Humanities, Science, Scimat A New General-Education Course



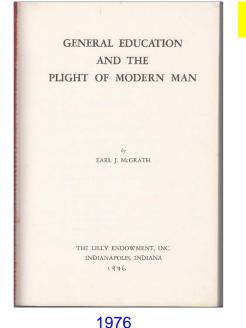
Lui Lam

San Jose State University, San Jose, California

General Education

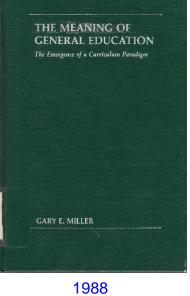
General Education

- An American invention in curriculum reform, in the1930s
- Liberal Education (in US, starting late 19th century) looks to the past
- General Education looks to the present and future



Earl McGrath

- Commissioner of Education under Presidents Truman and Eisenhower
- Executive Editor, Institute of Higher Education, Columbia University



Gary Miller

Executive Director International University Consortium University of Maryland

General Education in United States: Ideals

Aim

To develop in individual students the

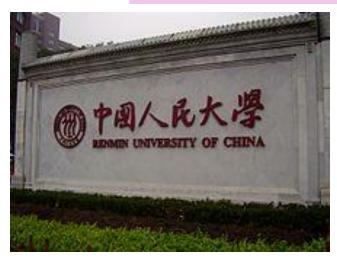
- attitude of inquiry;
- skills of problem solving;
- individual and community values in association with the society;
- knowledge needed to apply these attitudes, skills, and values—to
 - 1. maintain a lifetime learning process,
 - 2. function as self-fulfilled individuals,
 - 3. full participants in society

Characteristics

- comprehensive in scope;
- emphasize on specific and real problems faced by students/society;
- concern with future's needs

International Summer School 2015 Renmin University of China

Renmin University of China



- Founded by the Central Committee of the Communist Party of China in 1937
- Present name started in 1949
- Concentrated in humanities and social science (no engineering school)



International Summer School 2015

- Broaden your views
- Enjoy excellent education
- Superb service
- Touch the future

The HuSS GE Course

Renda International Summer School (course number: SH1518) Humanities, Science, Scimat: A Trans-Disciplinary and Cross-Cultural Experience Summer 2015

Lecture hours: Tue., Thur., 2:00 pm-5:30 pm

Prerequisite: None

Instructor: Lui Lam. Email: lui2002lam@yahoo.com. Phone: 1355 2008 171. Office hour: by appointment.

Course language: English

The Textbook

Humanities, Science, Scimat

A Cross-Cultural and Interdisciplinary Introduction

Lui Lam

Contents Summary				
Pro	olog	1		
1	Introduction	2		
PA	RT I BASIC	3		
2	Humans	4		
3	Knowledge, Nature, Science and Scimat	9		
4	Science and Scimat, Again	29		
5	History	54		
6	Arts	72		
7	Philosophy	93		
PA	RT II EXTRA	101		
8	The Two Cultures Problem	103		
9	Philosophy and Sociology of Science	111		
10	History of Science	130		
11	Science Communication	142		
PA	RT III EXTRAORDINARY	155		
12	Why the World Is So Complex	157		
13	Does God Exist?	166		
14	Su Dong-Po's Bamboo and Paul Cézanne's Apple	178		
PA	RT IV BONUS	189		
15	How to Do (Good) Research	191		
16	On Intuition and Innovation	204		
Epi	ilog	213		
Ind	ex	215		

The Dao of Scimat

In One Sentence

Scimat (Science Matters) is a new multidiscipline introduced by Lam in 2007/2008. In one sentence:

Everything in Nature is part of science !

Four Tenets and One Insight

Conceptually, scimat represents the four tenets:

- 1. Science is humans' effort to understand Nature without bringing in God or any supernatural.
- 2. Science covers everything in Nature.
- 3. Nature includes humans and all nonhuman systems.
- 4. All research on human matters, humanities in particular, are part of science.

Disciplinarily, scimat represents the collection of research disciplines that deal with humans:

Scimat = Humanities + Social Science + Medical Science

The 1-2-3 insight:

One culture, two systems, three levels !

- There is only one culture—the scientific culture.
- All systems are simple or complex systems; the two are quite different.
- There are always three research levels in any discipline.

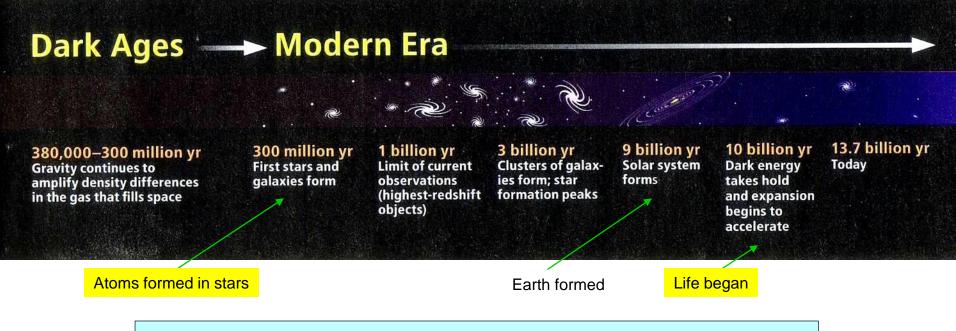
Basic Message 1: It All Started with the Big Bang

The cosmic timeline continues with fairly well-established events leading to the present day.

