O f all the work we do at CERS, the most gratifying for me is our efforts to inspire a new generation with the spirit of exploration and appreciation of the cultural and natural heritage of our region. To document this effort, and to provide our students and interns a showcase for their writing skills, CERS began to publish an Education issue of the China Explorers Newsletter in 2012. This year marks the seventh all-student issue, and our contributions once again come from an outstanding group of talented students and interns who joined us from around the globe.

The ACE 2018 Sports and Environmental Leadership Program, a part of the Rubenstein Bing Student-Athlete Civic Engagement Program, brought together another outstanding group of college athletes from Duke and Stanford to study and work in Zhongdian. They learned about the diverse environments and traditional cultures found around our CERS Center and organized and delivered an exciting service program for local village children, who learned English and sports. The ACE students' research spanned the range from scholarly studies on pollination ecology, tangka painting, sacred mountains and Tibetan calligraphy, to first-hand investigations of local nature conservation and yak cheese production, to a critical look at the impacts of the tourism industry in so-called Shangri-la. While these varsity athletes were not carrying out research on their individual projects or teaching village children, they were working out to stay in shape. And they still made the time to write blogs and produce a short video about their adventures:

https://ace.duke.edu/blog-program/ace-in-china/
https://www.youtube.com/watch?v=AB2ln9xyBtQ&feature=youtu.be

Our summer intern from Singapore, generously sponsored by City Developments Limited, helped with organizing and documenting the summer teaching program, while also remotely running the Singapore NGO that she had started, and she still found time to write the thoughtful article included here.

Students from the Hong Kong University Graduate Association College joined CERS on expeditions twice during the past year. The first trip, in December 2017, saw students travel to Hainan Island to our CER Li Cultural Village site in Hong Shui, while a larger group of college athletes from Duke and Stanford to study and work in Zhongdian. They learned of college athletes from Duke and Stanford to study and work in Zhongdian. They learned of college athletes from Duke and Stanford to study and work in Zhongdian. They learned about the diverse environments and traditional cultures found around our CERS Center and organized and delivered an exciting service program for local village children, who learned English and sports. The ACE students' research spanned the range from scholarly studies on pollination ecology, tangka painting, sacred mountains and Tibetan calligraphy, to first-hand investigations of local nature conservation and yak cheese production, to a critical look at the impacts of the tourism industry in so-called Shangri-la. While these varsity athletes were not carrying out research on their individual projects or teaching village children, they were working out to stay in shape. And they still made the time to write blogs and produce a short video about their adventures:

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Students from the Hong Kong University Graduate Association College joined CERS on expeditions twice during the past year. The first trip, in December 2017, saw students travel to Hainan Island to our CER Li Cultural Village site in Hong Shui, while a larger group of students came to our CERS Zhongdian Center and also visited our sites at the Lisu Cultural Village, the Padampa Sanjye meditation cave and the Meixiang Cheese Factory in Langdu. Sadly, constraints of space prevent us from publishing all of their interesting contributions, but a small selection gives a taste of the flavor and variety of their articles.

Many of the summer students marveled at the differences between the remote wild sites that we visited and their homes in places like the concrete canyon-lands of Hong Kong. As a teacher and a conservationist, it was gratifying to see that the participants came to share our appreciation of the diversity of nature and culture and felt the urgent need to protect this rich heritage. It makes me feel a glow in my heart, hopeful that their generation will do a better job at managing our world than mine has done, perhaps with a bit of inspiration from CERS.
German is spoken and written in Germany. Japanese is spoken and written in Japan. So Tibetan is spoken and written in Tibet, correct?

The reality is a bit more nuanced than that. Tibetan, not surprisingly, is a Tibetic language, a cluster of Sino-Tibetan languages that encompasses a large portion of Central and East Asian languages such as Balti, Sherpa, and Lhampo. However, Tibetan cannot be boiled down to a single tongue, as hundreds of dialects are scattered over the Tibetan plateau. It has been said that once a river is crossed or another valley entered, a new dialect is heard.

A variety of dialectical categorization systems for Tibetan exists. One system uses geography to divide the language into five categories: Northeastern (which covers the Amdo region), Southeastern (which covers the Khams region), Central (which covers the Ü-Tsang region), Western, and Southern. One dialect from the Central region, that of the capital, Lhasa, is the most widely studied and the internationally recognized dialect of Tibetan. Yet, the written language, known as classical written Tibetan, differs substantially from this Lhasa dialect and most other spoken Tibetan dialects. Nevertheless, it boasts a rich history, complex syllabic alphabet, and cache of beautiful scripts.

