A successful democracy is one which has sufficient central authority as a 'state' to defend itself against external aggression, while also operating under a 'rule-of-law', and with 'accountability' for its actions (by the replacement of officials through periodic elections).

The problem of constructing a 'good state' centers upon a proper balance between power and accountability. Fukuyama wrote: "Modern democracy was born when rulers acceded to formal rules limiting their power and subordinating their sovereignty to the will of the larger population as expressed through elections." (Fukuyama, 2011) For Fukuyama, the proper operation of a successful democracy centers (1) upon the 'rule-of-law', in which all citizens are treated equally under the law; and (2) upon 'accountability', in which offices are held by merit and not by kinship.

Yet once attaining an operational 'rule-of-law' and 'accountability', this balance may not be historically stable in a state. For example, Fukuyama wrote: "The story of how political institutions developed cannot be told without understanding the complementary process of political decay. Human institutions are 'sticky'; that is, they persist over time and are changed only with great difficulty. Institutions that are created to meet one set of conditions often survive even when those conditions change or disappear, and the failure to adapt appropriately, entails political decay. This applies to modern liberal democracies encompassing the state, rule-of-law, and accountability as much as to older political systems. . . . Moreover, the natural human propensity to favor family and friends -- something I refer to as 'patrimonialism' -- constantly reasserts itself in the absence of strong countervailing incentives. Organized groups -- most often the rich and powerful -- entrench themselves over time and begin demanding privileges from the state." (Fukuyama, 2011) The balance between political 'rule-of-law & accountability' against cultural 'patrimonialism' is an issue in the dynamics of the structure-functionalism of a society -- as a society of systems. And this is why patrimonialism recurs in the history of societies.

HISTORY: PATRIMONIALISM IN ANCIENT CHINA

We next review this recurrence back in ancient China, and how the systems-societal model allows us to precisely identify the contextual sources of political instability then and now. By extending middle-range theories over time, the empirical validity a middle-range political theory can be established for the different times of a society. A societal-systems-topological model provides an effective analytical methodology for temporal comparisons.

Going back to the Zhou Dynasty in China's history, Fukuyama wrote: "China during the early Zhou Dynasty had evolved into something between a tribal and a chiefdom-level society. None of its units commonly referred to as 'states' in histories were true states. Zhou China was a textbook example of a patrimonial society. That is, the entire country was 'owned' by a series of local lords and their kin groups. Within the constraints of China's agnatic kinship rules, the land and the people living on it were patrimony, or heritable property, that was passed down to decedents. There was no distinction in this society between public and private; each ruling lineage raised armies, imposed taxes, and dispensed justice as it saw fit. All this, however, soon changed." (Fukuyama, 2011)

The change occurred from 770 BC to 256 BC, the time of the Eastern Zhou Dynasty. Fukuyama wrote: "... genuine states began to coalesce in China. They established standing armies that were capable of enforcing rules throughout a defined territory; they created bureaucracies to collect taxes and administer laws; they mandated uniform weights and measures; and they created public infrastructure in the form of roads, canals, and irrigation systems. One state in particular, the kingdom of Qin, embarked on a remarkable modernizing project whose direct target was the kinship-based, patrimonial social order of the early Zhou" (Fukuyama, 2011)

A 'standing army' and a 'bureaucracy' to collect taxes to fund the army is the essential basis of power for a 'state'. It enables the enforcement of governmental rules throughout a territory controlled by the army. A bureaucracy enables the collection of taxes and imposition of laws and regulations. Toward the end of the Eastern Zhou Dynasty, seven feudal powers fought for control of territories in China, called the Seven Warring States. By 221 BC, Qin emerged dominant and temporarily unified China; and this unification would provide a continuing model of a unified empire throughout Chinese history, Figure 3.



Fukuyama wrote: "Modern state institutions were gradually implemented all over China in the later years of the Zhou Dynasty, but nowhere more so than in the western state of Qin." (Fukuyama, 2011) The organization of the Qin state focused upon military capability, shifting in military technology from the use of chariots to large masses of infantry armed, with bows and pikes. To attain these masses of infantry, Qin mobilized its peasants, attaining up to 20% mobilization.