Earliest Moments of the Big Bang ----- Formation of Atoms

10⁻³⁵ second Cosmic inflation creates a large, smooth patch of space filled with lumpy quark soup 10⁻³⁰ s One potential type of dark matter (axions) is synthesized **10⁻¹¹ s** Matter gains the upper hand over antimatter

10⁻¹⁰ s A second potential type of dark matter (neutralinos) is synthesized **10⁻⁵ s** Protons and neutrons form from quarks 0.01–300 s Helium, lithium, and heavy hydrogen nuclei form from protons and neutrons **380,000 years** Atoms form from nuclei and electrons, releasing the cosmic microwave background radiation



Everything on Earth is made up of atoms (coming from the stars) !

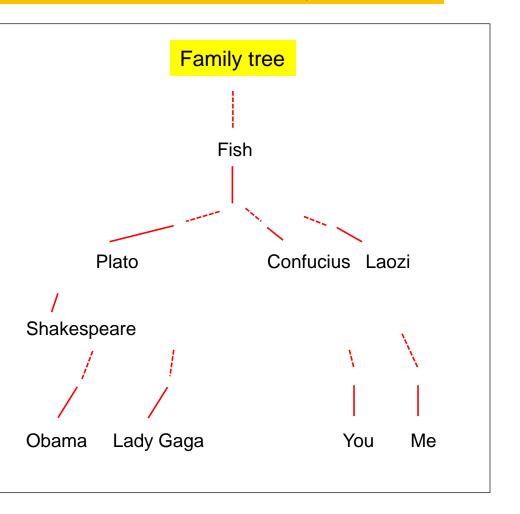
Basic Message 2: We Are One Family

Our ancestor

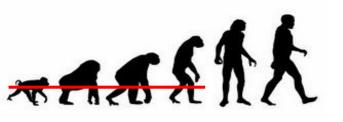
Microbrachius 8 cm, 0.4 billion years ago



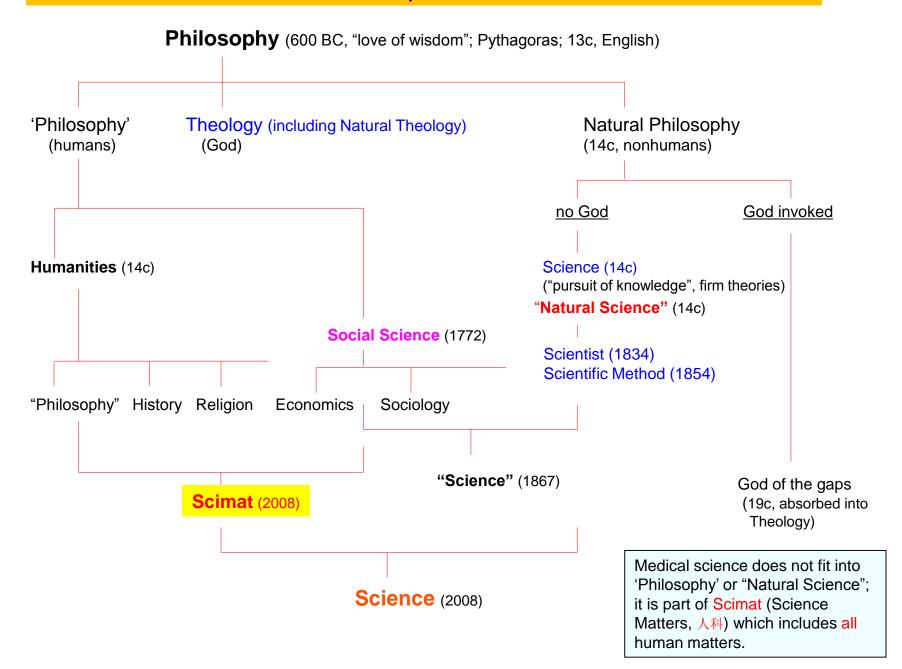
Darwin's evolutionary theory (1859)







Birth of Disciplines & of Science



The International Scimat Program

Step 1 The biennial international scimat conference series



All earnest and honest human quests for knowledge are efforts to understand nature, which includes all human and nonhuman systems, the objects of study in science. Thus, broadly speaking, all these quests are science matters. The methods and tools used may be different, for example, the literary people use mainly their bodily sensors and their brain as the information processor, while natural scientists may use, in addition, measuring instruments and computers. Yet, all these activities could be viewed in a unified perspective—they are scientific developments at varying stages of maturity and have a lot to learn from each other. In this conference, we invite experts from different disciplines worldwide to share their experience and outlooks, and hopefully plan the future together.

Many of the topics included in this conference are under the name of science and culture, science and art, science and society, etc. We do not think these descriptions are useful. For example, by saying "science and culture," it implies that science and culture are two different things, which could be opposing each other. Instead, we view them as different aspects of the same thing—the effort to understand nature, and a new word "science matters" is called for.

Invited Speakers

Leonor Béltran (Portugal, The nature of dance) Paulo Borges (Portugal, Buddhism, meditation & science of mind) Maria Burguete (Portugal, History & philosophy of contemporary chemistry) Paul Caro (France, Culture through science: A new world of images and stories) Clara Pinto Correia (Portugal, Biology: Manipulation of scientific information) Alfredo Dinis (Portugal, Has neuroscience any theological consequences?) Isabel Empis (Portugal, Psychology & life quality) Gilbert Fayl (Belgium, Policy fallacy: Stop talking, do it) Bernardo Herold (Portugal, Science & society) Brigitte Hoppe (Germany, The role of physiognomy in science and art) Lui Lam (USA, Histophysics: Integrating history with physics) Daguang Li (China, Science communication in China) Bing Liu (China, Philosophy of science and Chinese sciences) Dun Liu (China, History of science in globalizing time) Edgar Morin (France, Did a scientific revolution begin?) João Arriscado Nunes (Portugal, Unified science or ecologies of practices?) Maurizio Salvi (Italy, Science & ethics) Nigel Sanitt (UK, The tripod of science: Communication, philosophy and education) Michael Shermer (USA, The science of good and evil)