By the 7th century, the Yarlung Dynasty had been in power for over two centuries and was under its 33rd king, Songstem Gampo. Unifying neighboring kingdoms, he became the first emperor of the Tibetan Empire, an expanse that stretched west past India and south to the Bay of Bengal. Eager to share Buddhism with his people, Songstem Gampo sent one of his ministers, Thonmi Sambhota, to India to gather religious information. But as scripture was consistently written in Sanskrit, a native script was needed to translate this ancient Indo-European language into material that was accessible to all Tibetans. Thus,
Thonmi Sambhota set about creating what would eventually become classical written Tibetan. In doing so, he largely borrowed from Sanskrit grammar and used the Devanagari model for the alphabet, an eastern variant of the Gupta script. A Sanskrit-Tibetan dictionary was developed in the 9th century, but shortly after, the Yarlung dynasty fell, slowing language development and scattering much of the progress that had already been made. Development slowed even further in the 11th century, as Muslim suppression overran India, and many original Indian texts were destroyed or lost as a result. Fortunately, the language saw its comeback in the 13th century, with the rise of Genghis Khan. Though a Tengrist himself, the Khan was interested in various religions and adopted Tibetic Buddhism as the main form of Buddhism in his enormous Mongolian Empire. With a revival of the religion came a revival of the language. In the last seventy years, however, the use of the oral and written languages have both diminished significantly, partly due to the complex nature of the latter.

Classical written Tibetan boasts a unique alphabet. It is a syllabic alphabet, also known as an abugida, a system in which primary consonants are paired with secondary vowels as single units. Thus each consonant has an inherent vowel sound, /a/, but this sound can be modified through the addition of other vowels. There are thirty consonants and four vowels. Consonants can be combined into a single character, called a conjunct consonant - these have been compiled into a list of 89 standard combinations. When auxiliary consonants are affixed (sub-, super-, pre-,
or suffixed) to initial or main consonants, then multiple consonants can constitute one syllable. Written Tibetan is convoluted, and therefore requires substantial time for mastery. After mastery, one can then turn to calligraphy to incorporate artistic expression into writing.

Calligraphy can be broadly categorized into two styles, u-chen and u-me. U-chen, a crissted script, is considered easy to read but slow to write and therefore is commonly used in printing. In contrast, u-me, a non-crissted script, is considered hard to read but fast to write and therefore is commonly used in handwritten documents. While u-chen has only one main script, Jongs, u-chen has six main scripts. Petsug means ‘solidity’, is commonly used for Buddhist texts, and can be written in neat bottom or lengthened root style. Drugtsu means ‘shape of grain’, is often observed in the official documents of the Sakya monarch, and can be written in curved or straight leg style. Tsugrig means ‘tall and stable’ and lives up to its name in that the main body of a consonant only occupies one third of its entire height. Tsugtong means ‘small and stable’ and is similar to Tsugrig but conversely exhibits smaller letters, plumper bodies, and wider gaps. Khyusing means ‘quick and prompt’ and is the Tibetan equivalent of cursive. Because of its complex quality, it is not usually attempted until having learned the other, less advanced scripts. Lastly, Tsugkhyu is a combination of the two former scripts – it captures the beauty of Kyusing and the solemnness of Tsugtong. The wide array of calligraphy scripts allows for Tibetan to be used in a variety of ways, whether it be for official, artistic, or everyday purposes.

Alas, fewer people today are taking advantage of the opportunity to utilize this rich and multi-faceted language. Before the communist takeover in the 1950s, Tibetan flourished as the official language under the Lhasa government. However, during the Cultural Revolution, in some Tibetan regions, written Tibetan was completely outlawed and soon began to be forgotten. After the ban was lifted, it was reintroduced, and the National People’s Congress even passed regulations to protect the language, affirming that Tibetan and Chinese would share equal administrative roles. Although this remains the official policy, the changing social climate does not encourage the use of Tibetan. Official meetings and documents are conducted and reported in Chinese; college entrance exams are written and administered in Chinese; Chinese is introduced earlier and earlier in schools, sometimes even as soon as grade school in major cities; Tibetan is written in smaller font on billboards than its Chinese counterpart and frequently with grammatical or calligraphical mistakes.