Qin Shi Huang was the founding emperor. To pay for the mobilization of conscripted armies, Qin taxed agricultural land based upon allotments of land to groups of peasant families. This kind of taxes and agricultural organization had begun earlier in 590 B in the state of Lu. This systematic taxation of family groups decreased the power of kinship groups to control land. Also the government of Qin instituted a meritocratic administration. Fukuyama wrote: "It is safe to say the Chinese invented modern bureaucracy, that is, a permanent administrative cadre selected on the basis of ability rather than kinship or patrimonial connection." (Fukuyama, 2011)

Also there were some advances in technology, a shift from bronze tools to iron tools and improvement in how to yoke animals to plows. Thus both military and agricultural technology had some improvements. And there were changes in culture. Fukuyama wrote: "It is notable that the extremely violent centuries of (Chinese history called) the late Spring and Autumn and the Warring States era produced one of the greatest cultural outpourings in China's history. The extreme social dislocation created by perpetual wars occasioned considerable reflection on political and moral matters . . . One of the many itinerant teachers attracting students in this

period was Confucius . . . The political significance of this intellectual ferment was twofold. First, it created something like an ideology, that is, a received set of ideas for the proper ordering of government by which later generations of Chinese could judge the performance of their political leaders. The best-known ideology was Confucian doctrine, but Confucianists engaged in bitter intellectual debates with other schools of thought, such as Legalism." (Fukuyama, 2011)

The end of the Warring States era occurred with the Qin conquests; so the first 'empire' in China was accomplished through conquest. And the new Qin dynasty saw the need to build a strong central state. Fukuyama wrote: "The Qin state builders saw clearly that the kinship networks of earlier ages were impediments to the accumulation of power, so they implemented policies deliberately intended to replace them with a system that tied individuals directly to the state." (Fukuyama, 2011) States are constructed by the consolidation of power in a region.

Shang Yang (an official of the Qin government) argued a philosophy of government as 'legalistic' -- justifying governance on the principle of power, the 'Book of Lord Shang'. Shang changed the administration of the state through an emphasis on meritocracy and devolving power from the nobility; and Shang justified the centralization of power in the state in his new ideology, as 'Legalism'. The 'justification of power' of a state is a different thing from the 'consolidation of power' by a conquering army. Power of a state exists in two forms: justification and force.

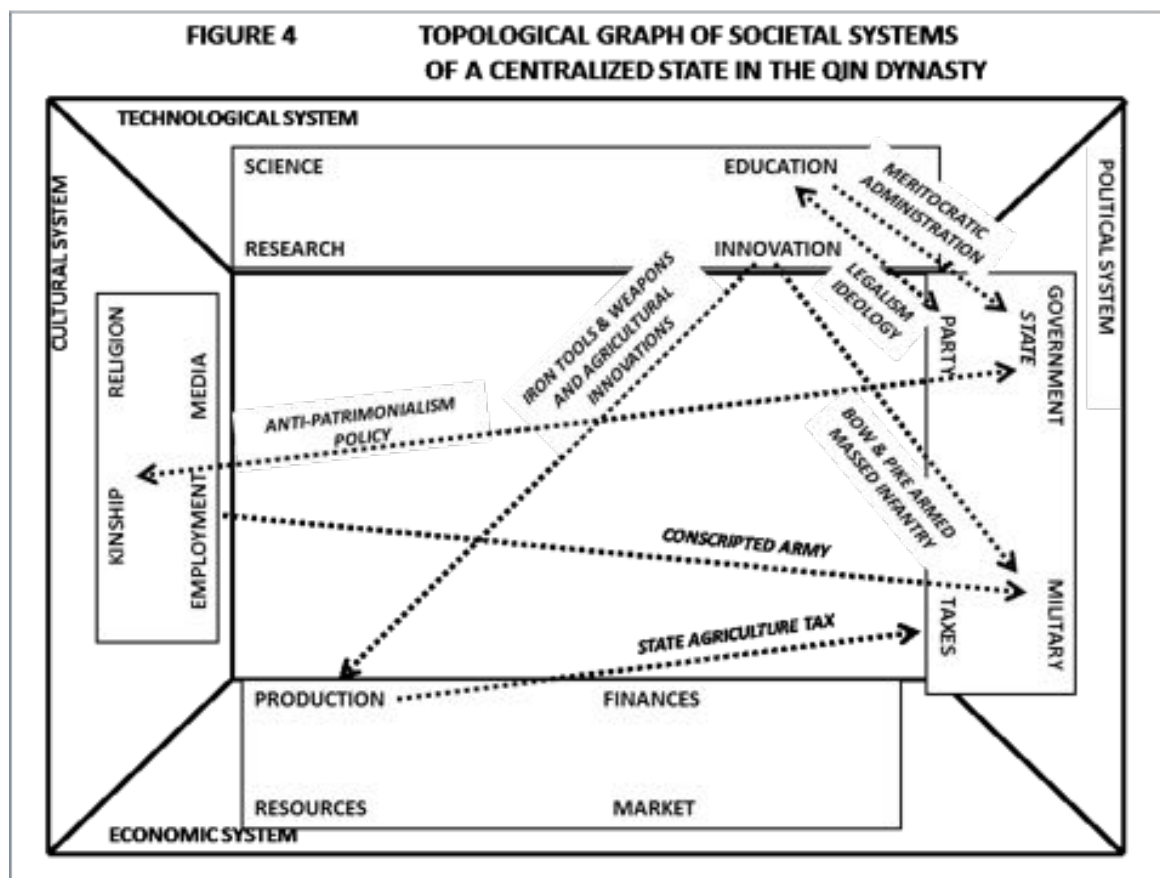
Throughout the history of China, even down to the present, ideology about the state (justification of power) was in the form of an opposition between Legalism and Confucianism. Fukuyama wrote: "Confucianism is an intensely backward-looking doctrine that roots legitimacy (of the state) in ancient practices. . . Family and kinship were at the core of . . . patrimonial order, and Confucianism can in many ways be seen as an ideology that builds a broad moral doctrine of the state outward from a model based on the family. . . This tension between the family and the state, and the moral legitimacy that Confucianism gives to family obligations over political ones, has persisted throughout Chinese history." (Fukuyama, 2011) Moral expectations if one form of justifying state power.

