

## Redeeming Technology

This series of half-day workshops brings together creators of technology, users of technology, and thinkers of technology to explore the opportunities available in bringing a Christian understanding of technology to bear on research, teaching and life. The workshops will take place over five mornings, on the first Saturday of alternate months. Discussions and interactions will be based around talks given by two speakers for each session.

### 7<sup>th</sup> October 2017: **Introduction**

Can “Stuff” be Morally Good? - Dr Mike Brownutt

Overview: Beyond a Utilitarian View of Technology - Dr Leung Wing-Tai

### 2<sup>nd</sup> December 2017: **Redeeming Technology in Principle and in Practice**

Searching for Christian Values that could Redeem Technological Systems

Prof Lauren Pfister

Technology and Human Nature - Prof John Wyatt

### 3<sup>rd</sup> February 2018: **Redeeming Business, Advertising and Propaganda Technology**

The Business of Artificial Intelligence - Prof Keith Chan

When Fact is Fictional and Truth is Fiction - Dr Melba Maggay

### 7<sup>th</sup> April 2018: **Redeeming Personal and Communication Technology**

The Role of Personal Technology in Modern Communications - Prof Ah Chung Tsoi

Christianity and Technology: The Uneasy Connection - Prof Bob Fortner

### 2<sup>nd</sup> June 2018: **Redeeming Educational and Religious Technology**

MOOC and the Knowledge and Education Exchange Platform (KEEP) - Prof Irwin King

Technology, Religiosity and the Changing Face of Humanity - Dr Yam Chi Keung

This document provides the full details of the speakers. For further information, visit the FaSCoRe website (<http://faithandscience.hku.hk>).

## Session 1.1: Introduction

7<sup>th</sup> October 2017

**Title:** Can “*Stuff*” be Morally Good?

**Speaker:** Dr Mike BROWNNUTT

Faith and Science Collaborative Research Forum, University of Hong Kong



Mike Brownutt obtained his first Master’s degree (MSci in physics) and his PhD (in experimental quantum mechanics) from Imperial College London. Following this he moved to Innsbruck, Austria, for eight years, firstly as a post-doctoral researcher and later as an Assistant Professor, developing scalable architectures for quantum computers. Throughout this work he has had an abiding interest in the relationship between science and religion. He completed his second Master’s degree (MA in theology from the University of Chester) considering how “faith” is understood by various parties in discourse on the relationship between Christianity and science. Now living in Hong Kong, he is Associate Director of the Faith and Science Collaborative Research Forum.

### **Abstract:**

We are used to the idea that *people* can be good or bad, but it is less obvious to see how an inanimate object – without desire or volition – can be morally good or bad. This talk therefore considers what it means to redeem, or even need to redeem, a *thing*.

The things people make, from guns to phones to Coke cans, are designed to be used in particular ways. This inbuilt purpose is not value free, and predisposes objects – deliberately or inadvertently – to be used in ways which are morally value-laden: you *can* use a gun as a paperweight, but you are using it wrong.

The engineers and scientists who develop new technologies are in a unique position, and have a unique responsibility, to be aware of the moral dimension of their work. This awareness can open new vistas for research. It enables us to move beyond the usual puzzles of finding how to make something faster, lighter, or cheaper, and ask how to make something which is, morally speaking, *good*.

### **Reading:**

- “Do Artifacts Have Politics?” Langdon Winner.  
Article #55 in Scharff and Dusek.

## Session 1.2: Introduction

7<sup>th</sup> October 2017

**Title: Overview: Beyond a Utilitarian View of Technology**

**Speaker: Dr LEUNG Wing-Tai**

Founding President, Lumina College, Hong Kong



Leung Wing-Tai has had an education spanning science, theology, media, management, and communication. He has a PhD in Communication (Regent); Master of Fine Arts in Cinema-Television (University of Southern California); MTS in Christianity & Society (Gordon-Conwell Seminary); MA in Radio-TV-Film (Bowling Green State U); and a BSc in Physics-Chemistry (HKU).

Dr Leung has demonstrated a life-long commitment to cultivate values and worldviews among youths and leaders, through the media and higher education. He served in - and later became the Head of - *Breakthrough*, a youth-culture organization. He currently serves as the founding President of Lumina College, a Christian higher education institute. He has served as the producer of award-winning youth media, and is involved in public policies for the government advisory system and church leadership. He has been an invited keynote speaker at international conferences on youth, media, culture, education, faith and futuristic concerns, and has authored ten books addressing these topics.

