中国户外旅游回顾与展望 ——基于外国学者视角^①

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摘 要:本文中我从一个外国学者的视角,透视了中国近30多年来户外旅游的成长与发展。虽然不懂中文,但在过去很多年中我屡次受中国科学院之邀,有幸探访了中国一些优秀的户外旅游目的地,观察到了其在社会、经济和环境方面发生的变化。外国学者的视角总会比中国学者有更大的局限性,但也仍然有可能提供一个有益的参照或者补充。

我把中国的户外旅游划分为三个主要的历史阶段。第一个阶段是在20世纪80年代,当时大规模的国内旅游和入境旅游尚未在中国兴起。我在文中提供了一些有关此阶段的历史事件回顾,或许会对当时尚未出生的今日中国大学生们增进对此阶段的了解有所帮助。第二个阶段中国逐步开放国际入境旅游,并被全球旅游者列入最受青睐的旅游目的地。第三个阶段由两部分组成:一是中国国内旅游的巨大增长,但在很大程度上与国际旅游业存在文化与经济上的隔离;二是中国出境旅游的同步快速增长,并与国际旅游业产生了密切关联。

中国目前不仅拥有非常巨大的国内户外旅游市场,而且具有规模虽相对较小但却很重要的国际入境旅游市场。前者包括参观风景名胜区、自然保护区、森林公园、传统文化遗址,自由漂流等中国专业探险活动,远足、爬山等国际上广泛流行的户外山地运动,以及冲浪和风筝冲浪等海滨户外活动。后者包括从北坡登顶珠峰,西藏、云南和四川的漂流,越野及骑行旅游,内河邮轮旅游等。从研究的角度来看,外国研究者遇到的关键问题是:很多中国学者可以阅读英文文献,而且很多国际出版物都有中文译本,但反过来看,却很少有国外学者熟悉汉语,因此也就对中文学术文献知之甚少。所以,从外国学者的角度来讲,与中国同行进行项目合作具有重要意义。

关于户外旅游的研究主题,有三个方面对于未来研究可能是很重要的。第一,确保国际文献中创新性的思想、方法得以尽快在中国应用。换句话说,中国应该从国际最新研究成果中获益,同时也应该被纳入国际比较研究中,但后者只有当中国相关研究成果发表在国际化的学术期刊上时才可能实现。第二,既然中国已经成为全球旅游乃至世界经济和人口的重要组成部分,外国研究者也很有必要了解中国的研究发现。现在国外学者已经知道中国户外旅游的发展是受规模、历史和文化影响的,但尚未进一步深入了解这些因素如何影响中国国内旅游市场的快速变化。我们想更多地了解、更好地理解作为世界旅游市场重要部分的中国旅游,举一个很小的例子,中国目前也有冲浪旅游的细分市场,那它与国际冲浪产业契合的地方在哪里呢?第三,随着越来越多的中国户外旅游者走出国门,国际旅游企业提供的产品也许并不能完全满足文化背景不同的中国旅游者的期望,这样国际户外旅游产业就会逐渐受中国旅游者需求的影响而发生一些改变;而当中国海外旅游者返回中国后,或许也会带回一些在国外形成的经验与习惯,从而对中国的户外旅游业产生影响。旅游在此类文化交流和互动中的作用,为当前社会科学研究提供了极具吸引力的机会。我很幸运能够参与中国同行的合作研究,也衷心希望合作研究能继续并扩展到户外旅游之外的其他研究领域。

关键词:户外旅游;外国学者视角;中国

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Outdoor tourism in China: A foreigner's 30-year retrospective

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Abstract: In this contribution I provide a foreigner's perspective on the growth and development of outdoor tourism in China over the past three decades or more. This is the perspective of someone who does not speak Chinese, but who has been privileged to visit some of China's outstanding outdoor tourism destinations over an extended period, and observe social, economic and environmental changes as they took place. A foreigner's perspective is always more limited than that of Chinese scholars, but it may still provide a useful counterpart. I describe three main historical phases. The first took place in the 1980s, before the development of large scale domestic or inbound international tourism. I provide some historical anecdotes which may be of interest to Chinese university students. The second phase was the gradual opening of China to international inbound tourism, and its inclusion as a favoured destination by global tourists. The third phase has two components: the enormous growth of Chinese domestic tourism, largely in cultural and economic isolation from the international tourism industry; and the simultaneous growth of Chinese outbound tourism, closely linked to the international industry. China now has a very large domestic outdoor tourism sector, and a much smaller but nonetheless significant international inbound sector. The former includes: visits to scenic parks, nature reserves, forest reserves, and traditional cultural sites; specialist Chinese adventure activities such as piaoliuziyou; and internationally widespread outdoor mountain activities such as trekking and mountaineering, and outdoor coastal activities such as surfing and kiteboarding. The latter includes, e.g., climbing Mt. Everest from the northern side; rafting in Tibet, Yunnan and Szechuan; off-road and bicycle tours, and riverboat cruises. From a research perspective, the key issue for foreigners is that whilst many Chinese scholars can read English, and many International publications are translated to Chinese, the reverse does not apply: few foreigners are familiar with the Chinese language, and hence with the Chinese academic literature. From a foreign researcher's perspective, therefore, cooperative projects with Chinese colleagues are of enormous value. As regards research topics in outdoor tourism, there are three broad approaches which can perhaps prove valuable in future. The first is to ensure that innovations in the international literature are also applied in China, as immediately as possible. That is, China should benefit from global research, and China should be included in international comparative studies. That can only occur if relevant research in China is published in internationally accessible journals. The second is that since China now forms a very large component in global tourism, as well as in the world economy and population more broadly, it is critical for foreign researchers that they can gain access to Chinese research findings. Foreign researchers understand that outdoor tourism in China is influenced by scale, history and culture, but they are not yet in a position to follow how those factors influence the many rapid changes occurring within the Chinese domestic tourism sector. We would like to know more, and understand better. As just one example, China now has a surf tourism subsector. Where does that fit into the international surfing industry? The third is that as more and more Chinese outdoor tourists travel overseas, their culturally driven expectations may not always match what international tourism enterprises provide. Chinese clients are influencing the outdoor tourism industry in other countries; and when they return home, they may also influence the outdoor tourism industry within China. The role of tourism in these cultural exchanges and interactions provides fascinating opportunities for social science research at present.