Advisors

Paul Caro (France) Gilbert Fayl (Belgium) Brigitte Hoppe (Germany) João Arriscado Nunes (Portugal) Maurizio Salvi (Italy) Michael Shermer (USA) Edward Wilson (USA)

Cochairs

Maria Burguete (Portugal) Lui Lam (USA, lui2002lam@vahoo.com)

Contact

Maria Burguete Email: mariaburguete@gmail.com Fax: +351 239 855 570 Phone: +351 239 855 589

Sponsors

Centro de Estudos Sociais da Universidade Coimbra, Barclays Bank, Fundação Luso-Americana, Fundação para a Ciencia e Tecnologia, Fundação Oriente, Fundação Calouste Gulbenkian, British Council

Further information www.ces.uc.pt/science_matters_meeting

2007

The Second International Conference on Science Matters

ARTS & SCIENCE

HUMANITIES AS SCIENCE MATTERS

October 5-7, 2009, Estoril, Portugal

"Everything in Nature is part of solence."

detenses Mattern (Schlag) is the new designer first brack of income dependent matters as part of evidence. Buildet instances all the laying according in particular and earlier performing and the particular. This contracts are being dependent on Bendury, participited and a substances and performing and them the particular. This contracts considered other taples of Sublet are welcome. The contents of Balay tapefore experientee of Sublet, while contracts are each allow? works performed and to exchange black. Headler, instant matters and materials, being and contracts according to a state of the substance of the substance of the state and material and contracts and according to a state performed and to exchange black. Headler, instant materianding will be activated and contains according to a state and to each any the exceeding level of all the devigations. Contracted pages we must welcome and encouraged.

HELL POOL, LESSON OF OFBUT CLEANDO, LESSON OF OFBUT CLEANDO, LANUEL, or any of HODAL, MULL, or any of HODAL, STUDIET, Sharing HODAL, SUBJECT (Sharing) HOPFIL, BUSIETT (Sharing) HOPFIL, BUSIETT (Sharing) HOMAL AND STUDIET (Sharing) HAND AND TO STUDIET (SHARING), STUDIET (SH

And a second secon

Part Caro granne, Birbai Printlen (Samary), Lance Pribling Singare, Bilgille Happe Strength Michael Sharmer anna, Salami O, Wilson anna

Martin Marguntin (Personal and Andreas State Street Street State State

Emil: authologuetelland.com, Phone: + 391 (59 266 3

d Ber State Burgerie (Velland, Faul Ger (Parres), Bert Faul Enrecht, Burgerie (Velland, Faul Ger (Parres), Bert Faul Enrecht, Bert Harres (Bertra), Hen Lie (Mess, Faul Lie (Vella), Blanks, Mail (Jel), Faul Gert (U

ina.h

2009





LL ABOUL SO

PHILOSOPHY, HISTORY, SOCIOLOGY & COMMUNICATION

Calouste Gulbenkian Foundation, Lisbon, Portugal November 21-23, 2011

"Everything in Nature is part of science."

Science Matters (SciMat) is the new discipline that treats all human-dependent matters as part of science, wherein, humans (the material system of Homo sapiens) are studied scientifically from the perspective of complex systems. Science is a subset of human activities aiming to understand how Nature (consisting of human and nonhuman systems) works. The Science process is a human-dependent matter and hence part of SciMat. This third international conference in the biannual series features discussions on human-dependent parts of science, emphasizing the philosophy, history, sociology and communication of science from the perspective of SciMat, while contributions from other topics of SciMat are welcome and encouraged. The conference is made up of review talks on all aspects of science by top experts around the world, and contributed papers. SciMat website: www.sjsu.edu/people/lui.lam/scimat

Invited Speakers

NAME DADINEAU

rom Sovrates in the "Contextual Bred

International Advisors

Paul Caro (France), Bårbel Friedrich (Germany), Janos Frühling (Belgium), Brigitte Hoppe (Germany), Dun Liu (China), Nigel Santt (UK), Michael Shermer (USA), Edward O. Wilson (USA)

Cochairs

Maria Burguete (Portugal, confsciencematters@gmail.com) Lul Lam (USA, lui2002lam@yahoo.com)

Contact

Email: confsciencematters@gmail.com, Phone: + 351 933 256 303

Sponsors



This conference is under the auspices of the International Science Matters Committee; members: Maria Burguete (Portugal), Paul Caro (France), Patrick Hogan (USA), Brigitte Hoppe (Germany), Lui Lam (USA), Bing Liu (China), Dun Liu (China), John Onians (UK), Nigel Sanit (UK), Ivo Schneider (Germany) and Michael Shermer (USA).

Further Information: www.sciencemattersconferences.com

4th International Conference on Science Matters



Humanities as SCIENCE MATTERS History, Philosophy & Arts

"Everything in Nature is part of science."

Science Matters (SciMat) is the new discipline that treats all human-dependent matters as part of science, wherein, humans (the material system of Homo sapiens) are studied scientifically from the perspective of complex systems. Humanities, the knowledge about humans, are thus a part of SciMat. Like in any other subject, humanities could be studied at three different levels or with three approaches - empirical, phenomenological and the bottom-up. This fourth international conference in the biennial series covers all three approaches with particular attention paid to the bottom-up approach. It will emphasize History, Philosophy, and Arts (including Literature). The conference will feature reviews by top experts from around the world, plus contributed papers.

