



A BIRD IN HAND

Computer scientists team up with bird-watchers to create avian application for Hong Kong.

Seeing a Black Kite gliding gracefully between the glass high rises of Central is not uncommon in Hong Kong. It is an inspirational reminder that while the world may view this city as a concrete jungle, in fact nature is everywhere. It's not just Kites – Hong Kong is home to more than 500 species of birds. To put that in perspective, Mainland China is home to 1,400

species, so in relative terms this city is positively teeming with birds.

To enhance awareness of this abundance of avifauna, a team from the Computer Science Department has developed a way to put those birds in the palm of your hand. Working together with the Hong Kong Bird Watching

Society (HKBWS), they have developed the city's first cross-platform mobile application, offering information on more than 220 wild bird species.

Called 'HKcBirds: Common Birds of Hong Kong', the application is available for free in both the App Store and Google Play. Beautifully designed, with its leafy green background, pictures and plenty of information, it is extremely easy to navigate. The information includes Latin name, habitat, nesting information, and for some there is even a recording of the bird's call. Importantly, the International Union for Conservation of Nature (IUCN) status of each bird is also listed, indicating if it is an endangered species.

Balancing out science

Project Coordinator Dr Beta Yip Chi-lap has been a computer scientist and a bird-watcher since the mid-1990s. "My area, Computer Science, is very inhuman," he said, smiling.



From left: Ms Yeung Lee-ki, Assistant Project Manager of the Hong Kong Bird Watching Society (HKBWS); Mr Lau Wai-man, Chairman of HKBWS; Dr Beta Yip Chi-lap and Dr Wong Ka-yan, both from HKU's Department of Computer Science, at the application launch media conference.

“I hope [the app] will give people a sense of conservation and a sense of the beauty around them, even in the urban jungle of Hong Kong.”

Dr Beta Yip Chi-lap

"Everything needs to be perfect and exact. I wanted a hobby that was far away from that to balance out my life."

Now a member of HKBWS and a founding member of the HKBWS Kite Research Group, he is an expert in many species, but still relies on bird-watching books for more information. "The guide books tend to be big and are cumbersome to carry when you are in the countryside," he said.

The idea for the application was born, and Dr Yip also saw it as a way to share technologies developed by the Computer Science Department with a non-governmental organisation (NGO) for the good of the public and as a means to raise awareness of bird conservation and ornithology. He and colleague Dr Ivy Wong Ka-yan, also from Computer Science, put the project together, using source materials from HKBWS, ornithology experts, and photographers.

Dr Wong designed the application – including graphics and user interfaces – and wrote the codes. Each platform – iOS and Android – had different requirements.

Dr Wong said: "Developing an application with professional quality is expensive and NGOs like HKBWS do not have the funds. Knowledge exchange funding enabled us to create a worthwhile tool that can enhance people's lives. As a university we are buzzing with ideas, but often the public does not know about them, let alone get to share them or benefit from them. This is what knowledge exchange is all about – knowledge for all. My speciality field is meteorological computing, but to be able to use my computing skills in a whole new area was very satisfying."

Five-star feedback

"Currently we have over 4,500 users worldwide and we have received very positive feedback. In user reviews, over 80 per cent have called us a five-star application," said Dr Wong. Users have also praised it as "one of the most beautiful applications I have ever used", and for striking "a good balance between being informative and being concise".

Though officially the project is ended, now they are in the process of updating the data of the application. "If we can get funding we

would love to expand to other wildlife too," said Dr Yip. "Several green groups are interested."

"What we've achieved is a platform to integrate bird appreciation with trendy technology. It's free, highly portable and useful," he added. "I hope it will give people a sense of conservation and a sense of the beauty around them, even in the urban jungle of Hong Kong."

He also believes that projects like this are important for helping students to expand their horizons and look beyond their own specialist areas. "I supervise undergraduate and postgraduate computer science students, and I find a lot of them think only in terms of computer science, they don't see anything from the users' point of view. I've been getting them to work on designing applications, and it helps them to integrate the softer side of social science with the exactness of computer science. These are life skills." ■

To download the application:



iOS



Android



Interfaces of the 'HKcBirds: Common Birds of Hong Kong' mobile application.