Key words: outdoor tourism; foreigner's perspective; China

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1 Introduction and Methods

Modern China has a very large and dynamic domestic tourism industry (Zhong L N et al, 2015), and this includes many types of outdoor nature, eco and adventure tourism. In addition to visiting nature reserves and other public conservation areas (Zhong L S et al, 2015), a wide range of adventure activities are available, including hiking and trekking, cycling, climbing, skiing, rafting, kayaking, surfing and kiteboarding (Jing, 2012; Xu et al, 2012; Zhang et al, 2014). There are domestic Chinese brands and manufacturers for all the equipment needed, and Chinese commercial companies, instructors and guides to provide training and safety.

This, however, is all very recent. Only thirty years ago, such opportunities were almost inconceivable. I first visited China in the early 1980s, and have visited many times since. I have thus watched some of these changes as they happened. Here I provide a historical account that allows us to pinpoint some critical changes. This is an outsider view, a perspective from a foreigner who does not speak Chinese, is not part of Chinese society and culture, and does not live in China.

Although it is an outsider view, methodologically this is an analytical autoethnographic study (Anderson, 2006; Buckley, 2012a, 2015), where the data are derived from the author's own records and experiences. Records include photographs, letters and journals taken or written at the time, and these are supplemented by the author's own memories. They are triangulated against the records of others who were present on the same or contemporaneous journeys, and also wrote or filmed their experiences.

Some of these records are now available on historical websites such as those of Shangri-La River Expeditions. Others survive as analogue photographs, prints or 35 mm transparencies. Others again survive only as videocassettes, playable only in antiquated equipment no longer widely available. Some of these are analogue copies of analogue copies, with corresponding loss of detail. Other records are available from articles in popular magazines, both Chinese and international, videos on youku.co.cn, and in TV pro-

grams produced by CCTV and local stations. For example, a recent CCTV5 documentary celebrating the 30th anniversary of the Chinese first descent of the Yangtze (Tongtian He) in 1985, interviewed two Chinese rafters, Yang Yong and Feng Chen, from the 1986 source to sea first descent; and one, Frank Ma, from the 1987 source to sea first descent of the Yellow River (Peter Winn, pers. comm.).

This analysis is an account of specific incidents, which together can be used to reveal a historical pattern. These incidents took place within the changing context of China's social and political geography, but I refer to those only as needed to present the individual incidents. Some of these incidents, or specific aspects of them, have been reported previously (Buckley, 2006, 2010a, 2010b, 2012a; Buckley, McDonald et al, 2014), but not in a historical context.

My early experiences relate principally to the great deserts of the Ordos and Taklamakan, and later to the great rivers flowing from the eastern Tibetan plateau through Yunnan and Sichuan. I have included one or two additional incidents from more iconic tourism destinations such as the karst landforms of Guilin and Kunming, and heavily visited modern protected areas such as Zhangjiajie and Jiuzhaigou.

There are many other iconic adventure destinations within China. Best known internationally are the northern approaches to Mt Everest, Chomolungma. Climbing Mt Everest is the subject of a distinct and separate literature (Mu et al, 2016), and is not considered here. Early attempts to raft or kayak the Yangtze, Yellow (Huang He) and Mekong (Lancang Jiang) rivers source to sea, or the great gorges of the Yarlung Tsangpo, were equally difficult and courageous. These expeditions exerted a substantial influence on the development of the Chinese river tourism sector more broadly.

I first present a historical summary in three phases: early scientific exchanges fostered largely by the Chinese Academy of Sciences; the transition to a commercial outdoor tourism sector; and the growth of modern Chinese domestic mass nature and adventure tourism. For each phase I extract major themes based on my own experiences and my limited outsid-

er understanding of the Chinese social contexts at the time

As a foreigner with no Chinese language capability, I could only make local observations, which may not be an accurate reflection of broader scale patterns. However, there are few records of these early periods in outdoor tourism, so even such a limited perspective may be valuable for historical reasons. I then outline current patterns and trends, as they appear to me. Finally, I identify priorities for future research, based on my interpretation of these trends in a global context.

2 Early Exchanges via Chinese Academy of Sciences

As China began to re- open to the rest of the world after the Cultural Revolution, the first exchanges were academic. Chinese scientists began to travel to other countries such as Australia in the late 1970s and early 1980s, and this was followed by reciprocal visits. My own first visits to China, from 1983 onwards, were hosted by the Chinese Academy of Sciences Institute of Desert Research at Lanzhou, since I had published research on desert soils and vegetation (Buckley, 1981, 1982).

With my host and colleague Professor Zhu Zhenda, we travelled first to the Tengger Desert, part of the Ordos area of Inner Mongolia, and later to the giant star dunes of the hyper-arid Taklamakan Desert of Xinjiang, and the climbing dunes near Lake Qinghai. This was a very fruitful collaboration that led first to experimental research (Buckley, 1987) and later to reciprocal visits to the Australian deserts by Professor Zhu and his colleagues, where I was able to take them to visit the linear dunes of the southern Simpson Desert.

Whilst these visits were for research rather than tourism, they provided some unforgettable opportunities to see parts of western China in the early transitional period post Cultural Revolution. From a tourism perspective, four aspects stand out. The first was the astonishing pace of change. In my first visit, I was escorted everywhere by silent and unnamed indi-

viduals. The only advertisements were political posters, in the exaggerated revolutionary style. There were two currencies, and two prices for everything. Foreigners could not buy anything directly, except in the Friendship Store in Beijing. Nearly everyone, including children, was dressed in green or blue denim. Nobody spoke English except one interpreter. It was illegal to import bicycles. My hosts asked me to bring solar powered calculators because there were no batteries.

Only a year or two later, in contrast, I was left to travel across the country on my own, even to Xinjiang. Multi-storey hypermarkets had sprung up, with colourful billboards advertising Western products such as imported brands of whisky. People were wearing a much wider variety of clothing. The roads were full of cars as well as bicycles. Scientific research laboratories were well equipped. Now, of course, almost every product available anywhere worldwide is also sold in China; there are numerous Chinese multi-billionnaires; 100 million individuals move from lower to middle income brackets every year; and foreign researchers rely heavily on Chinese funds!

