Modern China
2022, Vol. 48(3) 459–497

DOI: 10.1177/00977004221082515
journals.sagepub.com/home/mcx
SAGE

From Dualistic Opposition to Dyadic Integration: Toward a New Political Economy of Chinese Practice

Philip C. C. Huang[1,2]

Abstract

This article argues for the construction of a new political economy based on Chinese practices. It begins with an explanation of the research approach of starting from practice, and from a distinctive mode of thinking that is akin to that of medicine, rather than Newtonian physics and mathematical logic. Then it discusses the present-day Chinese practices of combining socialism with market economy, state enterprises with private enterprises, the peasant economy with an industrial economy, and the party-state with the economy—all distinctive realities about the new Chinese political-economic system. The foil for the discussion is the long-standing hegemonic ideology and worldview of Anglo-American classical and neoclassical liberal economics and law. This article suggests that we employ China's traditional dyadic integration worldview, evident in today's practices, to arrive at a new integrative cosmological view that rises above both. To a considerable extent, this article is also a reinterpretation of classical Marxist political economy. What the article advocates may be termed a "participatory socialist market economy," to be distinguished from a bureaucratized and controlling socialist planned economy. This is a system that is still very much in the process of formation, its particular content and characteristics yet to

[1]Institute for Advanced Historical and Social Research, Beijing, China
[2]University of California, Los Angeles, CA, USA

Corresponding Author:
Philip C. C. Huang, 332 Grenola Street, Pacific Palisades, CA 90272, USA.
Email: huang@history.ucla.edu

be clarified and specified through a sustained period of searching through practice.

Keywords
deduction + induction vs. medical reasoning, mutually opposed binaries vs. complementary dyads, small peasant economy and modernization, "party-state" and "party-army," the Chinese Communist Party and bureaucratism

This article calls for the building of a new political economy anchored in actual Chinese practices. Such an article cannot be merely a research report, but must of necessity also be a think piece. Nor can it be merely retrospective, but must also be prospective. It is based mainly on the author's past sixty years of research as well as a systematic and overarching encapsulation of much of the author's reflections based on that research. It starts from a discussion of the research method of proceeding from practice and then analyzes China's realities today of combining socialism with market economy, state-owned with private enterprises, small peasant economy with a modern economy, and a party-state with its new economic system, all of them rare realities in the contemporary world. As a foil, the article focuses on Anglo-American classical- and neoclassical-liberal economics and jurisprudence—which have enjoyed hegemonic influence for their emphases on deductive logic, marketism, and scientism—along with their accompanying ideologies and worldviews. The article calls for drawing on China's traditional worldview, evident still in much of the country's contemporary practices, which is anchored on combined and interactive dyads, distinguished from either/or opposed dualities. The aim is to build an integrative worldview that transcends the binary of China versus the West. To a certain extent, this article also presents some fundamental reinterpretations of the political economy of classical Marxism. It discusses multiple differences between the history of actual recent Reform-era Chinese practices and those classical views to point to the development of a new integrative political economy of practice. The direction of development the author advocates may be termed a "participatory socialist market economy" (distinguished from a bureaucratic and controlling socialist planned economy), something still very much in the process of formation, to be defined and clarified through experience.

Mode of Thinking

Mode of thinking might be the most fundamental element of all theory. It is precisely here that China has demonstrated in practice fundamental differences from the West.

Dualistic Opposition versus Dyadic Integration

Classical liberal political economy constructed the state and the economy as a duality in opposition, with the economy separate and independent from the state and free from its "interference." It set the laissez-faire state as the ideal, calling for the maximum possible latitude for the free market economic system to work on its own without interference, such that prices are set entirely by the free choices of the "rational" "economic man," to attain thereby the optimal allocation of resources through the mechanism of free-market competition, and entering thereby unceasing economic development.

Classical Marxism, on the other hand, conceptualizes the state as the "superstructure" that reflects directly the substructure of class relations—namely, to serve as the organization and ideology reflecting the changing relations of production in successive "modes of production." The state in a capitalist mode of production is thus merely the superstructure of the capitalist ruling class, and can only serve the interests of the capitalist bourgeoisie as opposed to those of the proletariat. There is no state system independent of the basic relations of production.

But the Communist Party that leads China's party-state today, after more than four decades of reform, has long since become much more than the political organization of any single class (the proletariat or the laboring people), and today is a multi-class party of more than 90 million members, more than the entire population of midsized countries like Vietnam and Germany, and includes not just workers and peasants and intellectuals but also professionals and technicians and managers of a range of societal entities, employees of party and governmental entities, students, minority peoples, and other members of virtually all of society (Internal Statistical Bulletin, 2021). The Chinese Communist Party is unlike virtually all political parties of liberal-democratic countries, which usually represent only one or another interest group, in that it represents nearly all of the people and controls all the political power. Such a party could be termed a "super party."[1] The party-state that it leads is of course most certainly not a liberal laissez-faire state. We must set aside our conventional understandings to grasp the true nature of this party and its party-state system, a dyadic combination of the party and the state, and the state and the economy/society rather than just one side of an either/or duality of state versus economy/society.[2]

The Inorganic versus the Organic Worldview

The mainstream worldview of modern science comes mostly from physics and mathematics. For physics, the most influential theory has been Newtonian physics and its laws on how "force" works among inorganic matter/machines.

For mathematics, the most influential has been Hellenistic Euclidean geometry. On the latter, this author has co-written in an article with Gao Yuan (PhD in theoretical physics) on "Should Social Science and Jurisprudence Imitate Natural Science?" the following explication:

> The model for deductive logic is Euclidean geometry. Its formalized system starts from a group of "definitions" of the elementary objects that geometry is to deal with, such as points, lines, planes, and so on. The definitions are immediately followed by five "postulates" (the first postulate being "a straight line can be drawn from any given point to another point") and five "common notions" (the first common notion being "things that are equal to the same thing are also equal to one another"). Together, these "postulates" and "common notions" form a group of axioms, which are considered to be self-evident and can be used as the premises for further deduction. Any consequent propositions concerning more concrete geometrical problems can be deduced from the combined application of definitions, axioms, and other previously deduced propositions (Lindberg, 1992: 87–88). An example is the famous Pythagorean theorem, which states that "the square of the hypotenuse of the right triangle equals the sum of the squares of the two legs"—it is something that can be deduced from the basic axioms. This is a system that works in a mathematical-logical world under given and defined conditions, with considerable applicability to the physical world. But, if used on the human world, it can only become a set of artificial constructions that are far removed from reality. (Huang and Gao, 2015: 141–42)

Anglo-American classical and neoclassical liberal economics has applied the deductive logic of Euclidean geometry to the study of economies: it begins from the definition and premise of the "rational economic man," and then applies logic to deduce a purely rational economic and market system, based entirely on the choices of the premised "rational economic man," to result in a purely competitive market economy system that logically can only lead to equilibrium between supply and demand and the optimal allocation of resources, producing thereby unending development.

Thereafter, when the general equilibrium postulate came to be challenged by the realities of the Great Depression and stagflation, neoclassical economics set about to reestablish its postulate of optimal equilibrium by turning from macroeconomic analyses to microeconomic studies, principally of game theory, decision theory, and market design theory, attempting still to use mathematical models to support its claim to being scientific and absolute. But, in reality, neoclassical economics has already retreated from "macro theory" to "micro theories," mainly in "market design" (dealing with such problems as designing auctions, matching patients to doctors and hospitals,

matching organs to patients, and such, all of rather limited applicability) (Gao Yuan, 2022a). Even so, classical and neoclassical economics, as first the ruling ideology of Great Britain, which enjoyed hegemonic sea power, and then of the United States, with its hegemonic military and financial power, has remained predominant in textbook economics, not to speak of scientific and economic discourse.

As for China, both its empirical realities and theoretical heritage are very different from the discourse of deductive logic. Its enduring cultural and epistemological tradition is founded mainly on an organic worldview that is closer to the life sciences than to the physical sciences and is mainly based on observations of human society and an organic, agricultural economy, not a mechanical world. Its traditional central concept of "heavenly principle" 天理 is predicated on an organic worldview of dyadic or multivariate interaction and on a morally based view of human interaction, very different from that of the modern West's singular, inorganic worldview. Therein, multidimensional interactive and unified wholes prevail far more than the unidirectional, mechanical push/pull of Newtonian physics. When it comes to its view of mankind, it emphasizes not just rationality but also moral and emotional dimensions that cannot be reduced or formalized simply into the rational side of humans.

By contrast, the West, from its tradition of deductive logic to its inorganic, mechanical worldview, is far more inclined to a worldview of dualistic either/or oppositions as, for example, in setting the premise of humans as "rational" beings, as opposed to irrational, or as economic, as opposed to moral. And of juxtaposing state and economy as an either/or dualistic opposition, or of economy as distinct and separate from, and opposed to, the state.

That mode of thinking is not able to rise above the one-sided postulate of rationality to incorporate "irrational" feelings or morals. China's way of thinking is by contrast anchored above all on moral ideals, especially expressed as Confucian "humaneness," the "moral person," "grasping clearly moral virtues," caring for the people, the "middle way," and "cultivating oneself, imparting it to one's family, thence to rule the state and bring peace and order to the world."[3]

Such a moral worldview, with its dyadic and multivariate cosmology, has persisted to a considerable extent to this day. Many Chinese are still not accustomed to thinking in terms of a one-sided, inorganic view of the world, nor to an excessively mathematized and logical conception of the world, whether in the past or the present. This is especially true when it comes to the most persistent mode of dyadic and interactive unity as opposed to the dualistic opposition mode of thinking, of an interactive organic worldview and not a deductively constructed worldview. There remains vigorous resistance to constructing "rationality" into a given formalistic definition, premise, or

postulate, and a strong inclination toward viewing the world as both a moral and a practical one.

The latter "practical moralism" mode of thinking is a central theme in the traditional Chinese dyadic jurisprudence wherein moral ideals and practice coexist to make up a single system. That fundamental pattern has remained to this day, and makes for a sharp contrast with the highly formalized way of thinking in Western jurisprudence. Chinese laws today have drawn a great deal from formalized Western law, including its use of formal deductive logic, but they have also preserved much from China's traditional mode of thinking, now in the form of combining Western law with Chinese interpretations and practices, to make up a larger system that joins together the two (Huang Zongzhi, 2014a).