香港大學

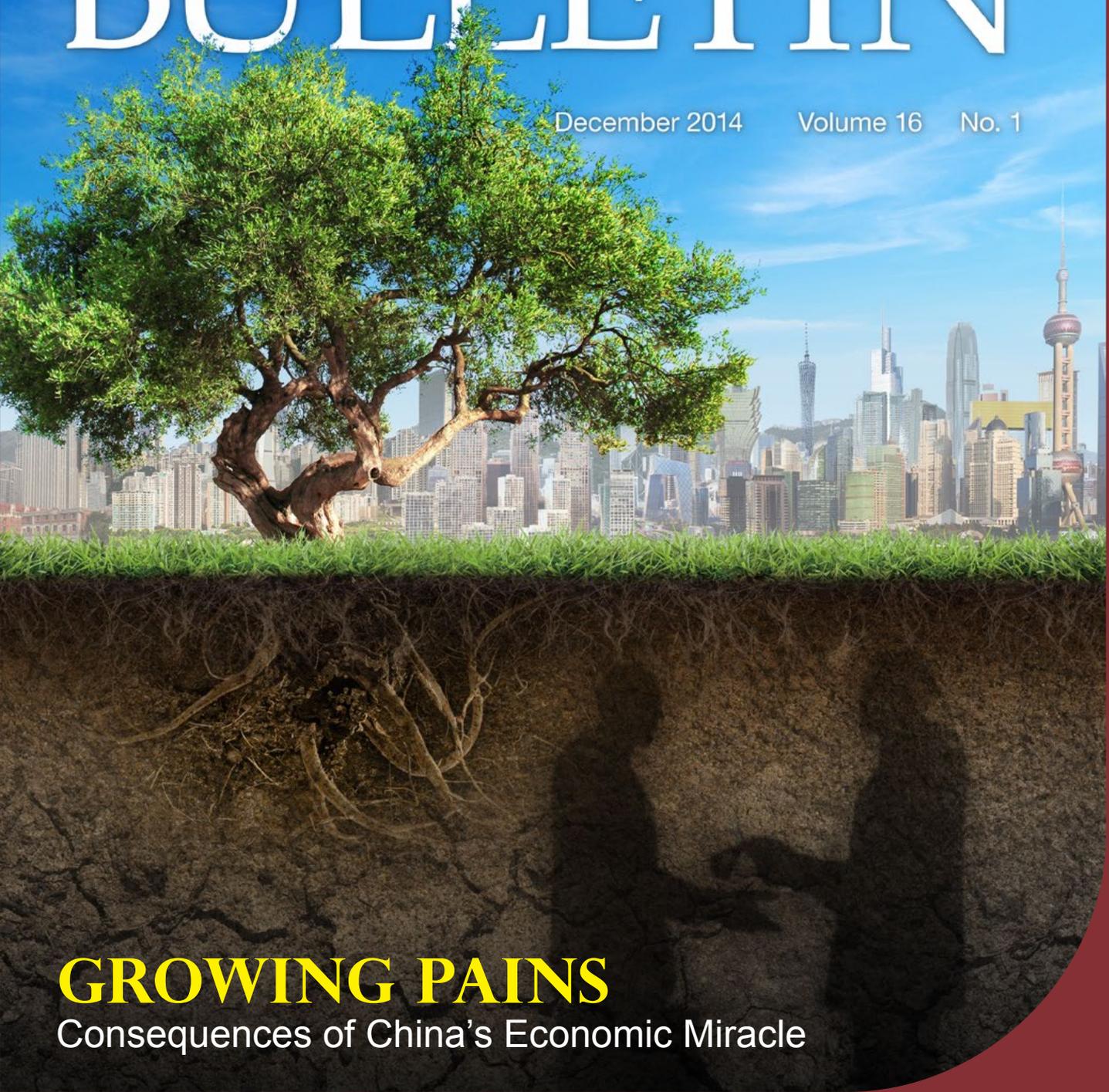
THE UNIVERSITY OF HONG KONG

BULLETIN

December 2014

Volume 16

No. 1



GROWING PAINS

Consequences of China's Economic Miracle



**Agricultural
Breakthrough**
Protecting
flowers from
freezing



**Mobile
Application
Takes Flight**

Digital bonus
for bird-watchers