The second aspect memorable from those early visits was the scale of human labour. At that time, tasks that in other countries would be unimaginable without machinery were being carried out, very efficiently, by enormous numbers of individual people. Sand dunes were stabilised using straw grids, made by pushing straw into the sand with a spade to create low fences in a grid pattern. The grid squares were about 25 cm across, and the straw grids covered hundreds of square kilometres. On one visit we saw an irrigation canal, tens of metres across and tens or hundreds of kilometres long, being built by hand. Millions of fist-sized stones were brought to the construction site by thousands of donkeys, in panniers, and laid into place one by one. On a later visit I also saw a mountain road built during this period, using cobblestones hammered into the earth on edge, one at a time. Like the Roman roads, it will probably last long after bitumen highways have crumbled away.

The third aspect was the resilience and adaptability of the local people, which I was able to see at first

hand. There were very few foreigners in western China at that time. As a guest of the Chinese Academy of Sciences, a central government organisation, I was in a very privileged position. However, nobody seemed to resent this. I bought a Chinese army greatcoat, green cotton padded with the outer part of the silkworm cocoon, and a black cap made of skin and wool of a karakul sheep. Wearing these, as long as I said nothing, I attracted little attention in the smoke and firelight of the evening market places. When I slept on the ground by a communal campfire in the Taklamakan, the donkey drivers and firewood collectors who had made the fire paid little attention.

Traders had arrived before tourists or even scientists. Carpet factories were already producing designs on commission for international buyers. Older scientists spoke Russian, but the advantages of English were already recognised. Even 30 years ago, one small desert village was sending one of its girls, younger than ten years old, to learn English in Yutian. In the early 1990s, on an inaccessible tributary of the Mekong, we met another ten-year-old girl who walked 30 km to school each week, and back at the weekend, for the same reason.

The fourth aspect was that everyone was very welcoming, and I never felt in any way unsafe. When I first visited Kunming in the mid 1980s, for example, I crossed the city by jumping on and off buses that seemed to be going the right general direction, and I never felt under threat. I hiked across country from the principal Stone Forest to another stone forest further away. I walked alone through giant cities and country villages at night, unable to say a word to anyone. I even went to China's first rock and roll dance, in a hotel basement in Beijing.

Only once was I taken advantage of. Some middle-aged ladies were selling pomegranates and hiring out rowboats at Kunming Lake. I took one of the boats. By sign language, the oarswoman, and two other ladies accompanying her, refused to take the boat back to land until I had exchanged RMB20 each in foreign exchange certificates, at par, for their local renminbi yuan. I could not use renminbi except to buy more pomegranates, and they wanted FEC to buy manufactured consumer goods, otherwise unavailable to locals. Even that, however, was at worst a minor annoyance.

Most of those early visits were made possible through the auspices of the Chinese Academy of Sciences. The Academy also made possible the first water-based explorations of the great rivers of western China, with international teams led by U.S.-based geologist Peter Winn. I was fortunate to take part in several of these, as a safety kayaker in support of rafts. These rivers flow through steep gorges with no road access, and they are broken by some major rapids, and long stretches of whitewater. At that time there were no aerial photographs and no aerial access for foreigners. The only maps available to foreigners were either of World War II vintage, or Russian maps made during the Cultural Revolution.

The only access was by river, and this was logistically and politically complex, and potentially risky. In addition, these first trips took place just as the era of large-scale dam construction on these rivers was commencing, and this added an additional complexity. Peter Winn was the ideal person to plan these trips, since he was expert in both geology and whitewater river navigation, and could predict the character of the rapids from the Russian maps, without any local information.

It was the Chinese Academy of Sciences that obtained permission for these early trips, and provided interpreters to travel with us on the rivers. Winn formed a U.S.-based company called Earth Science Expeditions specifically for this purpose. As outlined below, it was later renamed Shangri-La River Expeditions, and reports of some of these trips are still available on that website. Some were also later reported in academic books and articles on ecotourism (Buckley, 2003), adventure tourism (Buckley, 2006, 2010a, 2010b), and conservation tourism (Buckley, 2010c).

3 Transition to Commercial Tourism

As China became more accessible to foreigners, everyone wanted to visit, and sights in Beijing, Guilin, Kunming and Xian became incorporated into a regular tourist circuit. Soon this began to affect even the river explorations in the far west. Peter Winn found that the Chinese Academy of Sciences was no longer able to provide permits, and instead he was directed to provincial tourism authorities.

Whilst CAS had seen opportunities for reciprocal scientific exchange, the tourism agencies saw opportunities to extract substantial payments, essentially as a monopoly rent. They were very friendly and open about this, and when we raised concerns about such high charges "killing the goose which lays the golden eggs", they responded that they knew that perfectly well, but since politics were unpredictable from year to year, they had to "make hay whilst the sun shined".

In any event, diplomacy won through, and Peter and others continued a program of exploration adventure tourism in Yunnan, Sichuan and Tibet. It was at this period that the company name was changed to reflect tourism rather than science. Later, Peter's son Travis saw that to improve Chinese involvement, a Chinese company was needed. This also avoided the difficulties in obtaining permits for foreign-run trips. Travis learned Mandarin, moved to live in China, and with his Chinese colleagues, formed Last Descents River Expeditions (2015). He also began to train Chinese raft guides and Olympic kayakers.

I took part in only a few of these river trips, but they were all extremely memorable, and took us to parts of China otherwise inaccessible. There was always, and still is, an enormous contrast between small-scale traditional subsistence agriculture by ethnic minority peoples in the remote gorges, and giant modern dam-building programs of breathtaking scale. For the former, a group of rafters and kayakers in multi-coloured boats and gear is a cultural surprise. Confronted by the dam construction sites, however, those same rafters and kayakers felt extremely tiny and overwhelmed.