Casa do Infante, O'Porto PORTUGAL, 15th -17th, October 2013

Science history & philosophy professor, Portugal MARIA BURGUETE Generation of 1911: A Case Study in Portugal European Academy of Sciences, Arts & Letters, France JEAN CONNERADE Science, Culture and Anti-science Maître de conférences , France ANNE-SOPHIE GODFROY Science & Gender European Academy of Sciences, Arts & Letters, France FRANÇOISE ICART Arts, Photography & Science San Jose State University professor, United States LUI LAM Science Matters: Its Philosophy and History Biology Professor Minho University, Portugal ALEXANDRA NOBRE Biology & Art Complicity University College London, United Kingdom HAUKE RIESCH Humour and Science Communication Attune Institution, Suriname G.SMITH & NSU, United States E. BASTIDAS Indigenous Knowledge Systems and Science Pantaneto Forum Director, United Kingdom NIGEL SANITT From Science to Fiction Architect & Designer, Portugal RITA ROQUETTE DE VASCONCELLOS Architecture & Form

East Anglia University, United Kingdom KAJSA BERG Introducing NeuroArtHistory: Paintings and Neurons Arts professor, Portugal MARTA DE MENEZES Art and Biology: A Story about Art Research Université de Perpignan Via Domitia, France DAVID SCHMOOL Insights into Solid State Physics: Basic Phenomena and Teaching

European Academy of Sciences, Greece GREGORY VASTATZIDIS Heuristic Potential of Amplifier Simulacrum

Cochairs:

Maria Burguete (Portugal, confsciencematters@gmail.com) and Nigel Sanitt (UK, nigel@sanitt.com)

International Advisors

Manuel Bicho (Portugal), João Caraça (Portugal), Patrick Hogan (USA), Brigitte Hoppe (Germany), Lui Lam (USA), John Onians (UK), David Papineau (UK), Michael Shermer (USA), Edward O. Wilson (USA) and Robin Warren (Australia).

This conference is under the auspices of the International Science Matters Committee; members: Manuel Bicho (Portuga), Peter Broks (JR), Maria Burguete (Portuga), João Carça (Portuga), Paul Caro (France), Patrick Hogan (USA), Brigitte Hoge Germany, Lui Lam (USA), Bring Liu (China), John Onians (WR), David Papiesau (UK), Ngid Santa (UK), No Schneder (Germany), Michael Sherrer (USA), and Abolin Waren (Australia).





Step 2 International Science Matters Committee

ISMC (established May 30, 2007)

Members

- 1. Manuel **Bicho** (Portugal)
- 2. Peter Broks (UK)
- 3. Maria Burguete (Portugal)
- 4. João Caraça (Portugal)
- 5. Paul Caro (France)
- 6. Jean-Patrick Connerade (UK)
- 7. Patrick Hogan (USA)
- 8. Brigitte **Hoppe** (Germany)
- 9. Lui Lam (USA) – Coordinator
- Bing Liu (China) 10.
- 11. Dun Liu (China)
- John Onians (UK) 12.
- 13. David Papineau (UK)
- 14. Kok Khoo **Phua** (Singapore)
- 15. Nigel Sanitt (UK)
- 16. Ivo Schneider (Germany)
- Michael Shermer (USA) 17.
- 18. Robin Warren (Australia)

Aim

To promote the scimat idea and push the International Scimat Program.

Columnist. Scientific

American:

magazine

editor, Skeptic

President of European Academy of Science Arts and Letters

> Author of Cognitive Science. Literature and the Arts

Father of Neuroarthistory

President of British Society for Philosophy of Science (1993-1995)

Shermer

Nobel Laureate (2005)









Connecting Great Minds

SCIENCE MATTERS SERIES Founder and Editor: Lui Lam

Science Matters) is the new discipline that treats all human-dependent matters as part of science, wherein, humans (the material system of Homo septens) are studied scientifically from the perspective of complex systems. That "Everything in Nature is Part of Science" was wall recognized by Artistotie and da Vinci and many others. Yet, it is only recently, with the advent of modern science and experiences gathered in the study of evolutionary and cognitive sciences, neuroscience, statistical physics, complex systems and other disciplines, that we know how the human-related disciplines can be studied scientifically. Science Matters Series covers new developments in all the topics in humanities and social sciences from the Scimat perspective, with emphasis on the humanities.

Science Matters Series - No. 3 All About Science

Philosophy, History, Sociology & Communication

edited by Maria Burguele (Bento da Rocha Cabral Institute for Scientific Research) & Lui Lam (San Jose State University)

There is a lot of confusion and misconception concerning science. The nature and contents of science is an unsettled problem. For example, Thaies of 2,600 years ago is recognized as the father of science but the word science was introduced only in the 14th century; the definition of science is often avoided in books about philosophy of science. This book alms to clear up all these confusions and present new developments In the philosophy, history, sociology and communication of science. It also alms to showcase the achievement of China's top scholars in these areas. The 18 chapters, divided into five parts, are written by prominent scholars including the Nobel laureate Robin Warren, sociologist Harry Collins, and physicist-turned-historian Dietrich Stauffer.

ALL ABOUT SCIENCE

NAMES AND ADDRESS OF TAXABLE PARTY.