Tibetan is an integral part of China’s cultural heritage. More specifically, classical written Tibetan is a literary tradition that has bound a diverse Tibetan people and their countless dialects together for centuries. If the current linguistic attitude is maintained, it is likely that this endangered language will become extinct in less than two generations. Although Chinese is crucial from an economic point of view, neglecting Tibetan would result in disastrous repercussions for the combined Tibetan and Chinese community. Such repercussions include but are not limited to losing the key to unlocking hundreds of years’ worth of Buddhist and Bon texts and destroying a medium for lively scholarly traditions that have remained unbroken for centuries.

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Sacred sites are considered to be the abodes of gods (yul lha or gzhi bdag in Tibetan) that are features of the landscapes, such as mountains or bodies of water. Yulha reside within each site, and are worshiped by the surrounding communities. The deities are considered to be the same as humans in some regard. This means that these deities have relationships with each other and appreciate being pleased in the same way humans do. For instance two mountains may be married and a nearby sacred rock may be their child. It is estimated that close to twenty-five percent of the Tibetan region is considered to be sacred (John Studley, 2015). It is difficult to tell the origin of some of the deities and the traditions surrounding them since they predate the arrival of Buddhism and there is no written documentation of the practices prior to when Buddhist influence started entering the region.

Traditions surrounding sacred sites include prayer, circumambulation, and offerings. These traditions are typically held constant between different sites, but different minority groups may have different prayers. Since the deities enjoy being pleased, offerings such as incense and sport are presented to the mountain to receive blessings in this life. Blessings may be
for health, prosperity, academic success, or whatever one is wishing to gain in this life. Acts such as circumambulation have been used more recently to gain merit in hopes of reaching Enlightenment for the benefit of all sentient beings. This involves making a pilgrimage around a sacred mountain while praying and giving offerings. Depending on the year, circumambulation can give the individual much more merit. For example, 2003 was considered the 6th year in the Tibetan calendar, the Year of the Sheep, which is an important year to gain significant merit at Mt. Kawakarpo. Due to that, in that specific year, there were roughly 36,000 pilgrims in one month circumambulating that mountain. Another tradition surrounding sacred sites is that no life that resides on the site may be harmed. This means that animals that live on the site are “free” and cannot be captured or hunted. It also means that trees may not be cut and even branches may not be broken off of trees on the sacred site.

In the area surrounding CERS Zhongdian Center, many villagers worship the sacred mountain Rina Shan, which is a female mountain that resides on the west side of the Yangtze river. During the Tibetan new year, members of four villages congregate at this mountain to give offerings to it. Through the generations, there have been differences that have come about due to changing culture and environment. For instance, nowadays many of the younger generations no longer know the prayers that are to be said when worshiping each deity. Instead, younger pilgrims and people that live in cities (instead of more rural villages) chant and give offerings instead of praying. Despite this, younger generations are still very much involved in worshiping the deities.

As Buddhist culture is starting to influence the region more, there have also been changes in how these sites are presented. Traditionally, each village had its own sacred site which was only worshiped by that specific community. When people travelled, they had to be extremely courteous and respectful as they were no longer in the presence of their deity and protector and did not want to anger the deity of another village. Now, with more Buddhist influence, different sites and monasteries have become parts of pilgrimages. This means that people from all around culturally Tibetan regions come to these different sites to worship them as part of a larger, communal Buddhist movement. The difference that this has made was noted by Katia Buffetrille in her experiences with the sacred mountain Amnye Machen. Katia was kind enough to share with us her experiences completing the pilgrimage at that mountain. Being from France, she was the only foreigner trekking the mountain in 1990. However,
when she went back to Amnye Machen in 2002, she ran into a wide range of foreigners eager to complete the pilgrimage. She also found much more Buddhist imagery and Buddhist practices on the pilgrimage. Katia describes this as buddhicization. Buddhicization is the process of a sacred mountain becoming co-opted by Buddhism to promote Buddhist beliefs, endowed with new significance within the Buddhist faith.

The sites that have not yet been recognized as sacred by all Buddhists are generally only worshiped by local villagers. For example, we asked a man working at the CERS Zhongdian Center, A-lao, if he worshipped the Yulha or if he practiced Buddhism. He responded that there are four lamaseries in his village, and he worships at all four. He had no concept of the difference between Buddhist and non-Buddhist practices; it was all the same for him. This is an example of a villager who has not experienced the process of buddhicization on his local sacred mountains. Because of this, when he worships a mountain at the new year, he is not accompanied by a lama.