### **Abstract:**

This is an overview of technology beyond the utilitarian view to the philosophical, ethical and theological levels. What do we gain and lose in an invention? Does the form of technology shape human consciousness and culture? Is technology merely a tool or will it rule over humanity? What is the inner logic of technology? Is what *can* be done what *should* be done? What about the cases of gene cracking and human cloning? Are there any gender biases in technological development? What are the characteristics of convivial tools? What are the biblical views of technique and technology? What is to be said of either utopian or dystopian visions of a technological future? How, in light of this, can we redeem technology?

### **Readings:**

- “From Tools to Technocracy” Neil Postman (1992) in *Technopoly*, Knopf (pp. 21-39).
- “Tool Users vs. Homo Sapiens and the Megamachine” Lewis Mumford.  
Article #32 in Scharff and Dusek.
- “A Moratorium on Cyborgs: computation, cognition, and commerce” Evan Selinger and Timothy Engström.  
Article #52 in Scharff and Dusek.

## Session 2.1: Redeeming Technology in Principle

2<sup>nd</sup> December 2017

**Title:** Searching for Christian Values that could Redeem Technological Systems:  
Complications, Challenges, Confirmations

**Speaker:** Prof Lauren PFISTER

Department of Religion and Philosophy, Hong Kong Baptist University



Having obtained Master's degrees in both theology and philosophy, Lauren Pfister gained his PhD in Comparative Philosophy from the University of Hawai'i at Manoa. He has lived in Hong Kong with his family for thirty years, where he was Head of the Department of Religion and Philosophy (2010-2011) and Director of the Centre for Sino-Christian Studies (2012-2017), both at Hong Kong Baptist University.

He has written widely on Chinese philosophy in the context of Christian, Buddhist, Confucianist (Ruist) and Daoist thought, with particular emphasis on what he has coined "missionary scholars" such as the Scottish Congregationalist James Legge (理雅各 1815-1897) and the German Lutheran Richard Wilhelm (衛禮賢 1873-1930). His research is published in English, Chinese, and German, and he has translated significant texts on science and religion from Chinese to English, and from English to Chinese. Among other organisations, he is a member of the Society of Christian Philosophers, the International Jacques Ellul Society, and the Society for Philosophy and Technology.

### **Abstract:**

In order to offer Christian ways toward engaging various dimensions of our technologically-infused modern environment in A.D. 2017, we must first face some specific conceptual and theoretical complications in the literature related to the philosophy of technology. Following precedents set by Hans Jonas, Lewis Mumford and Jacques Ellul, I will argue that we must reject any reductionistic account of "technology" or technologies that considers them only to be about machinery and our innovative ways of advancing their efficiency. Instead, we must recognize the fundamental transformation of our 21st century forms of life by means of a new kind of technological environment that has created a dynamic system of values shaping, guiding, and changing a vast interconnecting network of technological systems that embraces and restructures us as humans within the various dimensions of our familial, communal, social, national and international experiences.

In order to address these conceptual and theoretical complications, I will develop the Ellulian concept of “environment” as it is applied specifically to “the technological environment” and “the [modern] technological phenomenon”. By this means we can begin to explore the practical challenges that await our self-conscious efforts at setting forth some Christian responses to our current embeddedness within the “Megamachine” (Mumford) and the pervasiveness of the “iGod” illusion (Nicolas Carr) that has been intensified through the so-called “World-Wide Web”. By these means we will seek to comprehend more about the “double-edged sword” of technological environments that have simultaneously included new and massive “advanced levels of human progress” and (especially within the contexts of environmental degradation and new military complexes) unprecedented forms of inhumane and more-or-less autonomous tendencies toward massive destructiveness.

We will approach some initial Christian responses by comparing the three inherent values driving technological research and innovation – seeking for “the fastest, the cheapest, and the means that produces the greatest impact” – with those found in the Beatitudes (Matthew 5: 3-12), the Greatest and Second Commandment, and the Pauline vision of an engaged cross-cultural transformative Christian form of life (Philippians 4: 8-9). Within these processes we will explore more of the practical and spiritual challenges in coming-to-awareness as Christian persons, families, and communities within our modern technological environment, and pinpoint various areas where we should develop forms of resistance to “technicization”, creative alternatives that reintroduce Christian humaneness into “artificially ignorant” and “artificially insensitive” technical systems, as well as consider specific means for living out Christian ways as adults, teachers, family members, church members and professionals to transcend what would otherwise become forms of life completely compliant to dominant values inherently at work within our expansive technological environment.