Contents: About Science 1: Basics -- Knowledge, Nature, Science and Scimar (Luf Lam): About Science 2: Philosophy, History, Sociology and Communication (Lul Lam): Philosophy of Science: Towards a Phonomenological Philosophy of Science (Cuo-Sheng Wu); The Predicament of Scientific Culture in Ancient China (Hong-Shang Wang): What Do Scientists Know! (Ning/ Sanitt): How to Deal with the Whole: Two Kinds of Hollsm in Methodology (In-Yang Da); History of Science: Helicobactor: The Ease and Difficulty of a New Discovery (Robin Whenenic Science in Victorian Fee: New Observations on Two Old Thoses (Dun Lin): Medical Studies in Portugal Around 1911 (Maria Burguete): The Founding of the International Liquid Crystal Society (Lut Lam): Sociology of Science: Three Waves In Science Studies (Harry Collins): Solitons and Revolution in China: 1978-1983 (Lul Lam): Scientific Culture in Contemporary China (Bing Liu and Mel-Fang Zhangi: Communication of Science: Science Communication: A History and Review (Poter Broks): Popular-Science Writings in Early Modern China (Un Vin): Other Science Matters: Understanding Art Through Science: From Socrates to the Communal Brain (Kajua Borg): Spy Video Carnes After 9/11: Narrative and Pleasure (Ting Ting Wang): Statistical Physics for Humanities: A Tutorial (Dietrich Stauffer);

Readership: Humanists, social and "natural" scientists, and laypeople interested In science.

456pp	Oct 2014	
978-981-4472-92-0	US\$0E	450
978-081-4508-19-3(pbk)	U5545	£30
978-881-4472-93-7(abook)	US\$114	£75



SCIENCE MATTERS SERIES

Science Matters Series - No. 2

ARTS: A SCIENCE MATTER ochod by Maria Burguete (Schmille Research) Instant Bana da Rocha Cabral, Ponugali & Lui Lam (San Jose State University, USA)

This book ironis ans as part of science, from the unified perspective of Science Manuers. is contains 17 chapters, with 18 contributors who are prominent humanists, professional unisis, or scientisis, h consists of three pans;

Pan I: Philosophy and History of Arist Pan II: Aris In Action: Pan III: Understanding Ans. The book is aimed at both research scholars and laypeople, and is unique in two imponant aspects.

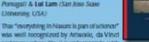
is is probably the first and only book that academic prolessionals and practicing anisis contribute to the same book, as equals, on the common theme of creating and understanding ans. (Anisis here include Crissina Leiria whose huge Run Iam (Coddess of Mercy) sculpture is an Imponare landmark in Macau, and the famous movie director, Hark Tsul, who is publishing his first ever anicle on movie-making). Perhaps more imponantly, a new understanding of the origin and nature of ansis offered for the first time, which is more convincing than all the other hypotheses put forth in the last two thousand years.

Readership: Scientises, anises, humanises and laypoople.

196pp	Apr 2011		humanise and
78-981-4324-93-9	US\$78	£48	27100
178-981-283-594-9(ebook)	US\$95	162	978-981-283

Science Manues Series - No. 1 SCIENCE MATTERS

Humanities as Complex Systems ection by Maria Bargaria (Scientific Research Institute Bento da Rocha Cabral, Porsugal) & Lui Lam (San Jose State Linnersity: LISA)



was well recognized by Arbenie, da Vinci and many others. Yes, it is only recordly, with

she advens of modern science and experiences gamend in the such of statistical physics, complex systems and other disciplines. that we know how the human-related disciplines can be studied acteneitically.

Science Mawers is about all human-dependent knowledge, wherein humans the material system of Homo saptom) are sudied actenditically from the perspective of complex systems. It includes all the topics covored in the humanities and social sciences. Containing contributions from knowledgeable humanias, social scientises and physicises, the book is intended for those - from shises to scientilies --- who are curious about the world and are interested in understanding is with a unified perspective.

Readership: Physicises and other scientises, social scientises, d taypeople.

271pp	Nov 2008	
978-981-283-593-2	LI5\$73	£48
978-981-4324-94-6(ebook)	U\$\$108	£71

ORDER FORM Please complete the form and send it to any of our offices below. Alternatively, you can order via our online bookahoo at www.workdscientific.com

EUROPE & THE MOOLE EAST

World Scientific Publishing Co. Inc. 27 Warren Street, Suits 401-402, Hadamasck, NJ 07801, USA Fex: 1-201-407-9930 Tel: 1-201-467-9655 Entail: sales @wspc.com

NORTH & SOUTH AMERICA

olo Manton Book Sanibas PO Bac 266, Akhgion, Ovan Olt 4 411, UK Fac 44 (0.120 546 5255 World Scientific Publishing (UR) Ltd. Tel: 44 (2) 123 549 5500

World Scientific Publishing Co. Pte. Ltd. Famer Road, PO Box 126, SINGAPORE 912805 Fair: 65 0487 7567 Tel: 45 8466 5775 Crail minagempt.com.ag

ASIA & THE REST OF THE WORLD

	TITLE SELECTION			CONTACT INFORMATION
WTLA(4)		env	PRICE (URSIC)	The & Sector
		+	-	Ogeniation
	NODE OF DELIVERY		6a	Attur
AVMENTIC DUPING HUN	METHOD OF PAYMENT	(Juneia)		
For chappe payment in Europe and the	US\$4 No chegue payetie to "World Scheedlik. Pub Midde Ellat, panae maile chegue payetie to e world, pienee traine chegue payetie 17 Wo	Meritian Boot	a Services"	Certanda
and No:		w		Courtry Ermi
Please bill my company / institu Signature	tion :	w peer	n slind julicies sites	- Special Phase are a solidite to developing counters and some Section Scripture assume Phase other in further states.