From the standpoint of different scientific spheres, China's basic mode of thinking is clearly different from what are today the two most widely and commonly used ones of the West: deduction and induction. We have seen above how Chinese thinking has largely rejected the centrality and exclusivity of deduction. Its present view of the modern world and of scientific thinking is closest instead to that of the modern life sciences, especially in the use of "reasoned inference" as employed especially in the medical sciences. My coauthor Gao Yuan and I in our earlier collaborative essay summarized those three main scientific modes of thinking, of deduction, induction, and reasoned inference:

> The founder of American pragmatism Charles Sanders Peirce (1839–1914) pointed out that human beings habitually employ in their lives inferential reasoning that is actually neither deduction nor induction, but rather a kind of reasoned guess on the basis of empirical evidence, something that he terms "abduction." For example, if we know that all the balls come from the same urn and that all the balls in that urn are red, we know that if a ball is taken from the urn, it will be red. That is deduction about which, given the preset conditions/definitions, there can be deterministic certainty. On the other hand, if we do not know that the balls in the urn are all red but, after taking (sampling) a number of balls from the urn, we see that they are all red, we infer that the balls in the urn are likely to be all red. That is induction, about which we can have probabilistic certainty, which can be verified by repeated "experiments." However, if we see a red ball near the urn, and know that all the balls in the urn are red, we guess that that ball probably comes from the urn. That is abduction, which we cannot be certain of, because the ball may well have come from another source. In natural science, such guesswork can use deductive logic to formulate an initial hypothesis, and then test that by experiment. What Peirce meant by "abduction" is guesswork yet to be made deterministic: it is different from probabilistic "induction" and also different from deterministic "deduction." This is the kind

> of reasoning commonly employed, for example, in medical diagnoses. Such reasoning, Peirce argued, is the third scientific method in addition to deduction and induction. (Huang and Gao, 2015: 148)

Peirce's "abduction" is different from deduction in that there is no preset premise (e.g., "rational man"), and hence it cannot attain the kind of "absolute truth" that is possible only when given the predetermined premise. At the same time, it is also different from induction in that it cannot be proven to be absolutely certain through repeated experiments in the laboratory. Its research approach is to start instead with a given empirical phenomenon to attempt to arrive at an accurate understanding of its reality. That approach is actually the most appropriate for studying the human world. It does not require a predetermined premise from which to deduce answers with absolute certainty, nor repeated laboratory experiments to arrive at absolute certainty. Rather, it proceeds from a given, limited reality, and then, through disciplined guesswork, attempts to arrive at a plausible conclusion with relative certainty. That is how modern medicine tries to arrive at a preliminary diagnosis of an illness and its probable cause, and a method of treatment. Whether the diagnosis is accurate or not is demonstrated in the end by whether the treatment is effective or not.

In my view, it is precisely such a scientific method that is most appropriate for the social sciences, including the new political economy that this article advocates, not some predetermined "universally true" premise and logically derived deduction therefrom, nor "truths" arrived at through induction by repeated laboratory experiments that are not possible in real human life and society.

It is also a mode of thought and inquiry that is compatible with a high moral ideal—to wit, the Hippocratic oath to save lives that is taken by most doctors in the course of their training, in some ways not unlike the moral ideal in present Chinese governance of "the fundamental interests of the largest majority of the Chinese people." It can also incorporate the fundamental Chinese view predicated on an organic universe, in which the main subjects are humans and other living things. In my view, such a worldview, even though it has not been adopted as the mainstream scientific worldview of the West today, because of the hegemonic influence of the worldview and ideology based on the deduction-induction methods of Euclidean geometry and Newtonian physics, is in fact the most appropriate for studying and understanding the human universe. Only by setting aside the excessively scientistic methods of deduction and induction can the social sciences arrive through abduction (or "reasonable inferences") at tentative guesses that might be closest to actual reality.

Furthermore, if we can, after cautious and grounded abduction, follow as does medicine a process of elimination before arriving at a tentative

diagnosis, which is verified through treatment in practice, we are then in a position to arrive finally at knowledge that is cumulative. China's new political economy of practice can deliberately imitate the knowledge-building method of medical science, and not insist on relying on deductive premises and abstractions that are divorced from practice to fall into a trap of one's own making, or to seek as does induction to re-create "laboratory experiments" that are simply not possible in human society, with the end result being merely fabricated abstractions.

Looking back, we can perhaps conclude that since the Enlightenment era, Western culture has to a considerable extent created an absolutist belief in "science" and "reason" to replace its earlier belief in an almighty, all knowing, all true, and all powerful God, and for that reason has singled out from all natural sciences the most "absolutely certain" Newtonian physics and mathematics, and has relegated the not-so-absolutely-certain biological and medical and other life sciences to a secondary position. However, so far as understanding human society is concerned, what is closest to reality cannot be discovered by constructing or deducing one-sided absolute "truths," nor reducing society to truths that are obtainable only through inductive experiments set to definite and absolute conditions. The truths sought by the social sciences can only come from scientific methods that remain closest to real human societies and economies, such as in the medical sciences—of abduction and diagnosis, followed by testing through actual treatments.

Some readers might think that Newtonian physics and mathematics have occupied the central position in the natural sciences because of their crucial role in early industrialization. That of course is true to a considerable degree, but we must acknowledge the fact that medical science's ability to double the life expectancy of humans is also crucially important, and that its method of study is most appropriate to the life sciences, even if not to the inorganic physical sciences. That is because the combination of Newtonian physics with mathematics has produced the science and engineering that best deal with those parts of human experiences that are most highly structured and most open to precise measurements and predictions, but that same world contains also large portions, indeed even larger portions, of experiences that cannot be structured, and therefore cannot be precisely handled by the formalistic sciences. Natural experiences that are related to all forms of life are precisely such experiences. And those of human societies are even more so.

In the inorganic world, what is lifeless will not react to pushes and pulls from the outside in the same myriad ways as organisms. The relationship among the latter will not be fixed into the simple mechanistic matter of pushes and pulls, but will be the consequence of reactions involving a certain

amount of "subjectivity" to result in a relationship that is interactive. To construct relationships among those life-forms as simply dead, and those relationships as simply inorganic pushing and pulling, is at best one-sided, at worst absurd.

Finally, we need to consider briefly classical Marxist dialectical materialism. Its point of departure is similar to that in deductive logic, of dualistic opposition (e.g., of the opposition between capitalists and workers in the relations of production of a capitalist mode of production). To be sure, classical Marxism includes also the idea of a leap from such dualistic opposition through socialist revolution to result in a higher mode of production, of classless socialism—which is to say, to enter into the higher order of socialist production without the class contradictions of capitalist production. We can of course view such a change as a synthesizing of dualistic opposition. But, in reality, this view is unlike that stemming from the dyadic relationships of an organic society, but rather of a different kind of qualitative change, of a leap into a higher mode of production.

The dialectical materialism of classical Marxism has never become truly rooted in China, not even in its revolutionary period, much less in its reform period. On this aspect, China's deeper inclination has been to view dualities not so much as opposed entities but rather more as interactive unities. To the "antagonistic contradiction" of classical Marxism, Mao Zedong in fact added the constructs of "non-antagonistic contradictions" and "contradictions among the people." Moreover, in the face of highly formalized Soviet Marxist theory, Mao repeatedly emphasized that theory must be anchored in practical realities, that it must "come from practice and go back to practice." He insisted that classical Marxism must be adapted to China's needs, and rejected treating any theory as a given and unchanging universal truth. In China's Reform era, in the face of the earlier overly subjective, deductivized theoretical tendencies, the need to look to practice as the point of departure, and not theory, became the central emphasis—expressed as "practice must be the sole criterion for assessing truth." We can view that epistemological position as the reinterpretation of Marxist theory from a Chinese mode of thinking, and also the beginnings of an even broader reassessment of Marxist theory later on.

Going back to economics and economic theory, China has in the main taken the imported deductive logic of liberal economics (including also quantitative research methods based on inductive logic) to be the most advanced and the most exemplary. Under the policy of "linking up with the international," the emphasis has been on imitation more than creative interpretation. But, in practice, the reality has clearly been more complex, as will be seen.

From Mechanical Dualistic Opposition to Organic Dyadic Combination, and Further to a Combination of the Two

To illustrate further the difference between a mechanical dualistic opposition and an organic dyadic combination, we can begin our discussion here with contemporary Western and Chinese scholarly studies of *guanxi* in Chinese society. In Western scholarship, guanxi has often been conceptualized as a unidirectional pull or push. For example, a good deal of research has emphasized how, in Chinese government and business relationships, many entrepreneurs have resorted to using personal guanxi with officials for the benefit of their businesses, to spotlight the importance of those in their operations.

However, as Zhou Li-An has observed in his new study of Chinese government-business relationships, guanxi must be conceptualized not as a simple unidirectional phenomenon at just one point in time, as many scholars have, but rather needs to be understood as a two-way interactive relationship that evolves over time (Zhou Li-An, 2021).

Moreover, state-business relationships today cannot be understood solely as personalized and informal but also as institutionalized and formal. For example, local governments enter formal contracts with businesses, which carry with them institutionalized formal relationships and also legal constraints. What's more, government-enterprise relationships entail also a "banner competition" among officials for advancing their individual careers, according to the set standard of the contributions they make to local development. That formal system works with and alongside the informal relationships.

Such relationships are not limited to a particular moment in time, but are rather a process over time. For example, an enterprise might be viewed by the government with favor in the beginning but, through banner competition among the officials for advancing local development, may over time be replaced by another (which contributes even more to local economic development).

Zhou equates such relationships with my concept of a "third sphere" between local officials and merchants, in an interactive and not an opposed or mutually exclusive relationship. He adopts the term/concept of "mix and match" 混搭 to characterize the multiparty interrelationship and its change over time, that to be distinguished from a one-sided push/pull relationship that is limited to a single moment in time (Zhou Li-An, 2021).

What Zhou's study does not discuss is the even more interactive relationship between today's state-owned enterprises and private enterprises. Theirs is most certainly not an either/or, separate, and opposed relationship, but is rather one that is characterized by mutual dependence and interactive cooperation. For example, local infrastructural state firms have worked with private developers in China's real estate industry (especially evident in the

capitalization of local development land, including infrastructural construction, and the building of condominiums) in cooperation, interaction, and even division of gains. (For a detailed discussion, see Huang Zongzhi, 2021a.)

From a broader theoretical perspective, mainstream Western theory is accustomed to thinking in terms of opposed dualities, whether state versus society or economy, or government versus society and economy, as in liberal and neoliberal economics' constructions. What it asks for is that the role of the state should be as minimal as possible, and free competition as great as possible, coming clearly from a perspective that juxtaposes state and economy as an opposed duality. But China's reality, including its deepest modes of thinking, has been to see those dyads as coexistent, interdependent, interactive, and even as a unified whole. That is most certainly and obviously true of traditional China. Present-day official discourse, even if on the surface it often seems to have adopted from the West the dualistic either/or modes of expression and of logic, in practice nonetheless usually adheres to the operative mode of the yin-yang dyadic coexistence and interaction and mutual complementarity, not distinctly separate and opposed dualistic oppositions. For example, administration and law, party and governance, socialism and market economy, and so on are all seen as interactive and unified dyadic wholes, not dualistic oppositions.

The fine differences therein are in fact traceable finally to the differential modes of thinking. At the level of deep-seated ways of thought and of practice, China still exhibits a worldview anchored in interactive dyads and unified wholes. Formalist economics and jurisprudence, by contrast, are insistent about postulating that humans are one-sidedly "rational" economic creatures, exclusive of irrational emotions, and that economy is made up only of rational economic beings, free of irrationalities. China, however, continues in its basic mode of thinking to view all of the above as organic, multivariate, and forming a larger unified whole that includes change over time, not just the push/pull of one particular fixed point in time.