The construction of a state encompassing different tribes over different territories requires a central political order (state) opposed to patrimonial order (tribe). Fukuyama regarded the Chinese political thought of 'Legalism' of Shang Yang and Han Fei in the Qin state as justifying the control of an emperor over the people solely by the military power of the emperor -- over and above any patrimonial ties.

Shang's Legalism was in contrast, to the political thought of Confucius, who had conceived of a state wherein ethical obligations bounded the emperor by familial ties. The emperor was thought of as a kind of greater father of the country, with an ethical obligation to protect and succor the greater family of China. This difference in political thought, between Chinese 'Legalism' and Chinese 'Confucianism', turned upon whether or not the political authority of the head of state (emperor) was justified solely by power (Legalism) or by patrimonial allegiance in a kinship-ordered state (Confucianism).

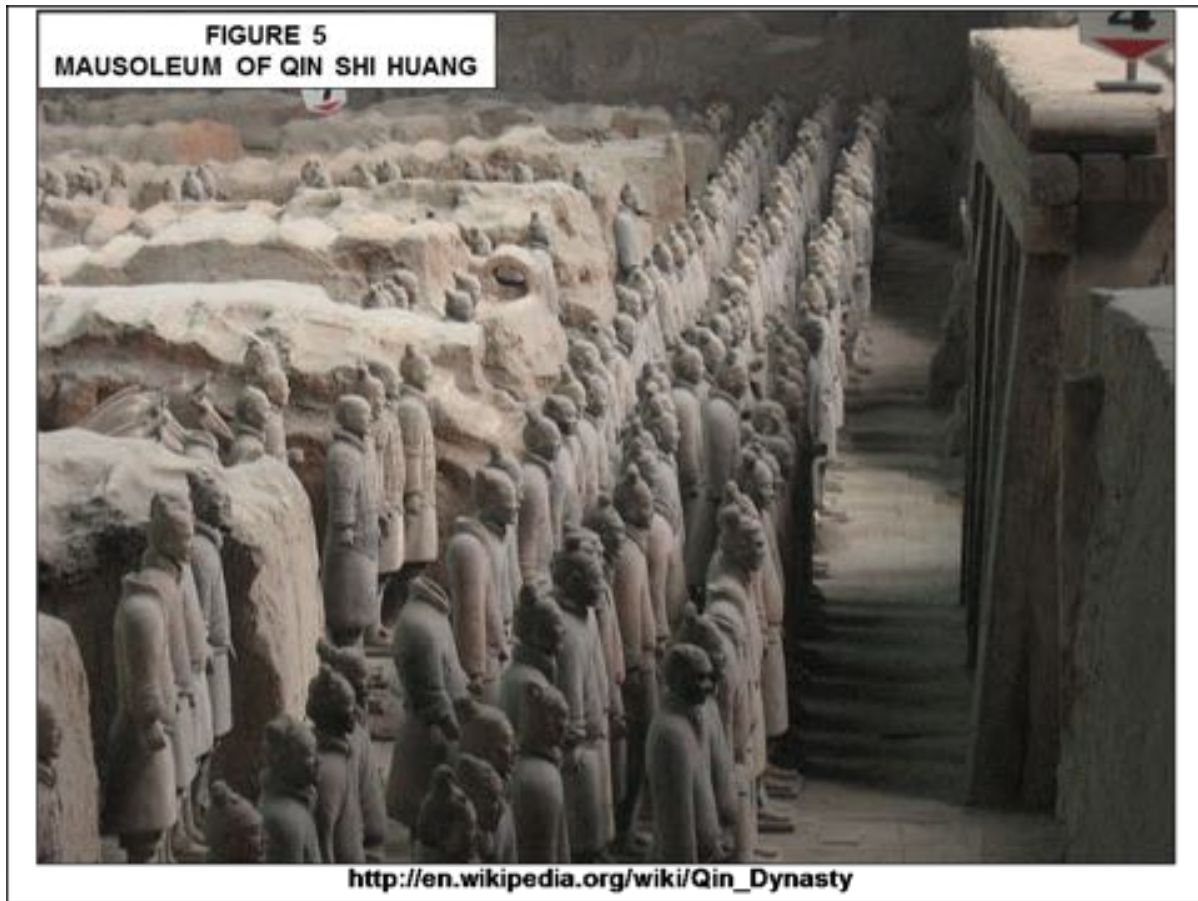
As we are using the Weberian societal model which depicts the dynamics in a society as a set of systems. (Betz, 2015) This model in the political system subdivides into a Military (standing army), Government (laws, regulation, and infrastructure), Taxes (government finances) – these