Many of the stretches of rivers we boated are now inundated by reservoirs behind these very large dams. To me, it is sad to think that there are parts of China's wonderful natural heritage that were seen only by a few foreign and Chinese rafters, and have now disappeared. Perhaps the greatest loss is the Great Bend of the Yangtze in Yunnan, China's Grand Canyon. Of course, exactly the same has happened in other countries too, notably through the Glen Canyon Dam on the Colorado River in the USA. The Colorado Grand Canyon itself has been threatened at times with industrial developments of various types, and still is, but to date has survived as a national park visited every year by millions.

There are too many events from these early trips to describe them all, so I will just list a few especially memorable. On one trip, for example, we encountered red-painted signposts (of course, only in Chinese) advising that a route crossing the river was closed because of bubonic plague. We also found locals fishing with explosives, which is highly disconcerting to kayakers. On another trip, we found a fully clothed human skeleton washed up on a small sandy river beach by our campsite. Locals walking by, however, ignored it. We met villagers splitting boulders by hand for building, and small but remarkably hardy grandmothers singlehandedly carrying entire tree trunks up steep hills. In Tibet, we met monks who (I think) misinterpreted my shaved head and enthusiasm for tea as signs that I too was a monk. I declined their invitations, and only worked out their reasons later on.

We also found world- class whitewater, with some wonderful rapids and waves, set amidst beautiful gorges, tiny villages, and historic walled towns. We paddled at almost 5000 metres altitude, where a lungful of oxygen- starved air barely lasts long enough to roll a kayak right-side-up if you tip over. In Tibet we found ancient cliffside pathways cut out or built up along perpendicular rock slopes, with the remains of giant wooden gates once used to block access.

We found villages subsisting on barley, grown in tiny terraced plots with irrigation water brought along half-pipes made of hollowed logs, themselves cut on high mountain slopes far above. The villagers ground the barley using hand-made stone millstones, powered by wooden water wheels. This, plus a few goats, was their only food supply. But they did have a DVD

player. We found hot springs and grassy river terraces, and on one trip the participants (not me, unfortunately) saw a snow leopard. Only one trip was aborted, for safety reasons, and with help from local villagers and their donkeys, and later a Chinese Army garrison and its truck, we hauled all our gear out over a high mountain pass, taking several days.

Throughout this period, the emphasis of these river trips gradually changed, from exploration by foreigners, to involvement of Chinese in the exploration and conservation of their own rivers. As in other countries, river tourism can sometimes provide a political and economic counterbalance to the large-scale exploitation for hydroelectric and irrigation dams. The same socioeconomic and political pressures which led to large scale dam construction in the American southwest many decades ago, are now leading to large scale dam construction in western China. And the same social and environmental impacts are created, and the same risks from earthquake damage.

By training Chinese raft guides, introducing influential Chinese to their own great rivers, and helping Chinese TV and video producers to publicise the places and the issues, the small Chinese tourism company Last Descents has contributed substantially to conservation of some of these landscapes and watercourses (Buckley, 2010c). The company has also brought Chinese rafters to the USA to learn about the history and current practices of river recreation and conservation in that country. Feng Chen, the Yangtze veteran mentioned above, became the first Chinese citizen to captain a paddle raft through the Colorado Grand Canyon, and Tang Jian Zhong, one of Last Descents' guides, became the first to row an oar raft.

4 Chinese Domestic Mass Adventure Tourism

In recent years, outdoor tourism in China has entered a third phase, the growth of entirely homegrown domestic adventure tours at very large scale, using distinctive Chinese models for land tenure, product design, business structure, marketing, and day-to-day management (Buckley, McDonald et al,

2014).

The first inkling of this occurred during one of Peter Winn's trips that included Chinese participants. Before the trip itself started, we were taken (unexpectedly) to speak at a public event in an urban climbing gym and outdoor equipment store in Chengdu, the first we had seen in China. We found many brands with names we had never heard, and it turned out that even though the names were printed in English, they were actually Chinese brands made solely for domestic markets. Apart from the brand names and colour schemes, they were copies of brands manufactured in China for international retailers. That is, there was an entire parallel domestic outdoor equipment industry, invisible to foreigners.

The scale of this sector was borne upon us following a river trip in Tibet, that included a number of Chinese participants with previous rafting experience. One of these was Feng Chen, who had taken part in the legendary mid-80's attempts to run the giant rapids of the Yangtze (Bangs et al, 1987). Another was a journalist and camerawoman, making a program for a national TV station. And a third had his own rafting business in one of China's eastern provinces. It was clear from his descriptions, however, that those operations were very different indeed from those we were used to. We therefore started a research project to examine the operations of Chinese domestic rafting tourism.

We found that *piaoliuziyou*, as it is known, is in fact a quite different activity from western style river rafting, and the two are confused essentially because of nomenclature (Buckley, McDonald et al, 2014). Again, until that study, the two sectors had proceeded in parallel, neither aware of the other's existence. We estimated that around 80 million Chinese residents aged 18-35 have taken part in a piaoliu trip. On a global scale, that is a substantial subsector of the entire worldwide adventure tourism industry. And again, it was largely invisible outside China.

My own experience in the growth of Chinese domestic mass adventure tourism was largely with the white- water rafting subsector. However, it appears that comparable developments have also occurred in other adventure subsectors. Horse trekking has become popular in western Sichuan and Tibet (Griffon Expeditions, 2016). There are now commercial tour operators offering off-road trips through the Taklamakan Desert (Buckley, 2006, 2010b). There are ski resorts at Huaibei and Nanshan near Beijing and Yabuli in Heilongjiang. The beach destinations of Hainan now offer opportunities for surfing and kiteboarding, in much the same way as subtropical beach destinations in Europe, North and South America, Australia and the Pacific islands.

There has also been substantial growth in the informal non- commercial outdoor recreation sector. There are now thousands of outdoor adventure clubs in China (Xu et al, 2012; Zhong Linsheng, pers. comm. 2015). Sporting and university clubs started cycle tourism, hiking and mountaineering, and Chris Jones (pers. comm.) notes that currently, up to 300 Chinese cyclists per day can be seen cycling on the Sichuan- Tibet Highway 318. Trekking and hiking groups have proliferated (Luo et al, 2015). Self-drive four-wheel drive touring is now also popular in some regions, including Tibet and Qinghai, with Chinese tourists taking part in a range of soft adventure activities whilst based out of their own vehicles.