From a Backward Natural Worldview to an Advanced Dyadic and Multivariate Cosmological View

To be sure, we need to consider also the suggestion that China's rejection of a one-sided mechanical worldview might well have been a factor in its delay in achieving the kind of development that occurred in the West with Newtonian physics and the mechanical revolution that came with it. This is an issue that can be linked to what might be termed "the Needham question": Why was it that China, more technologically advanced than the West before

the seventeenth century, failed to develop a modern scientific revolution such as that which occurred in the West in the seventeenth century? (Lee, 2017: 337–39).

Compared to traditional Chinese science, what stands out about the Newtonian revolution was its mathematization of inductive observations of (gravitational) force, that opened the way to the building of machines and the joining of mathematization with mechanization (Mahoney, 1998). Chinese science, by contrast, was more anchored in the organic than the inorganic, mechanical world. However, the issue is very different when it comes to subsequent, nineteenth- and twentieth-century, scientific advances. The Chinese worldview was actually much more amenable to grasping the later scientific advances, including electromagnetism, particle physics, and the theory of relativity.

We can enter into this discussion first with medical science. To be sure, China needed to, and has had to, learn from Western medicine the great advances that came with viewing the human body as an inorganic machine, developing precise measurements and a great variety of medical instruments, and the ability to test, repair, and even replace body parts with artificial devices. On those fronts, modern Western medicine has without doubt made great strides, which China has had to actively learn from and catch up with (Porter, 2006: 80–83).

To be sure, modern Western medicine has emerged not just out of Newtonian physics and its worldview but has also benefited greatly from empirical studies of the human body, and from clinical observations and experiences, as well as such new medical sciences as pathology and physiology, biochemistry, bacteriology, immunology, and so on, by no means limited to just the physical and mechanical sciences. Otherwise, it could not have attained its present-day paramountcy over other medical traditions (such as China's and India's) (Porter, 2006).

Even so, China has not given up its traditional medicine. The latter has the strength of taking a holistic view of the human body and seeing it as full of dyadic organic interactions. Present-day China has wisely chosen to "walk on the two legs" of traditional Chinese and modern Western medicine. Today, that forms a dyadic system that has the potential of surpassing modern Western medicine's one-sided mechanical emphasis on parts rather than the whole, and mechanical push/pull forces rather than interactive organic parts (State Council, 2016).

At the frontiers of advances in modern medicine, the perspective of dyadic interactive forces has already evinced great potential, most currently in dealing with the COVID-19 pandemic, by way of triggering through vaccines the human body's innate ability to resist the virus, reflecting an approach that is

very different from a Newtonian mechanical one. Modern Western medicine in general has emphasized partial treatments rather than holistic ones, has resorted far more to mechanical approaches of repairing, excising, destroying, or replacing than holistic prevention or treatment, which is part of the reason for its spiraling costs. The approach of walking on the two legs of modern Western and traditional Chinese medicine in fact offers great hopes for developing distinctive advances through the integration of the two.

At present, even though the "walking on two legs" framework has already been set in its medical schools and institutions, China still leans much more toward Western medicine than Chinese and has not yet developed the full potential of an integrative dyadic approach. Yet, the possibility of long-term and deeper integration of the two is already evident. For example, there has been wide use of acupuncture in anesthesiology to replace Western medications; it is cheaper, more effective, and less hazardous. We can also see multiple developments of holistic approaches that borrow from the body's innate healing abilities to deal with, even resolve fundamentally, medical problems without repairing, removing, destroying, or replacing body parts mechanically, also an area of great potential development for correcting some of modern Western medicine's excesses. For example, at the frontiers of treatments of lymphoma, the so-called CAR T-cell therapy takes the patient's own T cells, reprograms them to target the lymphoma, and then reintroduces millions of those reprogrammed cells back into the patient to attack the lymphoma (Cedars Sinai, n.d.). And then there are Chinese herbal medicines, which have also shown great potential for development with the help of the Chinese state in recent years (State Council, 2016).

Moreover, even in the sphere of the science of physics itself, advances in the uses and understanding of electromagnetism (and its interactive forces) and of particle (rather than mechanical) physics have already gone far beyond the understanding of Newtonian physics. Although, because most of us humans in our daily lives still see and feel more the impact of machines—for example, motor cars, household appliances such as washing and drying machines, dishwashers, vacuum cleaners, cold and hot air-conditioning, and so on—than the much subtler forces of electromagnetism and particle physics, not to speak of Einsteinian relativity, we are still far more accepting of the classical Newtonian mechanical worldview. Most of us have not yet gone beyond the narrower and more limited mechanical worldview, nor have we come to see through the limitations of formalistic economics and jurisprudence predicated on that worldview and its uses of deductive logic.

For example, most of us are not aware of how electromagnetism works through dyadic forces, not the push/pull of Newtonian physics. That is in part because in our daily lives, we find obvious confirmations for Newtonian

push/pull forces. Electromagnetism, however, is predicated on the interactions of dyadic yin-yang-like forces of moving electrical waves (yang) as opposed to stationary electricity and magnetism (yin) and the interactions between them. And of positive electrical poles (yang) and negative electrical poles (yin), and of the magnetism that results from the interactions of those (yang and yin forces and poles). In the face of thunder and lightning, we do not as a rule think of the fact they come from the interactions of those yin-yang forces. As for particle physics, not to speak of relativity, it seems even more remote from our daily experiences. All this is in contrast to our regular perceptions and feelings of push/pull forces in our daily lives. As a group of Chinese professors of electrical engineering have recently demonstrated, when they couch their discussion of electromagnetism in terms of yin-yang cosmology, (Chinese) students have tended to grasp much more readily the fundamental concepts involved (Zhang, Qu, and Wang, 2020).

When it comes to the life sciences and medicine, as discussed above, because they deal mainly with an organic rather than an inorganic or mechanical world, they accommodate far more readily a yin-yang cosmological view. In truth, that kind of cosmological view, if it can incorporate the more recent breakthroughs in physics, should have great potential for further integration and advancement of Western and Chinese medicine. What that points to is a cosmological view that is far more holistic, and far more attuned to interactive relationships than mechanical either/or push/pull relationships. All this is to say, future developments most likely will not come from a simple juxtaposed opposition between China and the West, but rather from the transcendent integration of the two.

Dyadic Unities in China's Development Experience

Theory and Practice

At the level of practice, Reform-era China, unlike Russia and Eastern Europe, did not completely reject its Marxist and socialist revolutionary past and adopt the marketist and capitalist "shock therapy" path, but rather both retained and reformed its historical legacy of classical Marxism and planned economy (Zhao Liuyang, 2022, is a good summary discussion).

This is in part because China has long been accustomed to thinking in terms of dyadic unities, especially at the deeper level of practice, and not only in economic thought but also in legal thought. Generally speaking, present-day China often appears at the level of discourse to have adopted wholesale Western rights theory and approaches, including deductive logic, but at the level of practice, it has over and over again adapted those to actual needs and circumstances, in what this author has termed a "practical moralism" mode.

Practical moralism is especially evident in the dyadic division in the Qing code between "statutes" 律 and "substatutes" 例: the former are about what ought to be—for example, that families should not undertake household division while the parents are still alive. But the ideal in this example was often impractical, because married brothers and their wives often fell into sustained conflict. In light of that, a substatute qualified the main statute: if the parents should permit it, then household division may be allowed. The fundamental character of Chinese law was that it did not insist that statutes and substatutes be one and the same, in words and in logic, in the way that Western jurisprudential systems have asserted. Rather, it allowed moral ideals expressed in law to be reinterpreted at the level of practice, to the extent of running counter to the statutory provision, allowing the two together to make up a single system. That is what I have termed Chinese "practical moralism" (Huang, 1996). Western formalist jurisprudence, by contrast, has insisted that practice be the same as and subsidiary to statutes, and has set both pragmatism and moralism as being opposed to formal legal logic, in sharp contrast to the Chinese perspective on the two as a dyadic unity.

Under the present-day Chinese justice system, the same kinds of adaptive practices have resulted in a distinctively Chinese legal system, rooted in actual practices that might differ from formal law at the levels of discourse, logic, and application. Thus, as I have shown in detail, Chinese divorce law has been anchored on the distinctive formulation of whether the husband's and wife's feelings about one another have truly ruptured, very different from the earlier Western standard of whether one or another party has been at fault, later revised during the 1960s to 1980s to reject (because of protracted and expensive court battles) any considerations of fault at all, now termed "no-fault divorce." Or, in torts, where the Chinese law first stipulates, in imitation of the West, that torts apply only when one or the other party has been at fault, but then goes on to qualify that principle to say that, however, even if there has not been fault, one party might still be held liable because of its "social obligation." Concerning succession, similarly, the law has stipulated first that all siblings are to inherit the parental properties equally, but then goes on to allow differential distributions because one or more parties have borne more of the obligation of parental old-age maintenance. These are just some examples of the modifications allowed by the justice system to its stated principles in the actual practice of the law (Huang Zongzhi, 2014b: vol. 3).

More important still is that informal and semiformal mediation systems for the settlement of disputes remain very much in operation in China, and are employed to a far greater extent than in the West. For example, of 25 million recorded disputes each year from 2005 to 2009, fully 43 percent were resolved by informal (village and residents' committees), semiformal

(administrative entities), and formal (court) mediation, far greater than the few percent in Western countries (Huang, 2016b: 243, table 1). In other words, there has been much more resort to mutually agreed compromises and settlements than to deciding which party has been at fault. That too is related to the fundamental dyadic worldview of China, as opposed to the either/or dualistic juxtapositions of the mainstream West (Huang, 2010).

Dyadic Coexistence and Interaction between the State and the Economy, and State-Owned Enterprises and Private Enterprises

Liberal economics has persistently considered the state and the economy as locked in a dualistic, juxtaposed opposition, and has sought to minimize the role of the state in what it terms the non-interfering, "laissez-faire" state. But in China of the Reform era, there have been multiple reformulations of the question of state-economy relations, seeking to turn them into a dyadic and interactive relationship rather than a dualistic either/or opposition that requires the choice of one or the other. Without doubt, the Chinese economic system today is one that combines state and economy far more than one that sets up the two as an either/or state-versus-economy dualism. The Chinese economic system today combines state action with a highly marketized economy, and also state-owned enterprises with private enterprises. The two form an equal share combination in which they coexist, interact, cooperate, and even act in unison.

This is due in part to the long-standing view of moral ideals and practical operations as coexisting and cooperative dyads. It is predicated on the habit of thinking in terms of dyadic unity, not dualistic opposition. To an extent, it is also related to China's long tradition of seeking the "middle way" in dealing with the coexistence of Confucianism and Legalism, traceable to Han Wudi 汉武帝 and Dong Zhongshu 董仲舒, and the later coexisting of Confucianism with Buddhism (and also with Daoism). Today, it is a matter of combining the Chinese with the Western, and tradition with modernity.