#### **Reading:**

- “Toward a Philosophy of Technology” Hans Jonas.  
Article #20 in Scharff and Dusek.
- “Tool-Users vs. Homo-Sapiens and the Megamachine” Lewis Mumford.  
Article #32 in Scharff and Dusek.\*
- *What I Believe* (1989) Jacques Ellul, William B Eerdmans Pub. Co. Specifically, what he says about “Environment” (pp. 99-103) and what he says about “The Technological Environment” (pp. 133-140).

#### **Further Reading:**

- “Ellul’s Corpus: A Brief Overview of His Writing” in Andrew Goddard (2002) *Living the Word, Resisting the World: The Life and Thought of Jacques Ellul*, Paternoster Press (pp. 51-57).
- “La Technique and Beyond” in Andrew Goddard (2002) *Living the Word, Resisting the World: The Life and Thought of Jacques Ellul*, Paternoster Press (pp. 134-151).

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\* This was also one of the set readings for Session 1. If you have read it already, you are all set. If you missed it for Session 1, now is your chance to engage with it.

## Session 2.2: Redeeming Technology in Practice 2<sup>nd</sup> December 2017

**Title:** Technology and Human Nature:  
Is it ethical to use technology to enhance our bodies and minds?  
Should we change our fundamental human nature?

**Speaker:** Prof John WYATT  
Ethics and Perinatology, University College London



John Wyatt is Emeritus Professor of Neonatal Paediatrics at University College London. He was previously Professor and academic lead for the Neonatal Intensive Care Unit at University College London Hospitals, an internationally recognised centre for the care of critically ill new-born infants. He has a special interest in the implications of advances in technology for the future of humanity and he is currently leading a research project based at the Faraday Institute on the philosophical, social and ethical implications of advances in robotics and artificial intelligence.

Prof Wyatt will be presenting his talk, and participating in the Q&A / discussion, live from the UK.

### **Abstract:**

The idea of using technology to enhance and improve the function of our bodies and minds can be traced back to the European Enlightenment, in the writings of Diderot and other thinkers. It can be considered part of the "Enlightenment Project" but it has taken more than 200 years for this to become technically feasible. The Canadian writer George Grant wrote that the fundamental goal of technology is the mastery of nature, and the mastery of human nature represents the final frontier for this way of thinking. We don't have to accept the limitations of our own bodies - we can transcend and change our humanity.

Christian responses to these challenges have been varied. Some see use of technology to improve humanity as a form of "co-creation", taking on and enhancing the creative work of God. Others see it as a threat to the goodness of creation and the way in which the original embodied human nature is vindicated and affirmed in the life, death and resurrection of Jesus. There is no doubt that enhancing technology will become increasingly powerful and widespread in the coming decades and thoughtful responses are urgently needed.

### **Reading:**

- "In Defense of Posthuman Dignity" Nick Bostrom. Article #43 in Scharff and Dusek.

### **Further reading:**

- *Technology and Justice* (1987) George Grant, University of Notre Dame Press.
- *Transhumanism and Transcendence: Christian hope in an age of technological enhancement* (2011) Ronald Cole-Turner (ed), Georgetown University Press.
- *Resurrection and Moral Order* (1994) Oliver O'Donovan, Inter-Varsity Press.

## Session 3.1: Redeeming Business Technology

### 3<sup>rd</sup> February 2018

**Title: The Business of Artificial Intelligence**

**Speaker: Prof Keith CHAN**

Department of Computing, Hong Kong Polytechnic University



Keith C.C. Chan graduated with a B.Math. (Hons.) degree in Computer Science and Statistics and an M.A.Sc. and Ph.D. degree in Systems Design Engineering from the University of Waterloo, Canada. Soon after graduation, he joined the IBM Canada Laboratory in Toronto, Canada, as a software analyst and was involved in the development of multimedia and software engineering tools. After spending four years in the industry, he returned to academia and joined the Ryerson University in Toronto, Canada as an Associate Professor for a year. He then returned to Hong Kong to join The Hong Kong Polytechnic University where he is currently a Professor in the Department of Computing. From 2002 to 2008 he was the Head of the Department, and from 2011 to 2016

he was the Dean of Students.