Ernall direct orders dimension to us

Science Matters Humanities as Complex Systems



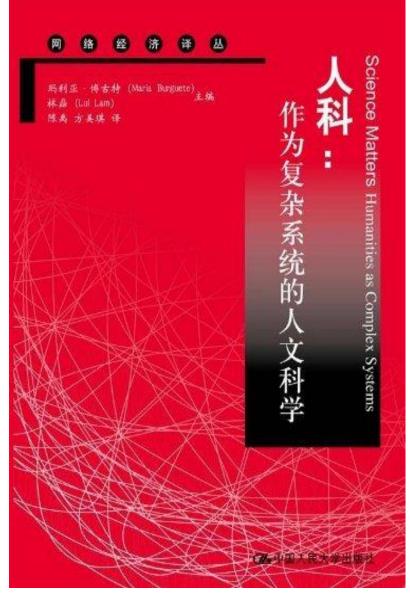
Maria Burguete and Lui Lam Editors 0

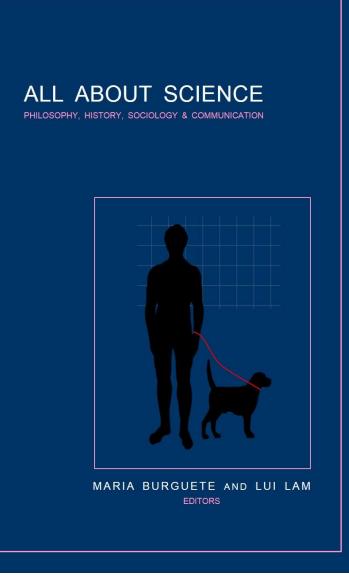
ARTS A SCIENCE MATTER

MARIA BURGUETE AND LUI LAM

2011

2008





Todas se questivas humanas do conhecimento colocadas de forma honesta e sincera, constituem estorgos para compreender a Natureza, nala se incluiado todos os seus objectos de estudo formados por sistemas humanos e esteranas não humanos. Ausim, de um modo genil, todas estas questões partencem ao dominio da ciñecia. Os métodos e as ferramentas utilizadas podem ser difenentes, comparte se trate de um especialista da sina das ciencias humanas e accisis ou um especialista da sina das ciências naturais. No entanto, todas estas actividades, visualizadas numa perspectiva unificada, são actividades cupos desenvolvimentos científicos se encostnam em estácios de maturidade diferentes e que por conseguinto, tim imanos a aprender umas com as outas.

A Gièncie Humena (Science Matters cu Scimat) è actore todo o conhecimento dependente do ser humano, no qual ce seres humanos (o sistema material do Homo Sepiena), allo estudados científicamente, na perspectiva de sistemas complexos.

A Scinat inclui todos os tópicos abrangidos pelas hamanidades e ciências sociais comparticular neslos paras arte, a literatara, o cinema, a caltara, a história, a filosofía, as ciências da comunicação e os estados de ciência.

Maria Burguete neafcou o seu Dostoramento en História das Ciènciae (Duinica Contemporánea) na Universidade Ludwig Maximiliana en Munique, Alemanha en 2000. Foi a primeira Bioquinica a Sendian-se na Faculdade de Cièncias de Lisboa en 1982, após a conclusto do Bacharelato en Engenharia Quinica em 1979 es Instituto Superior Engenharia de Lisboa (SEL). Centista con vesta experisincia decente e de investigação numa grande variadade de áreas científicas. Esta diversidade contribuis para o deservolvimento de sas interdisciplinaridade e transdisciplinaridade. Actualmente, é investigados no Instituto Investigação Científica Bento da Rocha Cabral em Portugal. Pablicos de lives científicos e cinco livros de poseia para siêm de mais de 30 artigos científicos, na sua maisma na área de História e Filosofia das Ciências. Desdis 2010 é membro correspondeste de Academia Europsia dela Cièncias, Artes e Latras, fundada em Para em 1990. Emei: maximaria se3448 grad.com

Lai Larry, cientista e humanista, obtave o seu Bachanelato em Ciências, com distingão da Universidade de Hong-Yong, o Master em Ciências da Universidade de Brish Columbia e o Doutonamento ne Universidade de Columbia. É professor catedrático de Fisica na Universidade de Sas Jose, California e de Asacciagão Chinesa para a Ciência e Tecnologia. Em 1982, o Profeseor Lam inventou "Bowfoa" (um dos três époc de cristais fiquidos existentes no mundo) em 1980 crise um novo paradigme para sistemas camplexce. "Active Walk", e crisu dass novas disciplinas: Histophysics (2002) and Scimat (Science Matters, 2007/2003). Lam publicou 14 invos e mais de 190 actigos científicos. E o fundador da Intenational Universitade Society (1990) e co-fundador da Chinese Liquid Crystal Society (1960); fundador e estaro principal de dusa sinise de livros: Science Matters, Morid Scientífici e Partially Ordened Systema (Springe). As suas invas de investigação ado actualmente score histófaica, sistemas complexos e Science Maters. Emais huitocolarrillo da cuas sinise do Science Maters.



Maria Burguete Lui Lam

Ciência Humana

Ciência Humana

Uma Perspectiva Unificada em Humanidades e Ciências



Maria Burguete e Lui Lam Editores

Instituto de Investigação Científica Bento da Rocha Cabral

2015

The Center is:

- To do fundraising to support the Center financially.
- To organize international workshops/conferences and summer/winter schools.
- To give out an Award every two years (for an individual who contributes significantly in the advancement of scimat).
- To host short-term visiting scholars (who will give lectures/short courses, who will also collaborate with existing faculty members and students of any discipline, especially from the humanities).
- To help match faculty members from humanities and science departments, and give them release time to create new interdisciplinary courses such as a course on "Science of History".
- To help spread the new, ultimate general-education course "Humanities, Science, Scimat" for undergrads of all majors, in all universities worldwide.

The HuSS Course

The Course Description

This is a trans-disciplinary and cross-cultural course, taught according to Confucius' dictum of "instruction knows no social distinction; teach according to the student's aptitude".