Moreover, China has already partly marketized some of its major state-owned enterprises (SOEs), especially those that have been categorized as commercial rather than service oriented. About a thousand of such large SOEs have undergone IPOs at either the Shanghai or the Shenzhen stock exchanges, some of them even at the Hong Kong or New York stock exchanges, submitting themselves thereby to both market profit-seeking incentives and to market constraints. Even so, they still remain subject to party leadership and control. This too is a part of the distinctive socialist-cum-marketist path of economic practice (Huang, 2022).

This kind of reality is captured by the officialized term of "socialist market economy"—perhaps better expressed as "marketized socialism" to capture more clearly its historical sequence. First is the frame of cooperative coexistence of the two, of the state lending "a helping hand" to private enterprises for the sake of development. As discussed above in connection with Zhou Li-An's analysis, to draw on the "banner competition among local officials" to induce them to extend to the private enterprises a helping hand, and at the same time, to draw on market-competition and profit-seeking mechanisms to propel the development of the private enterprises. And further, to use the mechanism of market competition to eliminate inefficient and unprofitable enterprises, including the "showcase" enterprises put up by local governments. These actions are clearly not merely matters of the public versus the private, the government versus the economy, or of dualistic opposition between the officials and the people, but rather of dyadic interaction and unity (Zhou Li-An, 2021).

Furthermore, what this author has analyzed is not just the relationship between the state and private enterprises, but also the relationship between state-owned enterprises and privately owned enterprises. To use Chongqing municipality (led by Huang Qifan for fifteen years—as deputy mayor from 2001 to 2009, then from 2009 to 2016 as mayor) as an example, under Huang's leadership, the local government acquired ownership of a total of 300,000 mu of development land, partly from allocations from the central government, and partly by acquiring cheaply development land controlled by the local state enterprises that were nearly bankrupt. To use abstracted numbers for illustrative purposes, each mu of development land cost the local government only about 10,000 yuan to acquire (about thirty times the annual net returns from farming). Once infrastructural development was added, the land would have a market value of ten times that much, or 100,000 yuan per mu. Then the local government would transfer the possession of the land 转让 to private developers. Once condominiums had been built, the market value of the land would rise another tenfold, to 1,000,000 yuan per mu. Throughout the process, the local government's state-owned infrastructural enterprises in effect worked together with private developers and shared in the profits. The total value of more than 300 billion yuan in land and potential land value, far greater than the total investments drawn in from outside, is what powered the municipality's stunning economic development—about 16 percent per year (Huang Zongzhi, 2021a).

This illustrates the process of "capitalization of land," a distinctive feature of China's development experience that is unlike that of earlier developed countries. It can even be seen as "the secret" to that development, very different from capitalization through initial public offerings (IPOs) through the

stock exchanges of Western countries. (Zhao Yanjing, 2014, was the first to point to this different yet functionally similar process of capitalization.)

What it illustrated was not just the role played by local government with respect to helping private enterprises but also that played by the collaboration between state-owned and privately owned enterprises, the two together driving China's rapid development in the first two decades of the twenty-first century. Whether compared to the developed West, or the developed "East Asian" countries of Japan and Korea, it stands out as a distinctive development experience in its dynamic and its operative mechanism.

We need to consider in addition the strategic turn in China's development path in recent years, from the temporary expedient of "let some people get rich first" to the socialist ideal of "getting rich together." Among the notable new developments are, first of all, the "belt-road" initiative launched in 2013, which explicitly argues for equal and mutually beneficial trade (distinguished from extractive and exploitative trade), and draws from China's own development experience with respect to infrastructural construction, to assist in the development of other late-developing countries, while extending also the development of China's state-owned infrastructural companies (which are relatively high-grade and inexpensive) by expanding the markets for them (Huang, 2020). That was followed, in 2016, by the "precisely targeted" program to assist nearly a hundred million poorest peasant households to break out of abject poverty 精准扶贫. Then came, in 2017, the transfer of 10 percent of state-owned enterprises' stock shares to the national social welfare fund. And then, in 2018, the launching of the Strategic Plan for Rural Revitalization and its multiple projects (Huang Zongzhi, 2021d). Together they have spotlighted China's strategic turn toward combining economic development with social equity, through the transition from the "capitalization of land" to what I term "the socialization of capital." Today, China is truly neither simply socialist nor simply marketist, but rather a combination of the two.

The Small Peasant Economy and Modern Agriculture

China's realities are in fact nothing if not paradoxical when seen from the standpoint of mainstream Western theories. That is especially true of China's villages and peasants. Many analysts, both Western and Chinese, believe that, for China to "modernize" more completely, it must in the end follow the Western model to reduce rural people to just a very small proportion of the total population through urbanization and to transform Chinese agriculture from small farms to large farms that can enjoy economies of scale and the increased rural incomes that come with such, just as in industrial production.

Only then, they believe, can China become truly modernized and join the ranks of the truly developed countries.

However, because of the long-standing basic reality (expressed in Chinese as "the basic national condition" 基本国情) of the still very high population-to-farmland ratio, a majority of peasants remain poor, even though the Chinese economy as a whole is now the second largest in the world. People of rural peasant registration still occupy the largest proportion of the total population. Even though urban residents now account for 60.6 percent of the total population, more than a quarter of them (16.2 percent of the 60.6 percent) are still of peasant status. Of those, a definite proportion will return to the villages, and many maintain close ties to the villages. If one were to count by registration status, urbanites still account for just 44.4 percent of the total population (2019 data—National Bureau of Statistics, 2020). At the same time, of the 440 million people employed in urban jobs, nearly 300 million are "peasant workers" of rural registration (Huang Zongzhi, 2020: vol. 3).

According to the most authoritative data from the three national decennial agricultural surveys begun in 1996, China in 2016 still had 300 million people working in agriculture (including 100 million who work in agriculture for one to six months a year, or who, in other words, may be considered part-time agricultural peasants), with just 7 to 10 mu of land per unit labor. The 200 million farming households average just 10 mu per household, a scale that really cannot begin to be compared to the American average of 2,700 mu.

But many observers have been influenced by the deep-seated ideology of "economies of scale," and also the official statements of China from that perspective in the past. Those have caused them to seriously overestimate the role that large-scale/capitalist agriculture has played in China.

If we turn to China's most authoritative three decennial agricultural surveys, we see clearly that the actual proportion that large-scale agriculture has occupied is limited. The most reliable gauge is the proportion that hired agricultural workers have occupied among the total rural workforce. As this author and coauthors Gao Yuan and Peng Yusheng have demonstrated in detail, hired agricultural workers in 2006 amounted to merely 3 percent of all those engaged in agriculture. And that figure remained still at 3 percent even in the 2016 decennial survey. We termed this phenomenon "capitalization without proletarianization." The truly important agricultural change was to be found in the small-scale "new agriculture," of small farms producing high value-added products such as the 1-, 3-, or 5-mu farm of small, medium, and large tented (or hothouse) vegetable farming, the 2- or 3-mu fruit orchards, and the 10 or 20 mu of farming-cum-animal husbandry farms, which are "capital and labor dual intensifying," not large farms of scale economies. It was a change that came with the complete transformation of Chinese food

consumption habits: from the traditional 8:1:1 ratio of grains:meats:vegetables to the present ratio of 4:3:3 (Huang, Gao, and Peng, 2012; Huang Zongzhi, 2021b).

In the last few years, official policies have finally taken a turn and have given the "small peasant economy" a hitherto unseen degree of attention, and have formally expressed the opinion that small peasant farming is China's most fundamental reality, and will remain so for a long time to come. We need therefore to incorporate persistent small peasant agriculture into our view of the special nature of China's political economy (Huang Zongzhi, 2021b, 2020: vol. 1). It would also be well to avoid the term "farmer," which implicitly equates Chinese peasants with American-style farmers, which is very misleading, and stick to using "peasant" to remind ourselves of the fundamental differences here.

First of all, we need to see that agricultural "primary industry" comes with a logic that is very different from the "secondary industry" of industry, and the "tertiary industry" of services. Agriculture is principally organic production, which relies on organic sources of energy, namely, human labor and land, unlike the secondary industry that relies on inorganic mineral-based sources of energy and machinery.

To be sure, today both are present in agriculture, especially large-scale farming using considerable amounts of machines and mechanical energy. In China, this is especially true of so-called big field 大田 farming, most especially grain farming, in which many small peasants have come to use their earnings from off-farm employment to pay for machine plowing, planting, and harvesting services. But that kind of secondary industry-like farming has definite limits, because agriculture cannot completely break free from its fundamental reliance on organic energy (of the land) (Huang Zongzhi, 2020: vol. 1).

At the same time, the basic production unit (of partly modernized) small peasant farming still is largely the family and not the individual. It is generally not the work of just a single individual, but rather often with the auxiliary participation of family members. It can still take advantage of the relatively low "opportunity cost" of the auxiliary labor of the family (women, the elderly, even children) to bear the low returns that a single worker would not be able to bear—which is what this author has referred to in the past as "involuted" agricultural production. It was one of the keys to Chinese agriculture (Huang Zongzhi, 2020: vol. 1).

It was precisely that kind of special ability of the farm family that lay behind the "new agricultural revolution" of the Reform period, mainly of high value-added small agriculture farms. Those make up the "labor and capital dual intensifying" farming behind the "new agriculture." By 2010, such farming had come to account for two-thirds of the value of all farming, while

using about one-third of the cultivated land. They have contributed greatly to the modernization of Chinese agriculture (Huang Zongzhi, 2020: vol. 1; see also Huang, 2016a).

At the same time, the small peasant farms of today will still consider the consumption needs of the household itself in making production decisions. For example, the household might plant vegetables in the farmyard for its own consumption, like in the days of the "private plots," or it might switch from production for the market back to farming grain for its own consumption. When needed, the households can still withdraw from the market—if the prices of some essential crops or products are too high, the household can still turn to production for self-consumption to meet subsistence needs. In the face of the "big market," the small household still has the option of withdrawing from participation. Whether as producer or as consumer, it still significantly differs from urban households (Huang Zongzhi, 2020: vol. 1).

Most important is that the small peasant farm's exchange relationship to the cities and towns is still unequal. It still "exports" far more than it "imports," a consequence mainly of unequal incomes. Peasants in the main still export to the towns and cities their most prized products, especially high-quality grains, meat-poultry-fish, and vegetables, far more than they import from the cities. Rural-urban trade is still marked by the long-standing gaps in income and consumption, and does not accord with the principle of equal exchange delineated by Adam Smith, which was partly anchored in reality, on the basis of the coincidence in eighteenth-century Britain of an agricultural revolution with its early industrial revolution (Huang Zongzhi, 2020: vol. 1).