Chan's research interests are in Artificial Intelligence, Machine Learning, Big Data Analytics, Bioinformatics, Fuzzy Systems, Nature-Inspired Computing and Software Engineering. He has 250 research publications in these areas in refereed journals and conference proceedings and has also been serving actively as organizer and program committee member of numerous conferences. Chan's research has been supported by the Research Grants Council, the Innovation and Technology Commission of the HKSAR Government and the industry. He has been active in "knowledge transfer" through consulting and contract research.

## Session 3.2: Redeeming Advertising and Propaganda Technology 3<sup>rd</sup> February 2018

**Title: When Fact is Fictional and Truth is Fiction**

**Speaker: Dr Melba MAGGAY**

Social Anthropology, Institute for Studies in Asian Church & Culture



Melba Padilla Maggay is a communication specialist with an anthropological interest. She graduated from the University of the Philippines with a first degree in Mass Communication (Cum Laude) and a Master's degree in English Literature, with her thesis titled, Towards an Adequate Definition of Terror. Her Ph.D. dissertation, published as "PAHIWATIG, Kagawiang Pangkomunikasyon ng mga Pilipino" by the Ateneo University Press, is the first scholarly and comprehensive analysis of Filipino communication patterns. The book is now a major reference for students of Philippine culture and intercultural communication issues.

A specialist in intercultural communication, she was research fellow on the subject at the University of Cambridge in the UK under the auspices of Tyndale House, applying it to the question of culture and theology. She has lectured on this and other cross-cultural issues worldwide, including a stint as Northrup Visiting Professor at Hope College, Michigan and Visiting Lecturer at All Nations Christian College in England. As a development specialist and practitioner, she has initiated and supervised research projects and ground-breaking grassroots work as president of the Institute for Studies in Asian Church and Culture, a research and training organization engaged in development, missiology and cross-cultural studies aimed at social transformation. She is also President of the Micah Global, a network of more than 750 faith-based development organizations worldwide, where she serves as resource person on culture and development issues.

## Session 4.1: Redeeming Personal Technology

7<sup>th</sup> April 2018

**Title:** The Role of Personal Technology in Modern Communications

**Speaker:** Prof Ah Chung TSOI

Faculty of Information Technology, Macau University of Science and Technology



Tsoi Ah Chung obtained his Master's and subsequently PhD in Control Engineering at the University of Salford, UK, and subsequently held positions at several universities across Australia. He has served as the Vice President (Research and Institutional Advancement) of Hong Kong Baptist University, (2007–2010) and Dean of the Faculty of Information Technology at Macau University of Science and Technology (2010–2015). His current research interests include neural networks, fuzzy systems, artificial intelligence, internet information retrieval, and web spam detection.

### **Abstract:**

In this talk, we will consider the roles which could affect the ways we communicate with one another. This includes the ways in which a message could be communicated and understood by the recipients, the possible deployment of spoken dialog systems in educational contexts, the ways in which we could persuade another person to accept a point of view. Each of these areas has been impacted by recent advances in technologies, particularly in the areas of text retrieval, spoken dialog systems, machine translation, videos manipulations, and virtual and augmented reality. We will first highlight some of the technical capabilities of these technologies, noting the developments in recent years. We will then give examples of how such technologies could be used in the context of modern communications.

## Session 4.2: Redeeming Communication Technology

7<sup>th</sup> April 2018

**Title:** Christianity and Technology: The Uneasy Connection

**Speaker:** Prof Bob FORTNER

School of Media Communication, Palm Beach Atlantic University



Robert Fortner received his B.A. degree from Otterbein College in Westerville, OH, his M.A. from Indiana University in Bloomington, IN, and his Ph.D. from the Institute of Communications Research at the University of Illinois in Urbana-Champaign, IL. His dissertation focused on the cultural history of the development of communications technologies in Canada until 1920 and he has published additional essays since then on the development of both radio and television systems there. His scholarly interests include international communication, media ethics, political economy of communications, and technological development. Most recently he published a co-authored book on *World Media Ethics*, published in 2017 by Wiley, and he has been working on the issues raised for our understanding

of humanity by digital technologies that exhibit characteristics long thought to be the province of humankind. He has conducted field work in twenty-two countries and taught classes, seminars, and workshops in a like number.