The course consists of three parallel components:

- 1. The instructor will introduce the proper relationships between humanities and (natural) science, from the perspective of scimat.
- 2. The class (of maximum 30) students will be divided into five teams, with 5-6 persons per team. Each team will work on a (research) project of their choice and approved by the instructor, to investigate what had been done scientifically on that topic, with the help from the web, library and experts around the world. Students will present oral progress report in class, some with power-points. Each team will hand in a written report in English (in the form of a publishable paper) at end of course. Outside speakers could be used.
- 3. The teams will be treated and guided like research teams. They will learn how to do good research, do presentation and write research papers, both in English. (Some papers could be published in international research journals.)

Objective

At end of class, the students will learn

- 1. The proper definition of science
- 2. The proper relationships between humanities and science
- 3. The proper understanding of history, arts and philosophy
- 4. The new multidiscipline called Scimat
- 5. Use Excel to program, calculate and plot results of some stochastic systems (such as Random Walk)
- 6. How real research is done
- 7. Team work
- 8. Communicate efficiently and do *professional* presentations in MS power-point (ppt)
- 9. Write English papers in publishable form

Schedule and Grades

	Tuesday		Thursday
7/7	First lecture (form teams, discuss possible topics)	7/9	Finalize team projects; start research in teams
7/14	Oral progress report from each team; continue research; teach Chaps 2-4	7/16	Oral progress report from each team; continue research; teach Chap 5 (History) 7/17-19 Meet with each group
7/21	Oral progress report from each team; continue research; teach Chap 6 (Arts)	7/23	Oral progress report from each team; continue research; teach Chap 7 (Philosophy)
7/28	Exam on Chaps 2-7 of text; oral presentation of draft of paper from each team; continue research; revise paper	7/30	Submit team paper; revise; submit final paper
		7/29	Jam session

Exam: There will be <u>one</u> (multiple-choice + fill-in answer) exam on July 28, 2015, to check that the students have actually read Chaps 2-7. <u>No make-up exams will be given!</u>

Grades:

	Maximum grade
Oral presentation*	30%
Written Exam	20%
Final paper	40%
Participation	10%
total	100%

* Each student has to present at least 3 oral presentations in class, with at least one in ppt; asking questions after other students' presentations is counted as an oral presentation. The top two grades of oral presentations will be chosen. You are welcome to give more than 3 if there is a chance to do so.

Important remarks:

• If you cheat in any form, you will be dropped from class and receive a zero grade, and will be reported to your department.

• Extra credit will be given to students who volunteer and are chosen to do extra work and present it in class.

• Debate and prepare to defend your own ideas! Be skeptical and critical to others' ideas!

• Be responsible! Be courteous!

• Starting July 14, presentation from each team <u>at the beginning of class</u> will have to be given with ppt.

• Each team has a "contact" person (not a leader), nominated by the team.

• Each team has a "publisher" that works with me, after the summer school, to finalize the paper and submit it to the journal.

Class Portrait







Questions Prompted by Newspaper Reading

Ann Tian Date Shane When the baby is upset. how could the father do? There is a nows about the TV show "The fathers comes back "Recently, the super stars Du Ivang and his wife Huo Siyon's son becomes famous because he us cute, but in last time's TU show, their baby become angry casily and the father stand know what to do to comfort him. There is a question in this phenomenon: What should the parents do when they are fairing an ourpset baby? The When If parents typore them - They may feel hurt and too If parents care much about them - They may be dependent and and di So, we can do some pythological rea research on whether the babies who are ignored becomes hurt, and become and if the ones who are cared very much become dependent.

DATE / / NO (02 The Why women cannot be tain initiative in a relationship) Is there any "sexual discrimination"? =) Is there enough equal between men and water woman in China? And why does this phenomenon appear? CIO. Why did in Hewei almost act in "Lost in Fai Thailand? If he had acted in this movie, What would happen? Bob (BO7. What indoes B2B mean? What does it do? what problems is BDB facing with now and how can it solve these problems? What Find of future Will B2B havo? AR/AB. What is "Yituo"? What's the damage? How can they cheat others? Why people I believe them ? How can we stop them or avoid being deceived?

Martet and housing price?

2. How to regard the phenomenon that nomen propose to men forwardly: Do that mean a popularity of terrinism?

3. In today's society, we should choose which kind of lifestyle? Fast-paced according to the reality or being a slow person following our hearts?

Speaking Out in Class



July 29 Wednesday: The Jam Session





July 30 Thursday: Paper Presentation and Party







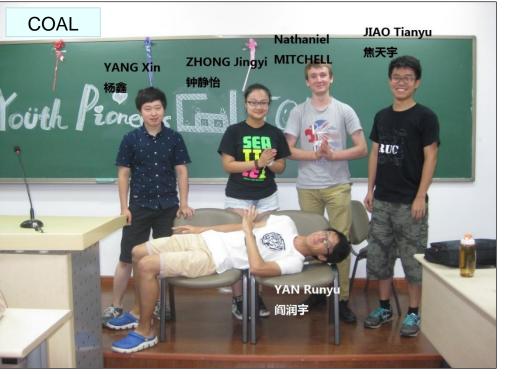


The Youth Image in Chinese and American Youth Films

Yue GUO¹, Wen-Jing LIU², Hong-Xian NIU³, Tong-Hui QU⁴ and Yu-Ting WANG⁵

¹ School of Journalism and Communication, Renmin University of China, Beijing 100872, China
 ² School of Sociology and Population Studies, Renmin University of China, Beijing 100872, China
 ³ School of Science, Renmin University of China, Beijing 100872, China
 ⁴ School of Public Administration and Policy, Renmin University of China, Beijing 100872, China

⁵ School of Labor and Personnel, Renmin University of China, Beijing 100872, China