To attain greater integration of the rural and urban economies, China still needs to raise more dramatically the level of its rural incomes, to develop the infrastructure of "a road to every natural village," as well as internet connectivity, in the manner planned and called for by the 2018 Strategic Plan for Rural Revitalization. Only then can there be more nearly equal trade between the villages and the towns-cities. Such trade can come through the development of China's higher value-added "new agriculture," including, for example, the production of organic agriculture for the domestic and foreign markets. The present Chinese "new agriculture" produces two-thirds of the gross agricultural output value on one-third of the land, a ratio of 2:1, but that is still a long distance from the American example of 36.8 percent of gross agricultural output value (mainly of vegetables-fruits, nuts, and flowers-plants), on just 3.6 percent of the farmland, or a ratio 10:1 (Macdonald, Korp, and Hoppe, 2013: table 1). At the same time, China's organic agriculture still accounts for just 6 percent of global production, far behind the 47 percent of the United States and the 37 percent of the European Union (Liu Shi, 2018).

Clearly, there is ample room for the development and improvement of the market (Huang Zongzhi, 2021b).

Even so, the main producers of Chinese agriculture will likely remain for a long time small peasants, albeit with a considerably higher degree of modernization. Precisely for that reason, this author has long suggested that Chinese agriculture must not rely only on the path of large farms with "economies of scale," nor simply more complete "urbanization," but rather on two-way collaboration between the party-state's aid-leadership and small peasants' voluntary participation out of their own interests, most especially in cooperatives anchored on village communities, to generate thereby genuinely mutually beneficial rural-urban trade and true modernizing development (Huang Zongzhi, 2021b). For that, China needs to expand resources suited to its villages and boost participatory village organizations, and not rely simply on the Western model of scale economies for agriculture, urbanization for villagers, and Weberian-style bureaucracy for village governance.

Chayanov's Theory and the East Asian Model

The modern transformation of peasant economies does not follow the simple "economies of scale" logic, but rather a much more complex logic of "differential optimums" (Chayanov, [1927] 1991: see especially chaps. 1 and 2). First, we need to distinguish in agricultural production between animal husbandry, which is more open to economies of scale, from planting, which observes much more "differential optimums." In the latter, there can be those that are more prone to developing economies of scale, as for example in "big field" grain farming, more open to machine plowing, planting, and harvesting, services small peasants have paid for with their off-farm earnings, but even then, there are production steps that defy economies of scale: weeding and later-stage fertilizing and maintenance, for example. More important still is the "new agriculture" that requires intensive, irregular, and intermittent labor input.[4] Those kinds of farms are especially well suited for the use of family labor, and not of relatively more expensive hired labor. We must not make the mistake of believing blindly in the "bigger is better" notion of economies of scale.

Moreover, in the face of the "big market" of modern economies, we need to employ yet another key insight of Alexander Chayanov's, which is to separate out "horizontal integration" (of scale) from "vertical integration," which takes into account the need for processing, packaging, and transporting (a chain of refrigerated transport to maintain the freshness of vegetables and meats is especially crucial), to make up a complete logistical system. Such

infrastructure is especially crucial for marketing, including precise and reliable gradations of the products, crucial for setting market prices.

In the decade after the October Revolution, Chayanov was the champion and major theorist of the cooperative movement of the time, which enjoyed the support of about a third of the entire population (Chayanov, [1927] 1991: xi). He called for with crystal clarity cooperatives anchored on the village communities, backed by his theories of differential optimums and vertical integration. But what the new Soviet government enacted in the end was no more than the theory of economies of scale and the policy of ordering from above the creation of large collective agriculture to replace small peasant farming. Chayanov himself was in the end killed by Stalin.

Ironically, what Chayanov advocated was unexpectedly enacted in Japan and Korea, where small peasant economy was even more predominant than in pre-revolution Russia and the early revolutionary Soviet Union. It came from the fortuitous coincidence of several historical tendencies. First was the group of progressives among the American Occupation Command Headquarters (AOCH), who identified deeply with Roosevelt's New Deal. Under their influence, Japan was ordered to terminate landlordism and to establish in its place an owner-cultivator economy. AOCH forbade purchases of village land by outside interests, and at the same time ordered the government to turn over its agricultural assistance resources to the newly established village co-ops, to enable them to organize cooperative purchases of agricultural means of production, and build up efficient and inexpensive processing, packaging, and marketing of farm goods (Cohen, 1987). The government also set up large wholesale markets (with cold-chain services) to link local farm goods to the national market, serving to set standards and prices of farm goods, such that the farm co-ops 农协 (Nōkyō) became an established brand name, achieving thereby what Chayanov had envisioned in the way of "vertical integration" and modernization of the farm economy. Thus did Japan attain striking success among the world's high-population-density peasant economy countries in achieving rural modernization without graphic urban-rural inequality. In Korea, even though not occupied by the United States but subject to its decisive influence, a similar approach was followed, with comparable results. (For a detailed discussion see Huang Zongzhi, 2015, and Huang Zongzhi, 2020, vol. 1). China can borrow this "East Asian" experience to overcome the problems of relative rural poverty and gross gaps in income between city and countryside. The present Strategic Plan for Rural Revitalization could become the opportunity for adopting such an approach. The mistake would be to look only to the Western experience and model to single out "economies of scale" as the only path to rural modernization.

The "Taobao Village" Development Path?

Here, we need to consider briefly also the recently much-discussed phenomenon of the "Taobao villages" 淘宝村,[5] referring to new developments related to the (Amazon-like) Taobao web-marketing networks and "villages" and towns that have emerged in connection with them. First of all, we need to make clear that many of those sites are in reality but rural processing centers, with urban distribution centers supplying the raw materials and/or designs, and villagers living at home providing a kind of cheap "putting out" or "workshop" labor for materials sent down through the network. Aside from the role of IT and express delivery networks, the phenomenon is similar to the "putting out" and "workshops" of early industrialization in the West. It could perhaps be termed "internet-linked putting out or workshops." Except for the enterprising local individuals who have created these businesses, the emergence of Taobao villages cannot be considered anything like "rural revitalization," or the entrance of large numbers of villagers into a middle-income level living.

Another variety is the rise of such production in villages that are linked to special conditions or skills of a given locality, now assisted by internet linkages to the outside world through Taobao. Those also account for a significant proportion of the new Taobao villages, but they are clearly contingent on the special conditions of particular localities, and hence are of limited import as far as rural China as a whole is concerned.

As for agricultural goods that truly involve large proportions of villages and peasant households, such as what this author has termed the "new agriculture" of high value-added fresh farm produce, those have accounted for only a very limited proportion of all Taobao villages—3 percent in the most precise tallying available (from 2014)—very far from the proportions occupied by the first two kinds of Taobao villages, and far from becoming a major path toward rural revitalization, or a way of overcoming rural-urban differences.[6]

Which is to say, from the point of view of the topic of the preceding section on two-way equal exchange between cities and countryside and the complete development of the countryside, the so-called Taobao villages are of relatively minor significance, to date limited to the most developed provinces along the east coast, or even just the suburbs and semiurbanized, semiindustrialized areas with well-developed transport networks. Taobao villages alone are hardly sufficient to make the Chinese countryside at large "fairly well-to-do" 小康, and erase the persistent problem of large rural-urban differences.

To penetrate the broad Chinese countryside as a whole and help it develop in fundamental ways requires that agricultural production rise to another level, move from what I have called "new agriculture" to a still higher level of value-added production, to raise further peasants' incomes so that they can

afford to purchase more urban goods, and thereby to drive greater mutually beneficial two-way exchanges between city and countryside. E-commerce, and its cheaper advertising and express delivery of goods, can of course aid in such development, but its basis must still be "vertical integration" services of efficient processing and packaging of goods, including cold-chain services and efficient standard-fixing and price-setting mechanisms that Chinese agriculture still lacks. On these levels, the East Asian model is still the most successful example to date, very different from the expensive and inefficient, and lacking in cold-chain infrastructure, wholesale markets that are run today mainly by profit-seeking government departments (Huang Zongzhi, 2018).

For China's future, perhaps we can think in terms of a structure that begins at the village level, led by the local party organization but with the full and voluntary participation by peasants out of their own interests in cooperative entities that can furnish efficient and inexpensive packaging and processing, transporting, and marketing of goods—that is, "vertical integration" with "the big market." Add to that fundamental structure such infrastructure as a road to every natural village, along with internet connectivity, as called for in the Strategic Plan for Rural Revitalization. Then add internet marketing that would be faster, broader, and more efficient than had been possible in the East Asian model experience of decades ago, to increase the incomes of village communities, peasant households, and agriculture as a whole. Its basic requirement is still a modernized small peasant economy and a modernized logistical system for agricultural products—including cold-chain services for fresh agricultural products and a vertical integration system that can be relied upon to set market standards and prices, including an efficient and non-profit-seeking state-funded wholesale marketing system. With the advantages of internet connectivity, one can envision a truly mutually beneficial interrelationship between city and countryside, which could overcome at long last the problem of the gulf in income between city and countryside.

Therein, a possible approach might be, in addition to organizing community co-ops that join together the party and the people, to also take advantage of the collaboration between the state and the internet businesses to organize marketing services, using the profits from increased two-way exchange between city and countryside to reduce the financial burden on the state, and use that system to help set standards and prices for the market, relying on the new village-level co-ops to help peasants produce to the standard of what the Japanese Nōkyō brand name has been able to achieve as a nationally recognized quality certification. That way, perhaps China might be able even to surpass the East Asian model's achievements by developing large-scale mutually beneficial two-way rural-urban exchange.

Dyadic Unity Rather than Dualistic Opposition between the State and the Economy and Society

China's "Super Party"

Mainstream Western formalism demands logical consistency between premises and postulates in all theory, without consideration of the dyadic relationships of interaction and unity that exist in the real world. Precisely for that reason, it has created the likes of classical liberal and neoliberal economic theory, turning what are obviously complex dyadic relationships and entities into either/or opposed dualistic abstractions and then turning those into supposedly absolutely true premises and postulates, "science," and "laws," as for example in the construction that humans are all "rational economic beings" (without irrational emotions), who make up "the perfectly competitive market" (without unequal and exploitative relationships), and attain "equilibrium between supply and demand" (without irrational factors), and the "optimal allocation of resources" (without irrational allocations), and so on. And then, as in Euclidean geometry, to derive from such premises necessarily true postulates, laws, and theories that are detached from the real world,

Formalist legal theory is very similar. Christopher Langdell, dean of the Harvard Law School from 1870 to 1895, and *the* representative of such a mode of thinking in American jurisprudence, actually dedicated his entire life to developing and arguing for jurisprudence to become just like Euclidean geometry, becoming thereby the founder of the mainstream "classical orthodoxy" in American jurisprudence. That was despite the fact that the American justice system in actual operation has long been clearly a combination of "classical orthodox formalism" and American pragmatism, demonstrated clearly in the alternating tugs between the two in the changing composition of the members of the Supreme Court (Huang Zongzhi 2020, vol. 2: see especially chap. 1; cf. Huang, 2007).