At the same time, the nature-based outdoor tourism subsector, relying largely on publicly owned parks, forests and nature reserves, has also grown to very large scale. Places such as Guilin and the Kunming Stone Forest, famous from ancient poetry and literature, were already popular domestic destinations even in the 1980s. In the mid 1980s, for example, over a thousand people a day took a boat-based day trip down a sector of river at Guilin, returning by bus. Almost all of these were Chinese or Japanese, with only 0.1% westerners (myself) on the day I was there. I bought a supposedly jade bowl at a very economical price, though I worked out years later that it was probably a ceramic artefact.

In more recent years, iconic parks such as Zhangjiajie and Jiuzhaigou have become destinations for mass nature tourism, with visitation variously estimated as 5, 10 or even 20 million people per year, depending on the exact boundaries of the areas consid-

ered. A recent review of environmental and visitor management within 1110 protected areas in China, of all types and at all scales (Zhong et al, 2015) found that the more heavily visited parks have very sophisticated visitor infrastructure, tollgate fee collection, mass transit, catering, and visitor flow management systems. These allow very intensive daily visitation and high visitor satisfaction with good control of environmental impacts. A large-scale follow-up study on visitor motivations, expectations, experiences, satisfaction and intentions is currently near completion.

Similar approaches have been reported for specific park and forest destinations (Wang et al, 2010; Du et al, 2016). Infrastructure in some reserves includes large-scale high-volume elevators and cableways. In some cases, infrastructure is co-funded by private investment. Access infrastructure has also expanded greatly. Large-scale government-funded infrastructure projects in western China, such as the Qinghai-Tibet railway and new airport infrastructure in Lhasa, catalysed large increases in domestic tourism arrivals to the Tibet Autonomous Region, with outdoor and cultural tourism particularly popular. As in many areas worldwide where inbound tourism increases rapidly, local tourism capacity is not always sufficient for this influx of arrivals.

5 Most Recent Patterns and Trends

Even though the proportion of domestic Chinese tourists engaging in outdoor activities is as yet relatively small in international comparative terms (Jing, 2012), the overall scale of the Chinese domestic tourism market is so large that domestic outdoor tourism in China is still a very substantial industry sector (Jing 2012, Buckley, McDonald et al, 2014).

Currently, it would appear that visiting iconic national nature reserves such as Zhangjiajie, Jiuzhaigou, Tianmushan and others is probably the single highest-volume component of the modern Chinese domestic outdoor tourism sector, though I am not sure if national statistics are available. There are also heavily visited World Heritage areas and geoparks such as Wudalianchi in Heilongjiang; and sites fa-

mous for specific wildlife, such as panda at Wolong (Cong, Newsome et al, 2014; Cong, Wu et al, 2014), and cranes at Zhalong. Mass adventure tourism activities such as piaoliu are also a large sector, but even the highest-volume piaoliu sites receive <10000 visitors daily (Buckley, McDonald et al, 2014), whereas the iconic nature reserves receive over 100000 visitors per day in peak season (Zhong, Buckley et al, 2015).

This rapid recent growth in outdoor tourism has created some concerns related to planning and impacts on natural heritage (Jing, 2012; Song, 2014) and also risk and safety (Liu, 2009; Chen, 2013; Huang, 2014). Currently, outdoor tourism is most popular amongst young, well-educated Chinese with above-average incomes (Xu et al, 2012).

As in other countries, there are many other outdoor sites in China that are visited for various mixtures of scenery, nature, culture and adventure. There are waterfalls, climbs, rope walks, glass walkways, caves, forests and many more. There are widespread practices such as forest bathing, where city dwellers visit native forests to breathe clean air and regain a peaceful state of mind and an appreciation of nature (Huang et al, 2014). Numbers and characteristics of tourists taking part in these activities remain largely unstudied.

The domestic beach and marine tourism sector remains largely unstudied, with no English-language data available on destinations, activities or tourist numbers. The area around Sanyo on the island of Hainan is the principal beach tourism destination. This is a key topic for future research. The islands of the South China Sea, or at least those that are close to the Chinese mainland and are not contested by other nations, could also provide opportunities for marine tourism, in the same way as many of the South Pacific and Indian Ocean islands.

Over recent years it seems that there has also been substantial growth in motorised outdoor tourism in China, although this has not been analysed in the English language literature. As with non-motorised adventure tourism such as *piaoliuziyou*, motorised subsectors have also adopted distinctively Chinese

business models. One Chinese company, for example, offers opportunities for upwardly mobile Chinese to take part in offshore motor yachting, used a staged entry system that combines features of a sporting club and property timeshare.

By joining the club, less wealthy members can rent imported powerboats of various sizes, by the hour or day. Later, they can buy their own boats, and the company will then store or moor the boats in its marinas, for a fee; and hire the boats out to other members, for a further fee. The marinas are resort-residential developments, a commonplace structure worldwide, and members can rent residential accommodation at the same time as renting yachts. Similarly, they can purchase residential units and allow the company to rent out their units to other members. The company thus gains a multi-source inflow of cash and capital, coupled with customer loyalty; and members gain networking and investment opportunities.

I learned of this business model by chance, from a meeting at a conference on coastal ecotourism held in Ninghai a couple of years ago. The main business of that conference, although this was not made explicit to foreign invitees, was for a local government agency to sell land and resort development rights to private investors. They were very successful in doing so, in part because they controlled development rights as well as land.

In many countries, the property development industry lobbies for so-called "development-ready" sites, where governments provide land complete with planning and environmental approvals. This is much more easily feasible in China than in most western nations. The more common system worldwide is that development entrepreneurs identify opportunities, and then apply for permits. The principal reason for this is that in most countries, development land is owned mostly by private individuals, whereas development permits are granted by government agencies. Most publicly owned land is allocated for specific purposes, such as conservation or forestry, and is not available for private property development. Only where a land management agency has both the right and the

interest to allow and invite private investment, can development-ready sites be offered.

In the last few years, outbound tourism from China has also grown substantially. Whilst some of these tourists are travelling on business, for shopping, or to visit friends and relatives, others are outdoor tourists who take nature and adventure tours at their destinations. Where the structure, expectations and safety management of such tours are very different in overseas countries than for the Chinese domestic market at home, this can create risks and management difficulties for tourists and tour providers alike (Buckley, McDonald et al, 2014). Understanding Chinese domestic outdoor tourism is therefore important not only within China, but also worldwide.