Roadways are under construction on some mountains to allow the pilgrimages to be completed by car. This advancement takes away from the physical suffering encountered when one must complete the pilgrimage trekking through difficult terrain and unpredictable weather, so there is debate about whether or not this still grants as much merit. These sacred sites are considered to be where the gods reside. These deities used to be feared, as people did not want to anger the god and receive retribution. To avoid this, sacrifices were often made to the gods. Now, these deities are
instead considered to be protectors, and far sacrifices are rarely made to them.

The traditional practices of worshiping Yulha is still a very prominent part of Tibetan culture. Though changes are slowly being implemented, the basis of these practices remains the same. Traditional Tibetan practices have been able to transition to include more Buddhist beliefs while still allowing Tibetan values to remain within the communities and culture.

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Salick, J. et al. Tibetan sacred sites conserve old growth trees and cover the eastern Himalayas. Biodiversity and Conservation. 2007. (p 695)
In China, English has become more and more widespread and widely taught since the Cultural Revolution ended in 1976. After World War II, Russian was the most commonly taught foreign language in the country, but this changed when Deng Xiaoping took power in 1978. By December of the same year, Xiaoping had created what is known as China’s second Open-Door Policy, which began the formation of the modern Chinese economy. This policy was created to open the country to business with foreign countries and to anyone interested in investing in China. Chinese ties with the United States were immediately formed, and the need for English speakers in China rapidly increased. It continued to grow at a high rate through the 1980s and 1990s, especially in areas where tourism was common. Since then, the number of English speakers in China has risen to over 200 million people, and around 50 million students in public secondary school take mandatory English classes in the present day.

The Rubinstein-Bing Athlete Civic Engagement program (ACE) has come to Shangri-La for the past three summers to engage the children of Gong Bi Village in English language learning, as it is not always taught in rural areas of China. We work with the personnel at CERS to create an immersive program for children ages 4 to 15.

Judy is a sixteen-year-old student at an international school in Beijing, where she has lived for nearly her whole life. At the age of five, corresponding with the beginning of kindergarten, Judy began taking a course in English after school twice a week, for an average of four hours per day. Her vocabulary was taught with English and pictures, with strictly no Chinese translation from very early on. In fact, teachers would send students out of the classroom for attempting to use Chinese to communicate. She said that while the class was long, it always flew by, because of the teachers’ scary stories, used to keep children interested in understanding English. Her teachers would often act out and tell stories in English two or three times, and would then ask students for a summary or reaction. Additionally, the teacher would record the stories told in class, and the students would have to listen to them again for homework.

When asked for her opinions on the education program at CERS, Judy commented that more speaking should be encouraged from the campers: “If they play there all day without speaking English, they can’t get anything out of it.” She also believed that “the days are too short
to learn English”. When asked about her experience with the efficiency of long days combined with a child’s short attention span, Judy said “the days were not too long because it was funny. It wasn’t learning; it was going and listening to stories.” She recommended breaks to go along with interesting material: “Use mornings for stories, and then a movie, and then lunch and reading, and maybe another movie”. Judy’s other recommendations included reward systems for performance to encourage practice and daily word lists for reciting at home. From any conversation we had with her, it becomes clear that Judy had had a productive English learning experience, as there was never a need for a translator.

Daniel, a fifteen-year-old from Kunming, attends Accelerated Christian Education there. His English learning experience compares in some ways to Judy’s, but is far more structured and choreographed. Daniel uses step-by-step text books, split into sections, and is tested on material one section at a time and all together afterwards. Daniel mostly supported Judy’s comments, saying that, relative to his experience, the camp just didn’t have enough time built into the day to noticeably improve English skills.

China’s Ministry of Education (MOE) has a mission statement for primary school English that is similar to what our group discussed; “…to emphasize the arousal and further fostering of students’ interest in learning English, and to guide them to participate actively in simple communications in English.” While we hoped to teach as much actual English speaking as we could, we realized rather quickly that with 3-hour camp sessions for eleven days, the most lasting effect we could have would be creating greater interest in the language.

In 2001, the MOE started to mandate English in public schools and continues to help build English programs in schools that aren’t yet teaching English as a subject. English education is most commonly started in the third grade, when students are about 8 years old. While the MOE defines nine levels of English proficiency, only the second level is required to graduate secondary school. This can be the only motivating factor for Chinese students, and when it is, it often creates students that cannot use their English in everyday conversational settings. By creating a genuine interest in English, the CERS summer education program can help to create true English speakers in Shangri-la.