Nevertheless, the juxtaposed opposition between state and society has always been a fundamental definitional premise of classical orthodox jurisprudence. It was, moreover, precisely on the basis of such juxtaposed opposition that mainstream American social science developed the "theory" of "totalitarianism" to characterize the Chinese political system. In that formulation, "Communist" countries came to be constructed as the diametrically opposed system to American liberal-democracy, almost in the manner of the juxtaposed opposition between God and the devil.

Totalitarianism remains today the most influential "theory" about Communists and Communist parties. For that reason, some thirty years ago, Professor Tsou Tang, the leading political scientist (specializing in China) of

the University of Chicago endeavored to reformulate "totalitarianism" 极权主义 into the more value-neutral term "totalism" 全能主义 to remove the strongly condemnatory implications of the former while still capturing the reality of the immense powers of the party (Tsou Tang [Zou Dang], 1986). His efforts gained a great deal of influence among Chinese scholars and also among some Western scholars. However, among politicians of the West, and also the populace, "totalitarianism" has been and remains still the most commonly used term and concept for China, conveying to most people its original implications of a small minority group, guided by an evil ideology, controlling and manipulating the entire nation and its people.

To be sure, we must face up to the reality of the unusually great powers of the party, but here we must first point out some truths that most Western users of the term "totalitarianism" are not aware of. First is the real nature and size of the Chinese Communist Party. As discussed above, it is a party of more than 90 million members, equivalent to the population of a medium-sized country. It now includes not just workers and peasants but also people from just about all walks of life. Only less than 10 percent of the members are officials or cadres. Rather than being the party of the proletariat as in the original Marxist conception, it is today much closer to being a party of all the people. Its ideology includes elements of both classical Marxism and classical liberalism, the two interacting and combining, resulting in socialism with market economy. This makes it very different from what is conveyed by the term "totalitarianism."

What the totalitarianism model does not consider at all is that, if the Chinese Communist Party were truly as the model imagines it to be, it could not possibly have won against enemies that were far more modernized and far greater in firepower. Its victory in fact stemmed above all from the active support of the people, conveyed by the very widely used Chinese metaphor of a party-people relationship that was like "fish is to water." Precisely for that reason, its army was able to enjoy much better intelligence than its enemies, whether Japan or the Guomindang. It was because of the support of the people that the party was able to operate behind enemy lines, to obtain much better intelligence, to estimate more exactly the power and movements of its enemies. It was also for that reason that the party was able to conduct "people's war" (the Japanese counter-strategy of "three-all" [burn all, kill all, take all] targeted especially the above characteristic of the Chinese revolution), operate behind enemy lines, conduct guerrilla and mobile warfare, to attack and harass the enemy from behind the lines, and also to attack the enemy with concentrated force by surprise (Huang Zongzhi, 2022).

In addition, the army was able to rely on not just popular support but also the special organizational capabilities of what might be called the "party-army" (borrowing from the usage of the term "party-state"). A major

characteristic is the party-army's ability to disperse and reunite on short order. The reason for that is its special organizational nature—party cells penetrate down to the platoon of thirty people, which helps greatly in maintaining discipline and organization when dispersed, and also in quickly regrouping when needed. That gave small units the ability to maintain morale and discipline and operate independently behind enemy lines (a basic requirement for conducting guerrilla warfare) and yet still able to regroup quickly for big, concentrated battles (Huang Zongzhi, 2022).

That special organizational capacity turned out to be a critical factor in the Korean War, which helped to bridge the great gap between the Chinese and the US forces in firepower, equipment, logistics, control of the air, as well as of the sea, so as to be able to fight America's far superior forces to a standstill, to result in the peace talks and settlements at Panmunjom. In that war, the Chinese forces were first able to push the US-UN forces from the vicinity of the Yalu River all the way back to the 37th parallel (south of the 38th), in part because General Douglas MacArthur grossly underestimated the attacking Chinese forces. On Christmas day 1950, General Matthew Ridgway was ordered to replace MacArthur and took over the command first of the US forces and then also the other UN forces. Ridgway was able to restore effectively American morale and, even more importantly, adopted an effective new strategy based on the critical weaknesses of the Chinese army. The US forces, with their motorized transport, were able to easily withdraw thirty kilometers a day, just about the maximum distance the Chinese forces could cover on foot, for seven straight days, which left the Chinese forces exhausted and also emptied of their food rations (each Chinese solider was known to carry just seven days of rations), before launching its counteroffensive. It was a strategy that came to be dubbed, by the Chinese side, "magnetic warfare," which produced the first major defeat of the Chinese forces, in what was dubbed the "fourth" major campaign, followed by the even more complete rout of the "fifth campaign." At that point, many American observers thought that they could push the Chinese forces all the way back to the Yalu (Huang Zongzhi, 2022).

In that situation, had it not been for the Chinese forces' special ability to go into dispersed resistance, they might well have lost the war. What they resorted to was to disperse the army into small units of thirty soldiers each behind enemy lines, to force the US forces to deal one at a time with each, before they could advance further. That battle gained crucial time for the Chinese forces to reinforce their defenses along the 38th parallel, setting the stage for the stalemated situation that brought the two sides to the negotiating table.

It was that kind of organizational capacity that allowed the Chinese forces to disperse and maintain their morale and offer effective resistance. In a similar way, it was that same organizational capacity that enabled the Chinese party-state to adopt both centralized leadership and effective delegation of authority to the provinces and local governments, in a kind of administrative contracting and subcontracting arrangement (with a definite degree of autonomy), as per Zhou Li-An's analysis, that became the key organizational form for driving Reform-era economic development. Even if one looks back to the civil war period, one can see that a similar kind of organizational form was adopted between the Central and the local in altogether nineteen "base areas." They too demonstrated the same organizational capacity for both centralized and locally semiautonomous organization.

The Differences between the Chinese Communist Party and Simple Bureaucratic Rule

Compared to simple, formalized bureaucracy, the party organization has a separate and different, more flexible dimension. It is not as rigidified to stand above the people, not as prone to bureaucratism, and not as apt to fall into the trap of resorting only to top-down controls. This other side of the party can be readily seen in its revolutionary and post-revolutionary history, also in the distinctive characteristics of the "party army" and the long-standing impressive performance of the "People's Liberation Army" (PLA) in times of natural disasters, such as floods and earthquakes, in which it has demonstrated tremendous capacities in helping the people. These tell of the special tradition and discipline of the party. That is completely neglected by the totalitarian model.

Even so, we need also to see that the Chinese party-state has also long been beset by the problems and tendencies toward bureaucratism. Just as the party's Central Disciplinary Committee has pointed out, bureaucratic officials often place themselves far above the people, dealing with them in arbitrary ways, and tend to be obsequious toward those above and dismissive and bully-like toward those below. They also have a strong tendency toward disregard of reality in favor of appearances (what is expressed in Chinese as "formalism" 形式主义), and can become obsessed with only their own personal advancement, and so on (Central Discipline Inspection Commission, 2020; Huang Zongzhi, 2021c).

Even so, we must not therefore think that modern Western specialized bureaucracies are somehow free of the problems of bureaucratism. Even Max Weber himself, who developed the theory of the ideal type of formal-rational

modern bureaucratic governance, gave special attention to what he termed the "iron cage" of specialized bureaucratic government and suggested that resort be made to the powers of the charismatic leader to curb bureaucratic excesses (Lai Junnan, 2016).

But we must also be realistic about the fact that the scope covered by the Chinese bureaucracy is considerably larger than that by Western bureaucracies, especially those of the liberal-democratic Anglo-American countries. The Chinese people have to deal with bureaucratic government far more frequently and across a much wider range of activities than citizens of the liberal-democratic Western countries. At the same time, the Chinese bureaucracy is more highly centralized. In worst-case scenarios, it can depart completely from reality and resort entirely to top-down compulsory enforcement, as happened in the great and tragic error of the Great Leap Forward. That was a gigantic mistake, and also one reason for repeated "party rectifications." Rectification of the party was, in fact, the original intention behind the Cultural Revolution. It remains a major problem of the present and future of China (Huang Zongzhi, 2021c).

It is not a problem that can be resolved simply by adding law to bureaucratic rule, to use bureaucratic specialization and legal discipline to restrain the great powers of the bureaucracy and of the party-state, as some people think. To truly overcome the problems of bureaucratism, the solutions must come from the other side of the dual tradition of the party itself, as outlined above.

It was for these reasons that the author has suggested numerous times that the party needs to rely on widespread popular participation to help curb bureaucratism. In matters related to the people's livelihood especially, it should become standard practice to establish popular participation as the sine qua non of all such policies, to use it as the final indicator of whether the policy is or is not welcomed by the public, to use it to restrain the possible misdirections of bureaucratism, to use it in conjunction with the system of party-state leadership, as a source of energy for implementation. All that is to ensure that such policies more optimally accord with the government's intentions and the people's interests. Of course, we are not talking here about violent mass movements like the Cultural Revolution.

In the history of contemporary China, the early-stage agricultural co-ops in which basic-level party organizations were closely joined with the people's self-interested concerns were clearly a good example of successful trans-bureaucratic organization. There was little in the way of commands from above, but rather a much closer-knit unity between the party and the people, a genuine example of successful party leadership. The co-ops united party interests with popular interests, an example of a program that was not imposed

simply by bureaucratic commands from above regardless of actual realities and the interests of the people. What it accomplished was to join together the co-ops' resources to overcome the inadequacies in labor, implements, and/or animal power of many individual households, thereby attaining better allocation of resources and, in the process, also engaging in "party-building" 党建 by absorbing large numbers of able producers and talented leaders into the party. We need to distinguish clearly between those successful early endeavors from the kinds of coercive and commandist collectives and planned economy imposed on the people later in the Great Leap Forward. By contrast, the early-stage co-ops were a good example of the praiseworthy combining of good party leadership with popular participation, perhaps even something of an illustration of one of China's "special characteristics" (Gao Yuan, 2022b, 2018; Tong Zhihui, 2018; Huang Zongzhi, 2022).

A related resource that China can draw upon today is what this author has called the historical legacy of "centralized minimalism" and "the third sphere" in Chinese governance, to develop, reconfigure, and turn them into a distinctive Chinese political-economic combination, to truly attain the party's noble ideals of "serve the people" and "common prosperity" 共同富裕.

Even in the collective era, and the highly penetrative collectivized and planned era, there was still the resort to semiformal governance at the basic village level. Reliance on that kind of party-people two-in-one combination amounts to a true "secret" of Chinese basic-level village governance, which is fundamentally different from modern Western "rational bureaucracy," liberal-democratic minimalist government, and of course, "totalitarian" rule. What it actually represented was what might be considered a combination of the best of the "mass-line" tradition of the Chinese Revolution with the democratic ideal of the West into what might be termed the "people-ism" tradition of active popular participation in governance (Huang Zongzhi, 2021c).