6 Research Priorities

From a foreigner's perspective, there are three key priorities for future research on outdoor tourism in China. The first is to gain access to existing research published in Chinese. The second is to repeat within China, the same types of research that have been conducted in other countries, so that China can be included in international comparisons and global studies. And the third is to identify and analyse the many ways in which practices and approaches within China differ from those in other countries, and in some cases, provide world leadership. Some of these differences are major, others subtle.

Each of these priorities can best be addressed through collaborative research programs involving overseas and Chinese researchers jointly (Weaver, 2015; Weaver et al, 2015). As shown by several such collaborations previously (Zhong et al, 2007; Buckley, Cater et al, 2008; Buckley, Ollenburg et al, 2008), every researcher is unconsciously influenced by their own academic and linguistic background, and is likely to assume that the way things work in their own country is also the way things work elsewhere. It is not until they have the opportunity to see and discuss the detail in person, that they appreciate the differences, which are essentially cultural.

In outdoor tourism specifically, there are numer-

ous examples where these subtle cultural differences have now been identified, but have not yet been studied in detail. These include, e.g., business models and individual behavioural expectations in commercial adventure tours; systems for financing park infrastructure and managing park visitors; the designs and colour schemes for marketing and interpretative materials (Xu X Y, pers. comm.); and the motivations and behaviours of individual tourists in protected areas (Xu F F et al, 2014; Xu H G et al, 2014; Packer et al, 2014; Du et al, 2016). No doubt there are many more.

To date, English language research publications on outdoor tourism in China lag well behind changes in the outdoor subsector itself. One of the first priorities from the perspective of the non-Chinese-speaking world, therefore, is translation of Chinese language publications into English. Currently this occurs sparsely and sporadically, generally when a Chinese and overseas researcher combine to write an English language review of Chinese-language literature on a specific topic. Such reviews are indeed valuable, especially when they can show the sometimes subtle differences between Chinese and Western approaches, perspectives and terminologies (Zhong et al, 2007; Buckley, Cater et al, 2008; Buckley, Ollenburg et al, 2008).

It would be even more useful for English speaking researchers to be able to read the original Chinese publications; and journals such as Tourism Tribune have contributed greatly by providing English abstracts for Chinese language articles. However, this is a problem for the Anglophone world to solve, by learning Chinese. Chinese academics, university students, and indeed schoolchildren, have already learned English!

Currently, English language international journals are perceived as more prestigious than Chinese journals, and Chinese academics are keen to publish in these international journals, since they have high readership and impact factor. One option for the Chinese Academy of Sciences, which already publishes a large series of its own Chinese-language academic journals, might be to start a bilingual top-tier Proceedings of the Chinese Academy of Sciences, with every

article published jointly in Chinese and English. This could soon rival other top-tier international science journals.

Most of the sub-fields associated with outdoor nature and adventure tourism, and with parks and recreation ecology and management, are studied in China as in other countries. Where this research is available in English, it includes individual studies that are very much internationally relevant, such as the study of tourist emotional, behavioural and physiological responses to monkeys in Zhangjiajie (Li et al. 2012). The volume of research available in the international literature, however, is very small relative to the size and number of China's parks and universities. There is a lot more published only in Chinese, but for international readers this is largely inaccessible, so we cannot judge the relative quality of the research. The same also applies for other large nations that publish principally in non-English journals, notably Brazil.

Internationally, we can identify several key themes in outdoor tourism research, and all of these are also applicable within China. Indeed, given the very large scale and the rapid changes within China's outdoor tourism, research within China is of global importance. These themes were reviewed recently for adventure tourism (Buckley, 2014), and for sustainable tourism more broadly (Buckley, 2011, 2012b). For China, I suggest five priority areas, as follows. Each of these five are equally important.

Worldwide, outdoor tourism is being used increasingly as a low-impact political and economic counterweight to other forms of economic development, essentially as a mechanism to support conservation of biological diversity, ecosystem services, and natural and cultural heritage. This applies across all land tenures, including public parks, other public lands, and privately and communally owned lands. Most of the commercial outdoor tourism industry itself, of course, sees its own priorities as commercial profit rather than public conservation policy. To achieve conservation outcomes, the engine of tourism must be harnessed to social and environmental goals.

Mechanisms for this may differ greatly between countries and cultures (Buckley et al, 2012, Buckley, de Vasconcellos Pegas, 2014). They also require an understanding of the internal structure and dynamics of the international tourism industry (Buckley et al, 2016), as well as the goals of conservation stakeholders (Romero Brito et al, in review). Exactly how adventure tourism and conservation can most successfully be linked within China is thus one key priority for research.

In order to understand outdoor tourism and its broader social connections and context, we need to understand what motivates individual tourists, as well as what drives tourism providers and other stakeholders. The psychology of adventure tourism has received substantial research attention internationally (Buckley, 2012a) but less to date within China. The psychology of nature and wildlife tourism, however, such as forest bathing and animal interactions, has indeed received attention within China (Li et al, 2012; Huang et al, 2014; Packer et al, 2014), and this is certainly a priority for further research.

One topic of particular interest is how psychological attitudes in individual nations may change as the tourism industry itself changes. As Chinese tourists travel to wildlife destinations overseas, for example, and see how tourists from other nations behave in the presence of wildlife, will this change how they behave themselves, in China as well as internationally? This issue has been raised for the growing domestic wildlife tourism industry in India, and applies equally to China. Similarly, in some sites at least, it appears that foreign visitors to China are more likely to take part in strenuous outdoor activities, than Chinese visitors to the same destinations (Du et al, 2016). Is that difference widespread, and is it changing?

In particular, the links between experiences in natural environments, and human health, have long been recognised within China (and also Japan), whereas it is only very recently that these have been recognised within English language research. In addition, English language research has focussed principally on physical health and the role of exercise. The role of nature in mental health did not attract mainstream interest in medical research until very recent-

ly. In China, however, the importance of human health as a component of ecotourism has always been recognised (Buckley Ollenburg, et al, 2008; Huang et al, 2014), and the social role of outdoor tourism in mental and emotional renewal as well as physical recreation has received greater recognition. This is clearly one area where Chinese research could inform broader global approaches.