The CERS summer education program does a fantastic job of sparking the interests of the campers, making English, and learning in general, a more enjoyable experience. Campers return year after year to play and learn with the college student groups that visit the CERS center every summer, and some have increased vocabulary because of their continued attendance. Whether or not the camp itself effectively teaches the language, it is clear that it continues to have lasting impacts on the local community.
A CASE STUDY: LONG TAN LAKE PARK

By Meible Chi
Duke University

During my time at the CERS Zhongdian Center, my fellow ACE participants and I have been fortunate to learn about the various projects that the society engages in, and I have gained an understanding about the local cultural and environmental conservation efforts in the Tibetan area. One particular field that fascinates me is the exploration that CERS does to discover the sources of Asia’s great rivers, such as the Yangtze. Identifying these sources means that conservation projects can be implemented to preserve the integrity of the upper reaches of the rivers. Almost half of Asia’s population lives downstream from the waterways of Tibet and are thus, dependent on the water quality and safety of these rivers. I focused my research on the conservation effort for Long Tan River and its park in the city of Shangri-la.

The Long Tan River’s sources reside in the local mountains surrounding the city of Shangri-la. It is one of the four rivers that run through the city and, combined, they are the city’s primary source of water. The park is located in the center of the city, running in an East to West direction. Eventually, Long Tan empties out at Napahai, a nearby wetland located about three kilometers outside of the city. Here, it converges with the other local rivers. Tibet is nicknamed “Asia’s Water Tower” and it is clear to see why; from Napahai their waters flow out through an underground river to join the Yangtze River. So, Long Tan River is not only important to the locals, but also to the countless villages, towns, and metropolitan areas that are dependent on its water supply several thousand miles away.

In recent memory, the locals remember the river being clean enough to swim in. But that was approximately 40 years ago, before tourism took hold of the area. Gradually, hotels and commercial areas began to be built along the river in order to exploit the abundant natural resource. Pollution from several industries began to creep in to the river. Plastics, chemicals from farms, and even sewage deposits clogged up the river running through the city. Long Tan became foul and instead of being viewed as an important waterway, it was used as a means to deposit waste anonymously. Before the turn of the century, there weren’t many acts of conservation because development of the economy took precedence. But this changed a few years later when schoolchildren made the first push to clean up and conserve the waterway.

In 2005, primary and secondary schoolchildren were participating in an education program sponsored by the Shangri-la Institute for Sustainable Communities (SISC). From this program, they had the opportunity to pursue their studies in any discipline with the local rivers as their main topic. Art students would paint the river, chemistry students would...
measure the pH and chemical makeup, and even English students would write poems about the river. Since the founding of the Institute in 1996, records of the students’ work were maintained and compared. The current students in 2005 were amazed at the gradual increase in pollution and waste that decorated the paintings and felt that the natural beauty of the river was being lost over time. Encouraged by their teachers, the students collectively wrote a letter to the mayor of Shangri-la asking for support in the cleanup of the river, but governmental support was slow to come. As a result, the students and their teachers began to create semester-long projects to clean up the river themselves. After realizing the purpose of the cleanup, the local community started to participate in the conservation of the river. Because the river cleanup became a major local movement, the government eventually provided the local military to assist with the projects.

After two years of continuous projects, the city government decided to commemorate the achievement by erecting a 1 km long park that runs the length of the river running through the city. This section of the river is now much cleaner and a ban has been placed to prevent careless dumping of waste. As a direct result, the water quality running through Napahai and down through China’s great Yangtze River is improved. Festivals are held at the park to celebrate conservation projects, and the SISC uses these events as platforms to further educate the public about the importance of conserving local waterways.

Water pollution has been an international challenge that has begun to be addressed, but all too often, not enough is being done to maintain the effects of such conservation projects. The SISC has recognized the importance of engaging local youths in these projects, and in 2008, the China Water School was created with support from UNESCO and Swarovski. These Water Schools are situated along China’s major rivers and continue the integration of water bodies into the children’s curriculum. The hope is that if locals do their part in conserving the water quality of their part of the river, then eventually the entire river’s water quality will be raised, and the economic, health, and longevity of the region will reap the rewards of clean water ways.

Special thanks to Mr. Wendi Gomba of the SISC for being so considerate as to contribute to this article.