can depict Fukuyama's criteria for a state. Also the additional societal sub-system of Culture can depict Fukuyama's focus upon tribes, kinship, and patrimonial order. In Figure 4, we topologically graph the explanatory connections between subsystems -- for the historical description of the building of the Qin state.



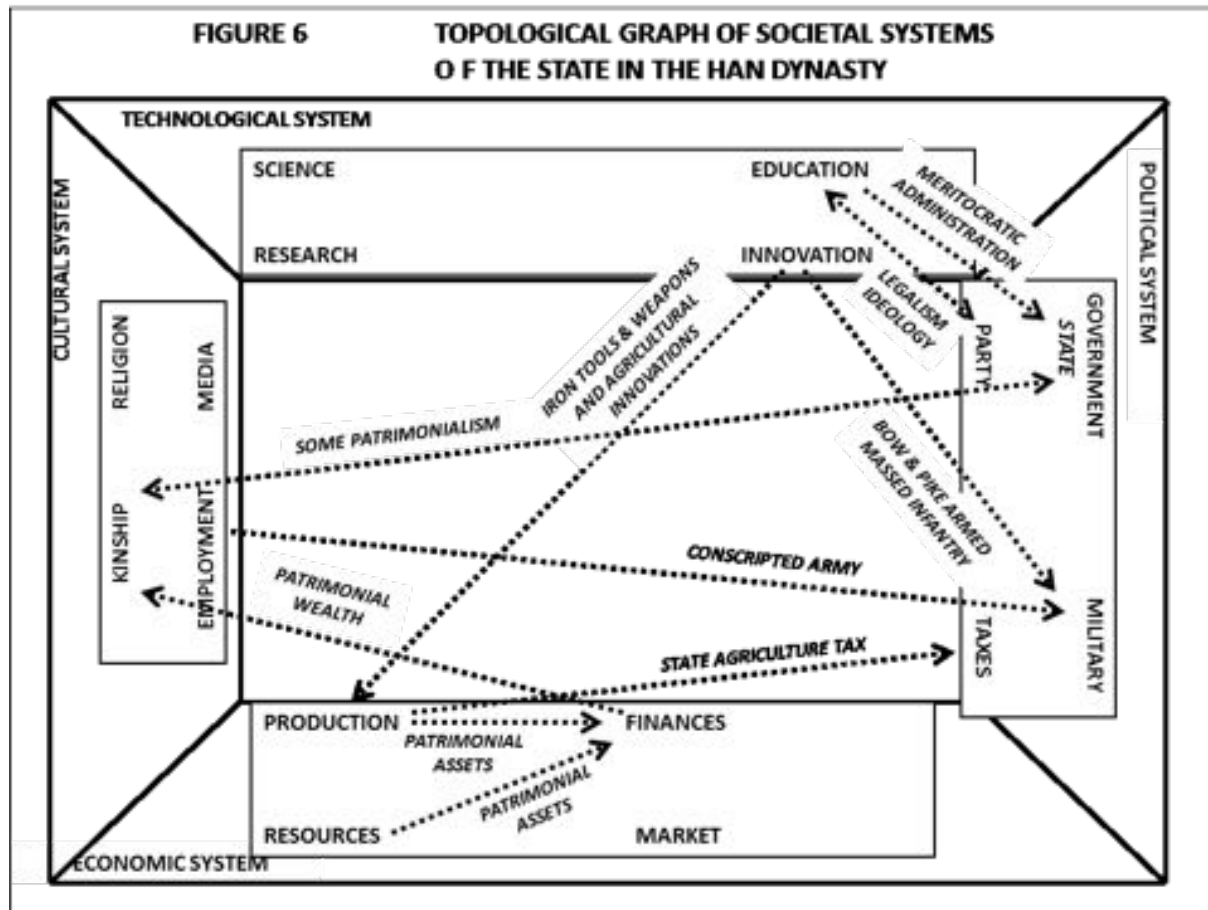
First, there was an Anti-Patrimonialism policy which focused power on the government as a centralized State, taking government offices away from Kinship relations. This was partly accomplished by using the educational sub-system to train competent administrators for the state as a meritocratic administration. This was also accomplished by fostering an ideology of Legalism and suppressing Confucianism. Second, there was a conscription of peasants for a bow & pike-armed-infantry to create a large standing army -- conscripted army. Third, there was a reorganization of land and imposition of central state taxes upon agricultural production throughout China-- agricultural tax. Fourth, there were advances in technology in the introduction of iron weapons and tools and the yoking of animals and land and water management which increased agricultural production -- agricultural innovations.