The same applies for the management of visitors in very heavily visited public parks. The monitoring and management of visitor flows, catering, toilet facilities, etc., in parks such as Jiuzhaigou, Zhangjiajie and Wudalianchi, provide globally relevant examples and standards, particularly with regard to public mass transit rather than the use of private vehicles. There are indeed parks in other countries that have adopted public transit systems, with Denali in Alaska as an early example. Mutual exchanges of approaches and lessons learned, however, will surely remain fruitful.

In the field of recreation ecology, key to measuring and managing visitor impacts in parks, considerable effort has been devoted in recent years to comparing the impacts of similar activities in similar biomes but different continents, where the soil types and species assemblages may differ (Buckley, 2013; Monz, et al, 2013). Research from South American ecosystems, for example, has been added to that from North America, Europe and Australia. To date, Chinese ecosystems have rarely been included in these comparisons. It would be very valuable if this were possible.

Finally, tourism involves travel, and travel contributes to climate change. This has been studied principally for international travel (Gössling et al, 2015), with relatively few analyses for individual countries (Simmons et al, 2004). Domestic tourism within China, however, involves more trips annually than the entire international tourism industry, and the distance from one side of China to another is the same as crossing many nations within Europe. The consequences and contributions of Chinese domestic tourism, including outdoor tourism, to global climate change thus represents a further priority for research (Tang et al, 2014; Tao et al, 2014; Buckley et al, 2015).

7 Conclusions

Outdoor tourism now forms a substantial component of the domestic, inbound and outbound tourism sectors in China. Since Chinese domestic tourism is so large in global terms, Chinese domestic outdoor tourism has become a substantial component of the global outdoor tourism industry. This growth has been rapid. Three phases were identified. The first phase involved international scientific exchanges, promoted principally by the Chinese Academy of Sciences. The second phase saw a switch to commercial inbound outdoor tourism, with government control moved from a central scientific organization to provincial tourism agencies. The third phase saw very rapid growth in Chinese domestic outdoor tourism, which still continues currently.

The economic scale of the global outdoor tourism sector was estimated some years ago at over USD 1 trillion annually (Buckley, 2009). Most recent estimates for the US alone are now around USD 650 billion annually. No corresponding figure has yet been published in an English language journal for the scale of the Chinese domestic outdoor tourism industry, but from number of participants alone, it seems likely to be large.

The shape and structure of the outdoor tourism sector, the expectations and behavior of individual outdoor tourists, and the design and operations of commercial outdoor tourism products and enterprises, are all different in China from other countries and continents. They have evolved to reflect Chinese physical and human geography, social and political systems, and cultural drivers and constraints. They have been influenced historically by nature and adventure tourism in other countries, including inbound tourism into China over the past three decades.

Currently and in the future, this influence has shifted direction. Some visitor management practices for protected areas in China, for example, and also some approaches to relevant research, are being considered and copied internationally. With the growth of outbound tourism from China, the effects of Chinese domestic tourism on the expectations and behav-

iours of Chinese tourists travelling internationally are now exerting a powerful influence on products and practices in destination nations.

All of these changes and differences provide ample opportunities and justification for continuing and novel research in the Chinese outdoor tourism sector; and opportunities for international collaborations so as to share cultural perspectives, expertise, and language skills for bilingual research publication.

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References

- Anderson L. 2006. Analytic autoethnography[J]. Journal of Contemporary Ethnography, 35(4): 373-395.
- Bangs R, Kallen C. 1987. Riding the dragon's back[M]. New York, NY: Atheneum.
- Buckley R C. 1981. Soils and vegetation of central Australian sandridges III. Sandridge vegetation of the Simpson Desert[J]. Australian Journal of Ecology, 6(4): 405-422.
- Buckley R C. 1982. Use and conservation of central Australian dunefields[J]. Biological Conservation, 22(3): 197-205.
- Buckley R C. 1987. The effect of sparse vegetation on the transport of dune sand by wind[J]. Nature, 325: 426-428.
- Buckley R C. 2003. Case studies in ecotourism[M]. Wallingford, UK: CAB International: 264.
- Buckley R C. 2006. Adventure tourism[M]. Wallingford, UK: CAB International: 528.
- Buckley R C. 2009. Ecotourism principles and practices[M].

- Wallingford, UK: CAB International.
- Buckley R C. 2010a. Communications in adventure tour products: Health and safety in rafting and kayaking[J]. Annals of Tourism Research, 37(2): 315-332.
- Buckley R C. 2010b. Adventure tourism management[M]. Oxford, UK: Elsevier: 268.
- Buckley R C. 2010c. Conservation tourism[M]. Wallingford, UK: CAB International: 214.
- Buckley R C. 2011. Tourism and environment[J]. Annual Review of Environment and Resources, 36: 397-416.
- Buckley R C. 2012a. Rush as a key motivation in skilled adventure tourism: Resolving the risk recreation paradox[J]. Tourism Management, 33(4): 961-970.
- Buckley R C. 2012b. Sustainable tourism: Research and reality [J]. Annals of Tourism Research, 39(2): 528-546.
- Buckley R C. 2013. Next steps in recreation ecology[J]. Frontiers in Ecology and the Environment, 11(8): 399.
- Buckley R C. 2014. Adventure tourism as a research tool in non-tourism disciplines[J]. Tourism Recreation Research, 39(1): 39-49.
- Buckley R C. 2015. Autoethnography helps analyse emotions [J]. Frontiers in Psychology, 6: 209.
- Buckley R C, Cater C, Zhong L S, et al. 2008. SHENGTAI LUYOU: Cross-cultural comparison in ecotourism[J]. Annals of Tourism Research, 35(4): 945-968.
- Buckley R C, de Vasconcellos Pegas F. 2014. Conserving Brazil's Atlantic forests[J]. Science, 346: 1193.
- Buckley R C, Gretzel U, Scott D, et al. 2015. Tourism megatrends[J]. Tourism Recreation Research, 40(1): 59-70.
- Buckley R C, McDonald K, Duan L, et al. 2014. Chinese model for mass adventure tourism[J]. Tourism Management, 44: 5-13.
- Buckley R C, Mossaz A C. 2016. Decision making by specialist luxury travel agents[J]. Tourism Management, 55: 133-138.
- Buckley R C, Ollenburg C, Zhong L S. 2008. Cultural landscape in Mongolian tourism[J]. Annals of Tourism Research, 35(1): 47-61.
- Buckley R C, Pabla H S. 2012. Tourism ban won't help Indian tigers[J]. Nature, 489: 33.
- Chen C. 2013. Legal analysis on security obligation of self-service travel organizers[D]. Shanghai, China: East China University of Political Science and Law.
- Cong L, Newsome D, Wu B H, et al. 2014. Wildlife tourism in China: A review of the Chinese research literature[J]. Current Issues in Tourism, doi: 10.1080/13683500.2014.948-811.
- Cong L, Wu B H, Morrison A M, et al. 2014. Analysis of wildlife tourism experiences with endangered species: An exploratory study of encounters with giant pandas in Cheng-