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Ever since I can remember, I have been fascinated by the visual arts. First it was the beauty that drew me in, but the feeling of creating something and expressing my emotions without words is what hooked me. Across the globe, art is used as a form of expression and communication for both the individual and for the collective group. Each time that I visit a new place I am intrigued by the differences in design and style of the fine arts, but also by the similarities in techniques. The art in Shangri-La has shattered my expectations in all the best ways. The ornate wood work on the door ways, the extreme attention to detail in the decorations, and of course the thangka paintings.

Thangka is a traditional style of painting and an integral part of Tibetan Buddhism. These pieces are usually small in size and are known for their portability, given their narrow vertical shape which is designed to be rolled up as a scroll. Sometimes thangkas are large though, and some can require 25 people to carry one. Thangka art isn’t like other styles of painting or drawing, such as impressionism, where the image may only loosely resemble something. Thangka images have to be exact and an artist cannot mess up even a little stroke. Each image of a deity must exactly replicate the original image with no exceptions. The only room for some creativity lies in the background of each painting with the trees, plants or landscape.

Thangka painting is taught in monasteries or at thangka
schools like the Shangri-la Thangka Academy in Old Town, which we were fortunate enough to visit. I interviewed the master of the academy, Palden who described the process to learn the techniques of thangka at his school. At the Academy, students can start learning the techniques of thangka at any age; the head of the school started at age twenty, but some students studying there are quite young. Thangka isn’t an informal style of painting that can be self-taught. There are many steps in the process of learning and mastering this art. A student must first seek out a monastery or an academy to learn all of the proper techniques. However, a student is not permitted to learn the painting techniques until they have mastered the process for drawing each deity with a pencil. Specifically, each Buddha has different detailed attributes, proportions, and features that must be replicated perfectly. Each student has to study these dimensions, just like a student of sutras studying and memorizing a piece of text. The student-painter must be able to recall these measurements from memory before she can even begin to paint. Next, a student is given an easel to attempt to draw each of the deities with a specific gridding system, incorporating the required dimensions. If the student is skillful and their works show potential, only then are they allowed to learn the techniques of painting. The student then learns to paint the bodies in each proper color and end with learning to paint the eyes, which are the most difficult part to master.

The progression for learning to paint these magnificent pieces almost exactly mimics the process for creating each Thangka; first the deity is drawn out in pencil with the exact dimensions mapped out through gridding, then the face, body, and background are filled in with pigment, and finally the eyes are painted in. When the painting is complete it must be mounted on either a traditional fabric, or in a frame. Even then, a thangka cannot be considered finished until it has been consecrated. The mounted painting is brought to a lama, who will perform rituals and bless the painting.

Each painting is believed to be inhabited by the deity depicted, which explains why the thangka is an important part of worship and prayer. Color symbolism is a large aspect of Tibetan Buddhism that also carries over into the paintings. There are five main colors that hold significance in the religion: blue represents purity, healing, and the wisdom transformed from anger; yellow represents rootendedness and the wisdom transformed from pride; white means knowledge, learning, and the wisdom of reality; red represents preservation and the wisdom of discernment transformed from delusions; and green represents harmony, balance, and the wisdom of accomplishment transformed from jealousy. The symbolism of color is exemplified in the five Dhyani Buddhas, or transcendent celestial Buddhas, each representing a different quality and each represented with a different color. They are common subjects of thangkas, and are usually depicted in a seated position. Usually they are assembled in a line based on their cardinal directions. Ratnasambhava is the yellow Buddha, which represents sensation and transforms pride into the wisdom of equality. Akshobhya, blue, represents the body and turns anger into the wisdom of purity. Vairochana, white, is consciousness and transforms ignorance into the wisdom of reality. Amitabha is red and represents perception, changing cravings into the wisdom of discernment. Lastly, Amoghasiddhi, green, is volition and turns envy into the wisdom of accomplishment.

The process to become accomplished in the techniques of thangka is an incredibly long and selective one. After learning about the process, the intricacies, and the symbolism that are involved in each painting, big or small, I have acquired a new level of respect for each new piece that I see. Thangka is a beautiful, extraordinary art form that expresses much about the histories of Tibet and Tibetan Buddhism. In each piece I sense the religious and historical significance as well as the reverence, discipline and commitment that each artist brought to bear. It is truly inspiring to experience the thangkas in person.