However, the Qin Empire did not last, collapsing after the death of its founder Qin Shi Huang, Figure 5.



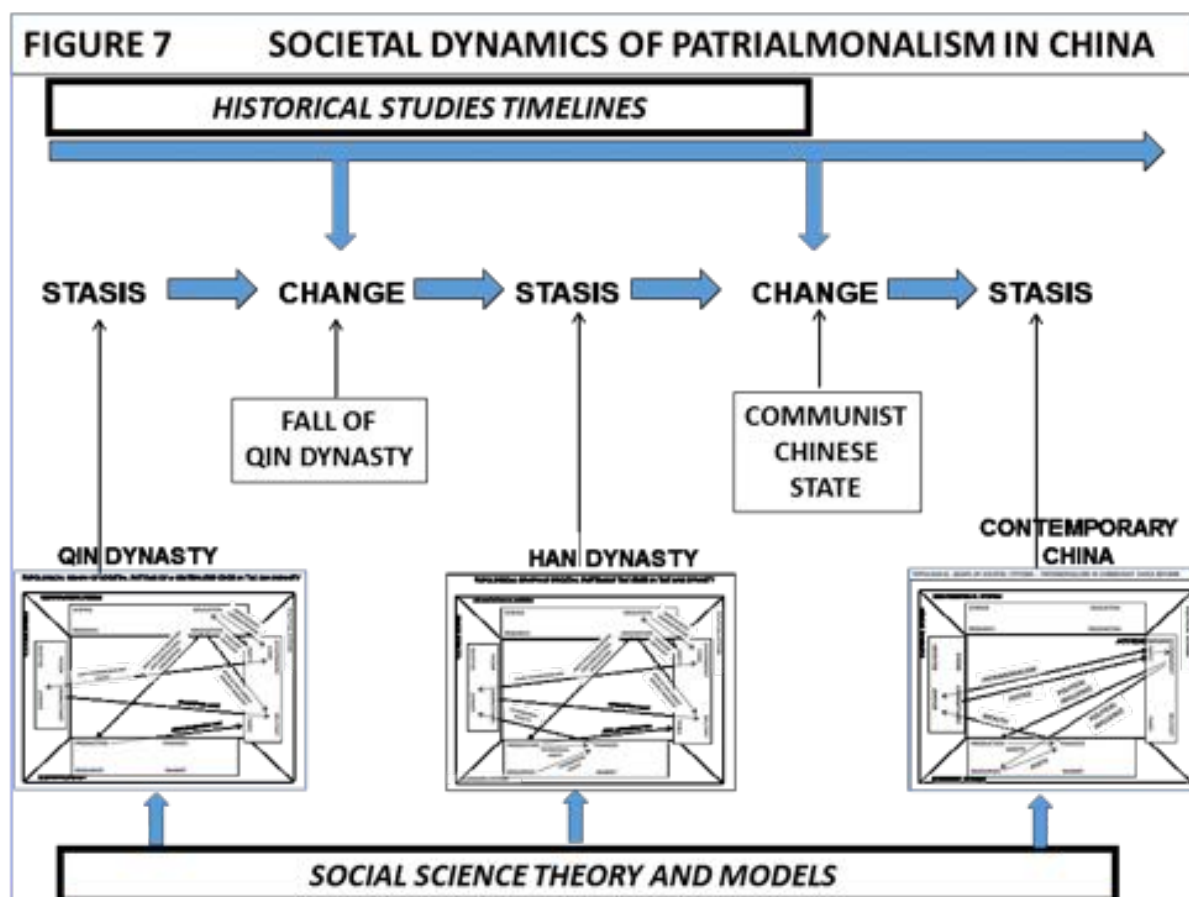
Fukuyama described this: "The founder of the first unified Chinese state, Ying Zheng (also known by his posthumous temple name Qin Shi Huang) was an energetic megalomaniac who used political power to reshape Chinese society. The world-famous army of terracotta warriors, unearthed in 1974, was created on his behalf and buried in a gigantic mausoleum. . . Qin Shi Huangdi extended the institutions of his native Qin to the whole of China and thereby created not just a state but what would become, under his Han Dynasty, successors, a unified Chinese elite culture." (Fukuyama, 2011) Thus the Qin Empire created the first institutions needed for a centralized state over China, a Chinese Empire.

But the Qin Emperor's institutionalization of his Legalistic state was brutal. Fukuyama wrote: "Officials trained in Confucian ideals resisted the change. The Emperor ordered the burning of classical books and had many resisting Confucian scholars buried alive. The Qin rule was harsh; and after the death of the Emperor, uprisings occurred all over China. . . . four years of civil war. In 202 BC, Liu Bang established a new dynasty, later called the 'Earlier Han Dynasty'". (Fukuyama, 2011) This new regime established by Han Gaozu endured four hundred years, from 202 BC to 220 AD. We can topologically depict the Han Dynasty system as a combination of a centralized state and some feudal structure, as in Figure 6.