Retrospect and Prospect

In sum, China's new political-economic system, after a hundred years of revolution and governance, after many changes and reforms, has emerged as something distinctive and unlike what went before it. It combines both traditional and revolutionary aspects, and also thoroughgoing Westernizing changes to "link up with the West," resulting in a distinctive system that is unlike what any existing social science theory is able to encompass and capture. It clearly differs significantly from both of the two major theoretical traditions, showing parts that are related to or like one or the other, but also aspects that differ from both. Moreover, its formation has been both predictably necessary in some respects, yet also coincidental in others. The result is

a dyadic entity that is historically unprecedented, and one that is still undergoing change. Even its own understanding of the new system, though evincing some new creative generalizations, conceptualizations, and discursive constructs, remains far removed from the ability to theorize more completely, not to speak of being able to discern clearly many of the new operative mechanisms.

We need especially to invert the normal epistemological process of starting from the major existing theories to try to fit the new realities into them, by taking as our point of departure China's actual new operative realities and mechanisms, including its most deep-seated modes of thinking, and to reconsider past theories and approaches in order to grasp and conceptualize the new practices. Especially with respect to the new operative mechanisms between the party and the government, the party and the people, the local governments and their economies, state-owned and privately owned enterprises, "socialism" and "market economy," Chinese tradition and the modern West, the revolutionary and the governing traditions of the Chinese Communist Party, and their coexistence, interaction, and combination, including the new phenomena, new characteristics, and new operative mechanisms in such combinations, all await more explicit conceptualizing and theorizing. We must also attend both to the strengths and the problems and weaknesses, including ways to cope with and overcome them.

The approach outlined above is best undertaken, studied, conceptualized, and pursued by the "abduction" approach of modern medical science. It is the third of the three methods commonly employed in modern science—deduction, induction, and abduction—and best accords with what Chinese realities most need today. It is principally concerned with the human and organic worlds, not the Newtonian physical, inorganic, and mechanical world, even less the abstracted and oversimplified world of deduction. It is able to grasp dyadic and "multi-adic" relationships, and also comes with a mission of saving lives, and is especially well suited for China's long-time moral-cum-organic mode of thought. At the same time, it also emphasizes the need to proceed from empirical evidence and operative realities, not deductive simplifications and abstractions, nor inductive laboratory reproductions of experience that are simply not possible for the human world. It does not, like common mechanical physics and deductive mathematics, try to pursue artificially simplified and constructed realities for the sake of establishing "absolute truths." Its focus is on real-life problems encountered by human beings, without the wild ambitions for universal, absolute, and unchanging "truth." It is precisely the knowledge accumulated by such a mode of thinking, with its explicit moral ideal, and its proceed-from-experiential reality mode of thinking and research approach, as well as its delimited boundaries of actual

practice, that are best suited for a new Chinese social science and political economy of practice.

Thomas Piketty, renowned for his innovative longitudinal (as opposed to cross-sectional) study of inequality, which is now being applied by coordinated projects in about a hundred countries, has recently called for a new "participatory socialism." Piketty begins with the fact that the two most advanced nations of the European Union, Germany and Sweden, have already adopted the practice of enterprise workers' sharing in decision-making power with management (Piketty, 2021). We can already see a similar tendency and idea in China today. On November 11, 2021, the party's Central Committee issued its Resolution of the Party Central Concerning the Major Achievements and Historical Experiences in the Hundred Years' Striving of the Party calling for "the Party to develop and renew the 'organized social groups' 群团," such as the "trade unions, the Youth League, women's federations, and others" to play new and enlarged roles in governance (Resolution of the Party Central, 2021). The key of course is whether such groups will remain merely party-controlled "mass organizations" or develop into something close to genuine popular participation in governance.

A recent essay published under the authority of the State Council's Development Research Center by Jiang Yu, a researcher at the center, under the title "Building the Party 党建 Is Itself a Productive Force" (Jiang Yu, 2021), suggests specifically that SOEs can call on the energy derived from party-building to drive the productivity of the SOEs, in a mode of thinking rather like what we discussed above about the early-stage agricultural co-ops. The essay recommends "strengthening the building of basic-level party organizations, employing and strengthening the employees' and workers' congresses to become the basic democratic management system, to invigorate and activate the engagement, initiative, and creativity of the employees-workers." Namely, to develop the workers-employees' involvement in the management of the SOEs, thereby to enlarge and push forward "democratic participation" in the enterprises.

This kind of thinking is clearly akin to what Piketty means by "participatory socialism." The difference consists in calling on China's unusual tradition of combining party-building with popular participation and its present-day potential for enhancing popular participation, by calling upon the party's ideal of being united with and at one with the people, and to draw on that kind of energy to push forward enterprise productivity and enterprise management democracy. That kind of prospective approach may be termed Chinese Communist Party–led participatory socialism, as well as a distinctively Chinese mode of democratization of enterprise management.

This would be a very different path from that of just bureaucratized governance and development, which also illustrates clearly the double characteristic

of the Chinese Communist Party. It should be distinguished from an excessively top-down approach (as in the Great Leap Forward), also from excessively violent "mass movements" (such as the Cultural Revolution), as well as from the "iron cage" type of bureaucratism.

If we extend such a path of development to the countryside, we can most certainly use it to understand what this article advocates in the way of popular participation in the agricultural co-ops. That kind of most basic level of party-branch-committee-led cooperative with the participation of peasants in pursuit of their own interests has been illustrated already in what has come to be termed the "Yantai model" (Yu Tao, 2020; Jiang Yu, 2020; Chen Yiyuan, 2020; Huang Zongzhi, 2021a; Yang Tuan, Liu Jianjin, and Tong Zhihui, 2021; Huang Zongzhi, 2022). It is cooperatives based on village communities, and popular organizations based on employee-workers of enterprises, that lend concrete illustration to Chinese-style "participatory socialism," also to the new direction of the political economy being called for here.

Setting up such a political economy of practice is of course not a short-term matter, nor the work of a few people or even a generation of people. That is because the new-style Chinese political-economic system is still undergoing change and development, and thus far only some aspects have become clear enough to be observed and conceptualized, or even theorized. But we must also acknowledge that large portions of it are still in the process of formation and can only be observed in very preliminary ways, rendering what might be considered complete knowledge and conceptualization, not to speak of a complete formulation of its theory and discourse, impossible at this time. Only through thoroughgoing rethinking of the two most important classical political economy traditions of the past and open-ended pursuit of a political economy of practice can we truly understand and grasp the new realities of China's new political economy. Just like actual Chinese practice, it remains still in the process of formation, a process that will continue for quite some time. Its self-expression of the moral ideal of the process is "the fundamental interests of the largest majority of the people," that is an ideal of which there can be relative certainty, but the process of creation of a new political economic system is not something that can be easily summarized or theorized, but rather something that must be founded and shaped in the process of step-by-step practice and theorizing. That is what forms the core of this article's advocacy for a new kind of political economy of practice.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

Notes

1. This is Wang Hui's (2014) term.
2. "Dyad" and "dyadic" are terms that come mainly from sociology texts that refer to husband-wife combinations as illustrative of the most basic "social" unit. The emphasis is not on their separate and opposed relationship but rather on their "social" combination and interactive relationship. These are the English words that come closest in meaning to the Chinese dyad of yin and yang. But they do not enjoy nearly the same degree of pervasive usage, in marked contrast to the ubiquitous terms "duality" and "dualism," which convey opposition more than interactive unity.
3. Later, in Song-Ming Neo-Confucianism, there came the separating out of "things" from moral principles, from "heavenly principles" 天理 to "moral principles" 公理, incorporating to a definite degree a view of inorganic "things" as distinct from moral principles, though retaining still the fundamental moral emphasis of the earlier worldview (Wang Hui, 2004).
4. Or those farms that employ "economies of scope" and not of scale, as for example in 10- to 20-mu farms that combine planting with animal husbandry.
5. A search of "Taobao villages" through CNKI on October 4, 2021, turned up 931 articles. I thank Zhou Li-An for directing my attention to this subject.
6. The above summary discussion is based mainly on the following studies: Guo Chenglong, 2015; Zeng Yiwu and Guo Hongdong, 2016; Zeng Yiwu, Cai Jinjing, and Guo Hongdong, 2020; Wu Sixu and Sun Bindong, 2021.

References

Cedars Sinai (n.d.) "CAR T-cell therapy." https://www.cedars-sinai.org/programs/cancer/we-treat/hematology/treatment/car-t-therapy.html (accessed Feb. 2, 2022).

Central Discipline Inspection Commission of the Chinese Communist Party 中共中央纪律检查委员会 (2020) "警惕公权力运行中的'内卷'现象" (Beware of "involution" in the exercise of public authority), Dec. 18. https://www.sohu.com/a/438579614_260616.

CHAYANOV, ALEXANDER (1991 [1927]) The Theory of Peasant Co-operatives. Translated by David Wedgwood Benn, with an introduction by Viktor Danilov. Columbus: Ohio State Univ. Press. [First published in Russian, as Osnovnye idei i formy organizatsii sel'skokhozyaistvennoi kooperatsii (The basic ideas and organizational forms of agricultural co-operation), Moscow 1927. This was the second edition, revised and supplemented, of a book first published in 1919.]

CHEN YIYUAN 陈义媛 (2020) "农村集体经济发展与村社再组织化" (The development of the collective agricultural economy and the reorganization of the village community). 求实 6: 68–81.

COHEN, THEODORE (1987) Remaking Japan: The American Occupation as New Deal. New York: Free Press.
GAO YUAN 高原 (2018) "工业化与中国农业的发展, 1949–1985" (Industrialization and China's agricultural development). 中国乡村研究 14: 196–217.
GAO YUAN (2022a) "A reflection on postwar neoclassical economics: the shift from general equilibrium theory to the new microeconomic theories." Modern China 48, 1 (Jan.): 29–52.
GAO YUAN (2022b) "乡村治理中的第三领域: 从合作化到乡村振兴" (The third sphere in rural governance: from cooperatives to rural revitalization). Rural China 19, 1: 31–50.
GUO CHENGLONG 郭成龙 (2015) "农村电子商务模式探析——基于淘宝村的调研" (E-business in the countryside: a field study of the Taobao villages). 经济体制改革 5: 110–15.
HUANG, PHILIP C. C. (1996) Civil Justice in China: Representation and Practice in the Qing. Stanford, CA: Stanford Univ. Press.
HUANG, PHILIP C. C. (2001) Code, Custom and Legal Practice in China: The Qing and the Republic Compared. Stanford, CA: Stanford Univ. Press.
HUANG, PHILIP C. C. (2007) "Whither Chinese law?" Modern China 33, 2 (April): 1–32.
HUANG, PHILIP C. C. (2010) Chinese Civil Justice, Past and Present. Lanham, MD: Rowman & Littlefield.
HUANG, PHILIP C. C. (2016a) "China's hidden agricultural revolution, 1980–2010, in historical and comparative perspective," Modern China 42, 4 (July): 339–76.
HUANG, PHILIP C. C. (2016b) "The past and present of the Chinese civil and criminal justice systems: the Sinitic legal tradition from a global perspective." Modern China 42, 3 (May): 227–72.
HUANG, PHILIP C. C. (2020) "A new integrative vision: China's belt-road initiative and the new Asian Infrastructure Development Bank." Modern China 46, 5 (Sept.): 463–89.
HUANG, PHILIP C. C. (2022) "A critique of marketism: varieties of exchanges in China's past and present." Modern China 48, 1 (Jan.): 3–28.
HUANG, PHILIP C. C. and YUAN GAO (2015) "Should social science and jurisprudence imitate natural science?" Modern China 41, 2 (Mar.): 131–67.
HUANG, PHILIP C. C., YUAN GAO, and YUSHENG PENG (2012) "Capitalization without proletarianization in China's agricultural development." Modern China 38, 2 (Mar.): 139–73.
HUANG ZONGZHI 黄宗智 [Philip C. C. Huang] (2014a) 清代以来民事法律的表达与实践: 历史、理论与现实 (Civil justice in China since the Qing: history, theory, and reality). 3 vols. Vol. 1: 清代的法律、社会、与文化: 民法的表达与实践 (Civil justice in China: representation and practice in the Qing); vol. 2: 法典、习俗与司法实践: 清代与民国的比较 (Code, custom, and legal practice: the Qing and the Republic compared); vol. 3: 过去和现在: 中国民事法律实践的探索 (Chinese civil justice, past and present). 北京: 法律出版社.
HUANG ZONGZHI [Philip C. C. Huang] (2014b) 明清以来的乡村社会经济变迁: 历史、理论与现实 (Social-economic change in China since the Ming and