Relationships between Mobile-Phone/Internet Usage and Socioeconomic Development Level

Tianyu JIAO¹, Nathaniel MITCHELL², Runyu YAN³, Xin YANG⁴ and Jingyi ZHONG⁵

¹ School of Finance, Renmin University of China, Beijing 100872, China
² Mathematics Institute, University of Warwick, Coventry, United Kingdom
³ School of Philosophy, Renmin University of China, Beijing 100872, China
⁴ School of Information, Renmin University of China, Beijing 100872, China
⁵ College of Art and Science, University of Washington, Seattle, Washington, USA



Sharing Economy Encountered Legal Quagmire: When Private Cars Entered the Taxi Market

Shi-Peng CAO¹, Zi-Xin CHEN², Rong-Ze MA³, He YAO⁴ and Jie YUAN⁵

¹ School of Law, Renmin University of China, Beijing 100872, China
² Department of Physics, Renmin University of China, Beijing 100872, China
³ School of Economics, Renmin University of China, Beijing 100872, China
⁴ School of Administration and Policy, Renmin University of China, Beijing 100872, China
⁵ School of Sociology and Population, Renmin University of China, Beijing 100872, China



From Arranged Marriage to Autonomous Marriage: Marriage Liberalization in India, Ancient Rome, United Kingdom and China

Cuo-Mu CIREN¹, Dan-Dan LIANG², Xiao-Fan LUO³, Yu-Xuan XIA⁴, Xi YAN⁵ and Yu-Guang YANG⁶

¹ School of Business, Renmin University of China, Beijing 100872, China

- ² School of History, Renmin University of China, Beijing 100872, China
- ³ School of Labour and Human Resources, Renmin University of China, Beijing 100872, China
- ⁴ School of Business, Renmin University of China, Beijing 100872, China
- ⁵ School of History, Renmin University of China, Beijing 100872, China
- ⁶ School of Economy, Renmin University of China, Beijing 100872, China



Teachers' Awareness of Cross-Cultural Communication in Confucius Institute

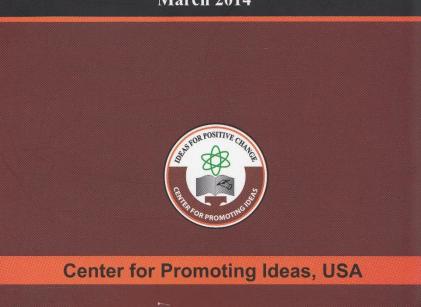
Ze HU¹, Xiao-Li SHA², Yan TIAN³, Lei YANG⁴ and Xi ZHANG⁴

¹ School of Science, Renmin University of China, Beijing 100872, China
² School of International Studies, Renmin University of China, Beijing 100872, China
³ School of Philosophy, Renmin University of China, Beijing 100872, China
⁴ School of Liberal Arts, Renmin University of China, Beijing 100872, China

ISSN 2220-8488 (Print) ISSN 2221-0989 (Online)

International Journal of Humanities and Social Science

Vol. 4, No. 5(1) March 2014



Publication fee provided by RUC.









Feedback

2回人成大學

rigorous 乎谨、细致、大无、坚持、领国, 这就是您给我的们就。 在我眼中.怨是一位坚持自己.投手 研究. 对管生相当相当相当人责 vio 老师,如果用一个词来到客,那就是 "科友"特殊 每次上深,都上兼公调热,不许我们还到 只深恐有已迟到(2),为争取空教室 动国引时间折腾了起太一番 有时要为自己vin权利努力争取…… 明研怨、派国的老师(光浪童)~~ 2月天 月月 Sha Xiao-Li

"With an apple, I will astonish fairs" To me, this class is like the apple which opens a new door during my college life. It's hard to imagine that I can learn so many things within just a few weeks. But it's true. I do have a special experience. tirstly, I'm impressed with the new concept - "scimat". There are many misunderstandings about science. I think it's scrimat that provides us with a new way and a correct way to define science. and do research. I will adapt some of the research methods mentioned in our class.

Secondly, my presentation skill is getting better thanks to our professor. For example, how to beautify my ppt and

how to process my article on the computer, Best wishes! Xiao Fan

DATE Thank you for your guidance and the new points you presented. The ideas of scimat and trans-discimethods really inspired me a lot. The experience and knowledge I have obtained will be useful in the future. And the idea of scimat interests me, perhaps it will be beneficial for my further study. Best Wishes. Yn-Xnan Xia

I haven't touched with physics for almost 5 years or more before this class. So thank you for give me another chance to experience the beauty of physics. And I also learned some skills about how to operate PPT and Word and Excel which I think it's helpful for my Tuture study no matter in which field. Thank you! Zhang Xi Zeits July 2015 Professor Lam: Thank you very much for teaching me how to do professional research in English. When I first gave a presentation before all classmates, I was very nervous.

But today, when I stood there again, I felt good and confident. I think without this course, I will not have this amazing change ! Also, I think anther I have learned in thiss colass is on time. Doing reacte research requires oware ness of time, I think through this process I understood one of the significant thing in researching is keeping time sense. Thank you for teaching me so much! Tvan Jan

IN dig July 30th, 2015

bowen20.5X14.3cm

Conclusion

• This is the only GE course that clarifies the connection between all the disciplines in a university, from a historical and unified perspective.

• This is the only course that systematically teaches all undergraduates to do research (by really doing it).

• The course provides the basic and core understanding about where we come from and why we are what we are, which should be shared by every living human being (in particular, the political leaders, present and future) in this world.

• This GE course can be taught by any instructor in any university worldwide.

• This course is cross-cultural and interdisciplinary, taught with everything recommended by the experts on how it should be done.