Fukuyama wrote: “The initial Han equilibrium was based on a balance between the interests of all parties in creating a strong, unified central Chinese state to avoid the turmoil and warfare of the Eastern Zhou, and the interests of the local elites across China who wanted to hold onto as much of their power and privilege as possible.” (Fukuyama, 2011) The new Han government balanced between the feudal organization of family ties and the state organization of force. Fukuyama viewed stability within the Early Han Dynasty as a kind of political 'equilibrium' -- balancing the interests of the kinship parties within and against the state. Political stasis in a society is an equilibrium between interests of different parties holding power in the state.

The changes in the stasis of Chinese governments can be graphed as a societal dynamics timeline. In Figure 7, we indicate only the three stasis systems we have analyzed in this case: Qin Dynasty, Early Han Dynasty, and the much, much later Chinese Communist State.



In these models, we see that different periods in the history of a society can be analyzed (1) as to a 'system-stasis' then in a society and (2) as to change-events which create a new stasis. The models analyze stasis and change in general analytical forms, so that comparison of social theory can be made between historical periods, identifying middle-range theories occurring in their historical contexts. This facilitates gathering evidence for a middle-range theory (e.g. patrimonialism) or against a theory (e.g. perfect financial markets). What is methodologically important is that the same Weberian systems model of a society can be used in different historical times to empirically compare social science theory over the different times of a society

EXPLANATION IN CROSS-DISCIPLINARY SOCIAL SCIENCE & HISTORIOGRAPHY

We have seen that societal models play an important methodological role of depicting how a middle-range-theory fits into the societal context during a historical period. For modeling system-stasis, we have used the Weberian systems model, which has 124 possible explanations for how stasis operates. (Betz, 2015a) For modeling event-change, we have used a three-dimensional societal perceptual space, which has 15 possible explanations of why the event occurred. (Betz, 2015) Thus we see that explanation in the social histories differs markedly from explanation in the physical sciences. In the physical sciences, there is only a single explanation, a causal explanation -- a force causing a motion. But in the social sciences, there are many explanations, none causal but all functional. Thus the methodological issue for the social sciences is this: what other kinds of relations (explanations) can there be in scientific methodology, other than a causal relation as used in the physical sciences? And the answer can be found by doing a logical analysis upon the idea of "causality". A logical expansion of the concept of causality was first suggested by Edgar A. Singer, (Singer, 1924), and later the author extended Singer's analysis to a four-fold explanatory taxonomy, (Betz, 2011).

In the physical sciences, 'causality' is the concept that for two physical objects to interact by physical forces requires logically:

1. Cause (A) must precede in time an effect (B),
2. When effect B has occurred, then the cause A must have previously occurred -- A is necessary to B;
3. Whenever cause A does occur, then effect B always follows -- A is sufficient to B.

To generalize on the methodological idea of a "natural law", one can take all the logical possibilities in the relationships of a previously-occurring event A and a subsequently-occurring event B, according to the logical conditions of necessity (N) and sufficiency (S) -- as shown in Figure 8.

FIGURE 8 MODALITY OF EXPLANATORY RELATIONSHIPS IN SCIENCE

<i>RELATIONSHIP</i>	<i>NECESSITY</i>	<i>SUFFICIENCY</i>
CAUSAL	NECESSARY (N)	& SUFFICIENT (S)
PRESCRIPTIVE	NECESSARY (N)	& NOT-SUFFICIENT (<u>S</u>)
ACCIDENTAL	NOT-NECESSARY (<u>N</u>)	& SUFFICIENT (S)
THEMATIC	NOT-NECESSARY (<u>N</u>)	& NOT-SUFFICIENT (<u>S</u>)

Physical sciences use the causal relationship (N&S) between physical objects. Physical forces are both necessary and sufficient for physical objects to change their motions in a space-time framework. Phenomenological laws in the physical sciences are due to causal forces (necessary and sufficient in cause-effect). All physical laws are thus context independent. Gravity works the same whether one is on Earth, in Space, on the Moon, on Mars, etc. (However, physical laws do change by scale. Quantum mechanics works at the atomic scale of nature; Newtonian mechanics at the earthly scale of nature; and General relativity at the cosmological scale of nature. But within a scale of space, all physical laws are context independent.)