- du, China[J]. Tourism Management, 40: 300-310.
- Du J, Buckley R C, Tang Y. 2016. Cultural differentiation in product choice by outdoor tourists[J]. Tourism Recreation Research, 41(2), 177-187.
- Gössling S, Peeters P. 2015. Assessing tourism's global environmental impact 1900-2050[J]. Journal of Sustainable Tourism, 23(5): 639-659.
- Griffon Expeditions. 2016. Tibet[DB/OL]. 2016-06-01[2016-06-21]. http://www.griffonexpeditions.com.
- Huang L Y, Xu H G. 2014. A cultural perspective of health and wellness tourism in China[J]. Journal of China Tourism Research, 10(4): 493-510.
- Huang X F. 2014. Research on the safety prevention and control of outdoor high-risk tourism activities in our country [D]. Quanzhou, China: Huaqiao University.
- Jing J. 2012. Outdoor tourism development in Hebei Province [D]. Shijiazhuang, China: Heibei Normal University.
- Last Descents River Expeditions. 2015. Rafting in China. Your adventure of a lifetime may save a river[EB/OL]. 2015-09-09[2016-01]. http://lastdescents.com/.
- Li J N, Yang D M, He L, et al. 2012. Psychological, physiological and behavioural responses of tourists to interactions with rhesus macaques at Zhangjiajie, China[J]. Journal of Ecotourism, 11(3): 202-206.
- Liu C. 2009. Outdoor adventure tourism problems and counter measures[J]. Industrial & Science Tribune, 8(6): 42-43.
- Luo X R, Huang S S, Brown G. 2015. Backpacking in China: A netnographic analysis of donkey friends' travel behaviour[J]. Journal of China Tourism Research, 11(1): 67-84.
- Monz C A, Pickering C M, Hadwen W L. 2013. Recent advances in recreation ecology and the implications of different relationships between recreation use and ecological impacts[J]. Frontiers in Ecology and the Environment, 11 (8): 441-446.
- Mu Y, Nepal S. 2016. High mountain adventure tourism: Trekkers' perceptions of risk and death in Mt. Everest Region, Nepal[J]. Asia Pacific Journal of Tourism Research, 21(5): 500-511.
- Packer J, Ballantyne R, Hughes K. 2014. Chinese and Australian tourists' attitudes to nature, animals and environmental issues: implications for the design of nature-based tourism experiences[J]. Tourism Management, 44: 101-107.
- Romero Brito T, Buckley R C, Byrne J. (in review). Environmental NGOs and ecotourism: A global framework[J]. PLoS One, in rev.

- Simmons D, Becken S. 2004. The cost of getting there: Impacts of travel to ecotourism destinations[M]//Buckley R. Environmental impacts of ecotourism. Wallingford, UK: CAB International: 15-24.
- Song H. 2014. Mountain outdoor tourism planning characteristics and empirical analysis[J]. Contemporary Sports Technology, (34): 240-242.
- Tang Z, Shang J, Shi C B, et al. 2014. Decoupling indicators of CO₂ emissions from the tourism industry in China: 1990-2012[J]. Ecological Indicators, 46: 390-397.
- Tao Y G, Huang Z F. 2014. Review of accounting for carbon dioxide emissions from tourism at different spatial scales [J]. Acta Ecologica Sinica, 34(5): 246-254.
- Wang C H, Buckley R C. 2010. Shengtai Anquan: Managing tourism and environment in China's Forest Parks[J]. AM-BIO, 39(5-6): 451-453.
- Weaver D. 2015. Tourism and the Chinese dream: Framework for engagement[J]. Annals of Tourism Research, 51: 54-56
- Weaver D, Becken S, Ding P Y, et al. 2015. Research agenda for Tourism and the Chinese Dream: Dialogues and open doors[J]. Journal of Travel Research, 54(5): 578-583.
- Xu F F, Fox D. 2014. Modelling attitudes to nature, tourism and sustainable development in national parks: A survey of visitors in China and the UK[J]. Tourism Management, 45: 142-158.
- Xu H G, Cui Q M, Sofield T, et al. 2014. Attaining harmony: Understanding the relationship between ecotourism and protected areas in China[J]. Journal of Sustainable Tourism, 22(8): 1131-1150.
- Xu Q, Peng J S. 2012. Study on outdoor tourism tourist characteristics and tourism development[J][J]. Journal of Nanjing Xiaozhuang University, (6): 97-100.
- Zhang Y, Zhang Z X. 2014. Challenge the limit of Qinghai Province outdoor tourism research[J]. Special Zone Economy, (9): 213-214. (in Chinese)
- Zhong L N, Wu B H, Morrison A M. 2015. Research on China's tourism: A 35-year review and authorship analysis
 [J]. International Journal of Tourism Research, 17(1): 25-34.
- Zhong L S, Buckley R C, Xie T. 2007. Chinese perspectives on tourism eco certification[J]. Annals of Tourism Research, 34(3): 808-811.
- Zhong L S, Buckley R C, Wardle C, et al. 2015. Environmental and visitor management in a thousand protected areas in China[J]. Biological Conservation, 181: 219-225.