### **Abstract:**

Christians, especially evangelically-minded Christians, have long approached communications technologies from a perspective of mythological expectation. Even the telegraph, as it arrived in one American city after another, was accompanied by Sunday sermons on how it would finally allow the entire world to hear the gospel. We have never let go of that expectation. But technology is a double-edged sword, bringing both benefit and harm in its wake. How is it to be redeemed, then? There are several demands that we must place on ourselves. First is not to get caught up in the technophile-technophobe debate that is promoted by inventors and the media. Second is to dive below the patina that this debate deposits on technological reality and inquire into the underlying logic of each technology. And third is to ask ourselves what the consequences are for faith, identity, and humanity itself when new technologies are widely adopted. Concentrating on these three aspects of technological development will lead, I think, to a more accurate appraisal of technological change and help us anticipate its fundamental demands on human beings.

### **Reading:**

- “Media, Artificial Intelligence, Robotics, and Human-Computer Interfaces: Implications for Human Flourishing” Robert S. Fortner (2017) 12th International Conference on Interdisciplinary Social Sciences, Hiroshima. [Available here.](#)

## Session 5.1: Redeeming Educational Technology

2<sup>nd</sup> June 2018

**Title: MOOC and the Knowledge and Education Exchange Platform (KEEP)**

**Speaker: Prof Irwin KING**

Engineering Faculty, The Chinese University of Hong Kong



Irwin King's research interests include machine learning, social computing, web intelligence, data mining, and multimedia information processing for Big Data. In these research areas, he has over 300 technical publications in journals and conferences. In addition, he has contributed over 30 book chapters and edited volumes. Prof King is Associate Dean (Education) at the Faculty of Engineering and Professor at the Department of Computer Science and Engineering, The Chinese University of Hong Kong. He is also Director of the Shenzhen Key Laboratory of Rich Media and Big Data. Recently, Prof King has been an evangelist in the use of education technologies in eLearning for the betterment of teaching and learning.

## Session 5.2: Redeeming Religious Technology

2<sup>nd</sup> June 2018

**Title:** Technology, Religiosity and the Changing Face of Humanity

**Speaker:** Dr YAM Chi Keung

Divinity School of Chung Chi College, The Chinese University of Hong Kong



Yam Chi-Keung (任志強), PhD (Edinburgh University), is an experienced media practitioner as well as an interdisciplinary scholar in Christian theology and contemporary media cultures. He is publisher of *Christian Times*, a major Chinese-language Christian weekly newspaper in Hong Kong. He is a Research Associate at the Centre for Christian Studies and an Adjunct Assistant Professor at the Divinity School of Chung Chi College, both at the Chinese University of Hong Kong. He is also the champion of the Diploma Programme in Christian Faith and Contemporary Culture, and an Associated Fellow at the Centre of the Study of Asian Religion and Culture, Groningen University (the Netherlands).

### **Abstract:**

The relationship between technology and its development on the one hand, and religion and civilisation on the other, is often covert but elemental. Technological developments, and the adoption thereof, often shape the course of human cultures and civilisations, including religion, without the conscious awareness on the part of individuals and communities involved. While adoption of newly developed technologies by religious communities is often marked by a lack of critical reflection on any possible long-term consequences, forms of religious lives and the essential nature of religious experience could be reformatted deep down into the bone.

For instance, when the written text began to become common approximately two millennia ago due to new developments in writing technologies, the written form of the Hebrew Bible became stable and the Christian New Testament emerged during the same broad time frame. Ever since, the written text gradually took the place of the oral tradition as the primary means by which Jewish and Christian communities articulate their understanding the Divine. Similarly, the Protestant Reformation inaugurated five hundred years ago could not have occurred without the material foundation provided by the unprecedented breakthrough in media technology of its days, namely the invention of moveable types in Guttenberg. Consequentially, the Reformation altered fundamentally not only the course of Christianity but also the subsequent developments in European society, politics and culture for centuries to come.

Since the end of the twentieth century, we are experiencing the foretaste of another wave of technological developments in a revolutionary scale. Singing hymns from PowerPoint on screen, reading the Scriptures from mobile phones, or deciding on church matters through WhatsApp are but tips of icebergs which point toward massive shaking of foundations. My contention is that the technologies many of us take for granted in recent years are, again, to transform our understanding of religious faith, and thus by necessity alter the human perception of the Divine, the world, and ourselves as a species.