In biology, one can use the causal explanation in depicting the mechanisms of biology, such as the mechanistic model of DNA. But also one needs a prescriptive explanation to depict the functional value of a mechanism to a living organism, so that the functional value of DNA to an organism is the information coded in the mechanism for the reproduction of the molecules of living forms. The prescriptive relationship of (N& not-S) explains the functional value of biological mechanisms. For example, a medical diagnosis of a disease may be as the mechanism of bacterium may be causing the disease and a prescription of a cure can cure the disease – mechanism & causality with function & prescription. Functional explanation is context-dependent (N¬-S); whereas causal explanation is context independent (N&S). In contrast to the physical sciences, all explanations in social and historical phenomena are context dependent. There is no causality in the explanations of the social sciences, since social science always involves functional explanation.

In the social sciences all explanations must be 'functional' in the structure-functionalist approach to depicting society. The concept of 'function' introduces the notion of 'value' in societal connections. While causal explanation in the physical science has no value implication, yet all functional explanations in the social sciences have value implications in the normative explanation.

And historically, Max Weber emphasized this in his method of 'ideal-type' theory. Weber suggested that the 'principles-of-order' in a societal process could be described as a normative theory for that society. And he suggested that descriptions of a social epoch would include both a historical reality and a rational ideal. (Weber, 1945)

Weber was focused not only with empirical descriptions of actions in a societal era but also what people thought they were doing as they acted. Weber proposed: (1) the idea of historical epochs as empirical bases in the social sciences and (2) the idea of "ideal-types" as a normative social theory. (Weber, 1897) Thus a description of a social epoch should include both a historical 'reality' (empiricism) and a historical 'rational ideal' (normative judgment).

As an example of a normative theory in modern social science, Weber wrote that modern economic theory was one of these -- an 'ideal-type' of social theory: "We have in abstract economic theory an illustration of those synthetic constructs which have been designated as 'ideas' of historical phenomena. It offers us an 'ideal picture' of events on the commodity-market under conditions of a society organized on the principles of an exchange economy, free competition and rigorously rational conduct. An ideal-type of a commodity market's relationship to the empirical data consists solely in the fact that where the market-conditions are discovered to exist in reality, we can make the characteristic features of this relationship clear and understandable by reference to an ideal-type. . . . In its conceptual purity, this mental construct (of an ideal type) cannot be found empirically anywhere in reality. It is a utopia."(Weber, 1897)

One observes the normative aspirations of participants in the historical situation and analyses the underlying principles of their normative aspirations. In this way, an ideal-type theory is an abstraction of the principles-of-order that can be empirically observed as a normative expectation in a historical social situation. Ideal-types are abstractions and do not exist completely in reality except as a desire, a hope, a value; but such principles-of-order may be wholly or partly implemented in real practice (or may not). This distinction, between ideal and real, fostered two approaches to explanation in modern political science: discourse-ethics and power-analytics. Jürgen Habermas described the normative principles-of-order for democracy

as a consensual process around the ideas of a value consensus -- discourse ethics. (Habermas, 1983) In contrast, Michel Foucault's emphasized that empirical practice of power was focused upon conflict which violated such principles -- the realism of power -- power analytics. (Foucault, 1965)

A Weberian systems model of society allows societal explanations to be real & empirical and also normative & ideal. An 'ideal-type' social theory is a generalization of the principles-of-order that participants think should attain what they wish. Explanations in societal stasis due to ideal-type theory are prescriptive explanations – necessary but not sufficient.

The historical 'reality' of an era is a description of the 'power-analytics' of the era -- empirical description of the times. The historical 'rational-ideal' of an era is a description of the 'discourse-ethics' of the era -- normative judgment about values (ideal-type theory). If in a specific context, actual social behavior is in accord with the ideal, then sufficiency is met in the explanation and normative theory matches empirical description. Then the discourse ethics may realized in the power analytics of the situation – what is ideal may be real, in the proper context when idealism is really implemented in power relations.

Thus there are important methodological differences between physical and social sciences: (1) causal context-free (invariant) and value-free (empirical) laws in physical sciences versus (2) the functional context-dependent and ideal-type laws in social sciences. Societal 'phenomenological laws' (validated in the observed historical cases of middle-range theory) are never causal explanations but instead are either prescriptive, accidental, or thematic explanations. The forms of 'middle-range' societal theories must be either 'prescriptive' or 'thematic'; while the forms in the context of a 'middle-range' theory must be 'accidental'.

We have shown two examples of the cross-disciplinary methodology of middle-range-theory & history & societal models:

1. Of how a model analysis of a historical event can draw empirical evidence against the validity of a middle-range theory – fiscal crisis of 2007-08 and invalidity of economic 'perfect market' theory as applied to financial markets;
2. Of how a model analysis of societal systems of different periods of a society can draw empirical evidence for the validity of a middle-range theory – patrimonialism in different periods of Chinese society.

As we saw in the historical case of the Global Financial Crisis 2007-08, therein Weber's example of an economic 'commodity-market' as an 'ideal type' explained why regulators did not regulate -- but did not explain why the market collapsed. The ideal-type theory of perfect markets was not really implemented by financial managers in manufacturing and selling mortgage-based derivatives. And as we saw in the historical cases of patrimonialism in Chinese society, the ideal-type of state as a monopoly-of-power was always challenged with the power-analytics of kinship.