Qing: history, theory, and reality). 3 vols. Vol. 1: 华北的小农经济与社会变迁 (The peasant economy and social change in North China); vol. 2: 长江三角洲的小农家庭与乡村发展 (The peasant family and rural development in the Yangzi delta); vol. 3: 超越左右: 从实践历史探寻中国农村发展出路 (Beyond the left and the right, searching for a path to rural development from the history of Chinese practice). 北京: 法律出版社.

HUANG ZONGZHI [Philip C. C. Huang] (2015) "农业合作化路径选择的两大盲点: 东亚农业合作化历史经验的启示" (The two big blind spots in path selection for agricultural cooperativization: lessons from the East Asian historical experience). 开放时代 5: 18–35.

HUANG ZONGZHI [Philip C. C. Huang] (2018) "怎样推进中国农产品纵向一体化物流的发展——美国 、 中国和'东亚模式'的比较" (How to push forward the vertical integration of Chinese agricultural products: a comparison of the US, China, and the "East Asian Model"). 开放时代 1: 151–65.

HUANG ZONGZHI [Philip C. C. Huang] (2020) 实践社会科学与中国研究 (The social science of practice and research on China). 3 vols. Vol. 1: 中国的新型小农经济 (China's new peasant economy); vol. 2: 中国的新型正义体系 (China's new justice system); vol. 3: 中国的新型非正规经济 (China's new informal economy). 桂林: 广西师范大学出版社.

HUANG ZONGZHI [Philip C. C. Huang] (2021a) "从土地的资本化到资本的社会化: 中国发展经验的新政治经济学" (From the capitalization of land to the socialization of capital: the new political economy of China's development experience). 东南学术 3: 79–95.

HUANG ZONGZHI [Philip C. C. Huang] (2021b) "资本主义农业还是现代小农经济? 中国克服'三农问题'的发展道路" (Capitalist farming or modern peasant economy? China's path to overcoming the "three peasant problem"). 开放时代 3, 5: 32–46.

HUANG ZONGZHI [Philip C. C. Huang] (2021c) "农业内卷和官僚内卷: 类型 、概念 、经验概括和运作机制" (Agricultural involution and bureaucratic involution: types, concepts, empirical generalizations, and theoretical mechanisms). Rural China 18, 2 (Oct.): 1–19.

HUANG ZONGZHI [Philip C. C. Huang] (2021d) "中国乡村振兴: 历史回顾与前瞻愿想" (Rejuvenating rural China: historical retrospect and prospective vision). 中国乡村研究 16: 30–53. 桂林: 广西师范大学出版社.

HUANG ZONGZHI [Philip C. C. Huang] (2021e) "民主主义与群众主义之间: 中国民众与国家关系的历史回顾与前瞻愿想" (Between democracy and the mass line: historical retrospect and prospective vision for the relationship between the Chinese people and the state). 文史哲 2: 1–11.

HUANG ZONGZHI [Philip C. C. Huang] (2022b) "从简约治理的第三领域到党民结合的第三领域" (From the third sphere of minimalist governance to the third sphere of party-people co-participation). Rural China 19, 1: 1–30. For the working paper version, see www.lishiyushehui.cn.

Internal Statistical Bulletin of the Chinese Communist Party 中国共产党党内统计公报 (2021) Xinhua Net, June 30. http://www.xinhuanet.com/politics/2021-06/30/c_1127611673.htm.

JIANG YU 江宇 (2020) "'烟台经验'的普遍意义" (The broad significance of the "Yantai experience"). 开放时代 6: 13–26.

JIANG YU (2021) "国企五年大发展充分证明'党建就是生产力'" (Five years of great development of state enterprises proves that "party building is a productive force"). https://www.sohu.com/a/498775484_100082376.

LAI JUNNAN 赖骏楠 (2016) "马克斯·韦伯'领袖民主制'宪法设计的思想根源" (The conceptual roots of Max Weber's constitutional design for "leadership democracy"). 人大法律评论 1: 151–79.

LEE, KEEKOK (2017) The Philosophical Foundations of Classical Chinese Medicine: Philosophy, Methodology, Science. Lanham, MD: Lexington Books.

LINDBERG, DAVID C. (1992) The Beginnings of Western Science: The European Scientific Tradition in Philosophical, Religious, and Institutional Context, Prehistory to A.D. 1450. Chicago: Univ. of Chicago Press.

LIU, SHI 刘石 (2018) "中国有机农业发展的纠结" (The dilemma of the development of Chinese organic agriculture). http://blog.sina.com.cn/s/blog_5a3c6ad90102zhxx.html.

MACDONALD, JAMES M., PENNI KORB, and ROBERT A. HOPPE (2013) "Farm size and the organization of U.S. crop farming." United States Department of Agriculture. https://www.ers.usda.gov/webdocs/publications/45108/39359_err152.pdf?v=6445.7.

MAHONEY, MICHAEL SEAN (1998) "The mathematical realm of nature." Pp. 702–55 in Daniel Garber and Michael Ayers (eds.), Cambridge History of Seventeenth-Century Philosophy. Cambridge: Cambridge Univ. Press.

National Bureau of Statistics 国家统计局 (2020) 中华人民共和国2019年国民经济和社会发展统计公报 (National Bureau of Statistics report on the national economy and social development, 2019). http://www.stats.gov.cn/tjsj/zxfb/202002/t20200228_1728913.html.

PIKETTY, THOMAS (2021) Time for Socialism: Dispatches from a World On Fire, 2016–2021. New Haven, CT: Yale Univ. Press.

PORTER, ROY [ed.] (2006) Cambridge History of Medicine. New York: Cambridge Univ. Press.

Resolution of the Party Central Concerning the Major Achievements and Historical Experiences in the Hundred Years' Striving of the Party 中共中央关于党的百年奋斗重大成就和历史经验的决议 (2021) Nov. 11. http://www.gov.cn/zhengce/2021-11/16/content_5651269.htm.

State Council of the People's Republic of China, News Office 中华人民共和国国务院新闻办公室 (2016) 中国的中医药 (China's Chinese medicine). https://www.aisixiang.com/data/126023.html.

TONG ZHIHUI 仝志辉 (2018) "20世纪50年代乡村改造: 没有'乡建派'的乡村建设" (Reconstructing rural China in the 1950s: rural reconstruction without reconstructionists). 开放时代 3: 50–55.

TSOU TANG 邹谠 [Zou Dang] (1986) "中国二十世纪政治与西方政治学" (Twentieth-century Chinese politics and Western political science). 政治研究 3: 1–5. https://www.aisixiang.com/data/104625.html.

WANG HUI 汪晖 (2004) 现代中国思想的兴起 (The rise of modern Chinese thought). 4 vols. 北京: 生活·读书·新知三联书店.
WANG HUI (2014) "代表性断裂与'后政党政治'" (Rupture of representativeness and post-party politics). 开放时代 2: 70–79.
WU SIXU 吴思栩 and SUN BINDONG 孙斌栋 (2021) "信息化助推乡村振兴: 机制、条件与对策" (IT assisted rural revitalization: mechanism, conditions and policies). 南京社会科学 9: 64–72.
YANG TUAN 杨团, LIU JIANJIN 刘建进, and TONG ZHIHUI 仝志辉 (2021) "烟台经验: 党组织在乡村振兴中发挥的作用和潜力" (The Yantai experience: the role played by the party organization and its potential). 经济导刊 8. http://tinyurl.com/yjtca7s6.
YU TAO 于涛 (2020) "组织起来, 发展壮大集体经济（全文）——烟台市推行村党支部领办合作社、全面推动乡村振兴" (Get organized, and develop and strengthen the collective economy: Yantai city pushes forward with the party-branch committees taking the lead in organizing co-ops and advancing rural revitalization across the board). 红旗网. http://www.hongqi.tv/mzdxueyuan/2020-02-25/17476.html.
ZENG YIWU 曾亿武, CAI JINJING 蔡谨靖, and GUO HONGDONG 郭红东 (2020) "中国'淘宝村'研究: 一个文献综述" (A study of Taobao villages: an overview of the literature). 农业经济问题 3: 102–11.
ZENG YIWU and GUO HONGDONG (2016) "农产品淘宝村形成机理: 一个多案例研究" (The logic and mechanism for the formation of Taobao villages: a case study). 农业经济问题 4: 39–48.
ZHANG, WENHAO, SHANSHAN QU, and JIE WANG (2020) "Application of Chinese *yin-yang* principle in the teaching of 'electromagnetic fields and waves.'" International J. of Electrical Engineering and Teaching. DOI:10.1177/0020720920954156.
ZHAO LIUYANG 赵刘洋 (2022) "China's 'economic miracle' and the universal modernization model." Modern China 48, 1 (Jan.): 53–72.
ZHAO YANJING 赵燕菁 (2014) "土地财政: 历史、逻辑与抉择" (Land financing: history, logic, and choices). 城市发展研究 21, 1: 1–13.
ZHOU LI-AN 周黎安 (2021) "地区增长联盟与中国特色的政商关系" (Coalitions in local development and the special characteristics of Chinese government-business relations). 社会 6: 1–40.

Author Biography

Philip C. C. Huang Guangxi shifan daxue chubanshe 广西师范大学出版社 is publishing Philip Huang's "collected works," to include his four volumes on China's rural economy and four volumes on China's justice system, both from the Qing to the present and beyond, as well as his one-volume study of China's "informal economy." There will also likely be four volumes on theory and method. Three of the above thirteen volumes have appeared to date, and four are scheduled for this year. Five of the book volumes, as well as numerous articles from the remaining volumes, have appeared in English—see www.lishiyushehui.cn for the already published material, in both Chinese and English.