Both normative and empirical middle-range theories are important in the social sciences and both require validation in real societal experiments – histories of societies. The social sciences need a 'value-loaded' methodology (discourse-ethics) as well as an empirical methodology (power-analytics).

A value-loaded methodology can yield important grounded understanding about universal human values. To do this:

1. The social sciences, although organized in disciplines, need to be methodologically integrated (as are the physical and biological sciences) -- all societies exist as a whole and not simply in the disciplinary slices of sociology, economics, political science, etc.
2. Social science theory must be empirically grounded (as are the physical and biological sciences) -- and grounded upon societal histories, as history depicts the natural experiments in human societies.
3. Social science theory must also be normatively grounded over a universal 'family of humanity' -- normative social theory (judgments of value) needs to be generalized over all societies and all time;
4. The discipline of history needs a formal analytical structure (perceptual space) to properly analyze the evidence necessary to the empirical and normative grounding of societal theory.
5. Models of a society in a given historical period facilitate the use of historical cases to validate middle-range societal theory.
6. Behavioral characteristics of middle-range-theory can be captured in the graphic form of a systems model of societal stasis.
7. Change in societal stasis occurs due to societal events which alter societal structures.

References

- Angelides, Phil. 2011. "Justice, Reform, and Rebuilding in the Wake of the Financial Crisis". Levy Economics Institute of Bard College. 20th Annual Hyman P. Minsky Conference on the State of the US and World Economies. April 13–15, 2011, New York City.
- Appelbaum, Binyamin. 2013. "Days before 2007 Crisis, Fed Officials Doubted Need to Act." *New York Times*, January 18.
- Backhouse, Roger E. and Phillippe Fontaine. 2014. *A Historiography of the Modern Social Sciences*. Cambridge University Press. New York. ISBN 978-1-107-03772-4
- Betz, Frederick. 2011. *Societal Dynamics*. Springer New York. ISBN 978-1-4614-1278-6
- Betz, Frederick. 2014. "Cross-Disciplinary Economic Theory". *Journal of Knowledge Economy*. Volume 5 Number 4. Pp 820-840. DOI 10.1007/s13132-013-0163-6. 2014, ISSN 1868-7865.
- Betz, Frederick. 2014a. "Patrimonialism in Political Economy -- A Graphic Analysis", *Business and Management Research*, Vol. 3, No. 3. ISSN 1927-6001 (Print) ISSN 1927-601X (Online). Sciedu Press.
- Foucault, Michel. 1965. *Madness and Civilization*. Random House, New York
- Fisher, Irving. 1933. "The Debt-Deflation Theory of the Great Depression." *Econometrica*, October 1933
- Forsythe, Michael, Chris Buckley & Jonathan Ansfield. 2014. "Investigating Family's Wealth, China's Leader Signals a Change", *New York Times*, April 19. <http://www.nytimes.com/2014/04/20/world/asia/severing-a-family-ties-chinas-president-signals-a-change.html?hp&r=0>
- Forsythe, Michael. 2015. "Zhou Yongkang, Ex-Security Chief in China, Gets Life Sentence for Graft." *New York Times*.
- Fukuyama, Francis. (2011). *The Origins of Political Order*. Farrar, Straus and Giroux.
- Giles, Chris. 2010. "Financial crisis exposed flaws in economics", *Financial Times*, April 10.
- Habermas, Jürgen. 1983. *Philosophical-Political Profiles (Studies in Contemporary German Social Thought)*. Massachusetts Institute of Technology. SBN-13: 978-0262580717
- Krugman., Paul. 2009. "The B Word". *The New York Times*, March 17.
- Merton, Robert C., and Zvi Bodie. 2005. "The Design of Financial Systems: Towards a Synthesis of Function and Structure" *Journal of Investment Management*, Vol 3, no. 1 (First Quarter 2005): 1-23.

- Minsky, Hyman. 1975. John Maynard Keynes. Columbia University Press (reprinted in 2008 by Mc Graw Hill)
- New York Times. 2008. "Credit Crisis," The New York Times, December 8.
- New York Times, 2015. "Former Security Chief Gets Life for Corruption". New York Times. June 11.
<http://www.nytimes.com/2015/06/12/world/asia/zhou-yongkang-former-security-chief-in-china-gets-life-sentence-for-corruption.html>
- Singer, Edgar A. 1924. Mind as Behavior and Studies in Empirical Idealism.
- Whalen, Charles J. 2012. "Post-Keynesian Institutionalism after the Great Recession", Working Paper No. 724, Levy Economics Institute of Bard College (<http://www.levyinstitute.org>)
- Wolf, Martin. 2008. "Why Greenspan does not bear most of the blame", Financial Times, April 8.