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Head Master at the Shangri-la Thangka Academy
Yaks, the formidable yet endearing bovines native to the Himalayan region, have for over a millennium been an essential part of life for the Tibetan and Nepalese people. In fact, many argue that life would be impossible in these areas if not for the yak and the products the yak provides, due to the extreme and fluctuating climate. Clothing, blankets and day-to-day necessities such as rope are made from yak wool. Yak meat, milk, and butter provide...
one. Tibetan companies selling yak products have had a hard time breaking into the modernized market. This is in part due to the lack of cultural understanding from modernized societies, as well as due to the lack of market intelligence amongst Tibetan groups. Put that in the context of physical remoteness and inability to easily export products, and one can see what a challenge it is to bring products to wider markets.

The “outside world’s” lack of cultural understanding can also be a huge barrier when trying to help a more remote group break into the global market. In this case, that understanding involves getting to know the intricacies of the relationship between the people and the yak. To an outsider, the relationship may seem purely economic and survival-based. However, that is not the case. In Tibetan legend, wild yak are the protectors of the people both physically and spiritually, living on Earth as well as in the constellations. Religious ceremonies involving yak-headed deities in Tibet actually pre-date the introduction of Tibetan Buddhism into the area. Yak skulls and horns are of extreme religious importance, and are often placed in prominent or sacred places to ward off evil spirits and bring prosperity. Additionally, there are social contexts to be considered. In nomadic groups living around the Tibetan Plateau, wealth is often judged by the amount of yaks owned. Yaks are almost always used as a dowry when a Tibetan girl marries a herder. The social structure and hierarchical organizations of many communities in this area have been based around yak and yak-raising. Failing to understand this complex relationship will result in both social and economic failure.

Companies selling yak products are generally family-based, living in small villages, and have little to no exposure to the modernized market. Entry into these markets may prove difficult because the companies have no intuition on when to buy and sell, how the monetary systems work in city settings, and generally how to navigate the market. They also have difficulty transporting the goods once they decide to sell, due to the mountainous terrain and unpredictable climate of the Tibetan Plateau. And finally, there has been difficulty breaking into new markets because the yak has not produced a strong enough specialty product that can generate enough revenue in the large-scale market to make all the growing pains worth it. This is where yak cheese can make the difference.

Cheese is often valued for having a unique flavor or texture, rather than being a staple food that should have a taste that conforms to all other tastes. Other yak products, such as milk, may not be strong enough to beat out global companies because they are part of a sub-market that is monopolized by one or a couple of “correct” flavors. Cheese, on the other hand, is valued for being different: sharp or creamy, hard or soft, mild or salty.

With this understanding, Wong How Man and the China Exploration, and Research Society launched a project around 2004 to help a family-based company in the Shangri-la area get a yak cheese business up and running. A first step was the construction of the “Cheese House”, a house built for experimenting with yak cheese to find the best methods to produce the best cheese. Specifically, the project worked with Laorong Choma, and her family to create the Mei Xiang Yak Cheese Factory. For 6 years, the family didn’t make a cent. But with the help of CERS
that it tastes good. Cheese, as pointed out by Professor May, a teacher of Dairy Plant Management in the Animal and Food Science Department of the University of Wisconsin, takes on its natural environment because it actually pulls nutrients and elements out of the environment to create its own unique flavor. Yaks possibly have the most freedom in their grazing when compared to any other livestock around the world. This gives yak cheese a very special flavor that is very particular to a specific region of the world. Additionally, yak cheese is healthy. In one study comparing the cheese from free-range Nepalese yaks to cheddar cheese from grain-fed, Canadian dairy cows, it was found that the yak cheese had three times more omega-3 fatty acids than cheddar cheese, as well as being richer in conjugated linoleic acid - all healthy fats.

Yak cheese has passed all sorts of tests in the global market. A variety of restaurants and shops are selling it across China. It is used in a plethora of dishes, ranging from salads, to sandwiches, to pasta sauces. Someone anonymously entered Laorong Choma’s aged cheese into an international contest of cheese in France, and to many people’s surprise, her cheese won gold!

Yet there is still work to be done. The cheese factory, like many Tibetan companies, is having difficulty arranging the proper paperwork and licenses to be able to sell products globally. On top of the economic difficulties, rich and important traditions are being lost amidst the frenzy for buying and selling and commercialization. Modernization can be good, but it is important to consider more than just the economic impacts of production decisions. There is a way to have a marketable product on a global scale, while still preserving the tradition and history behind that product. For yak products and yak cheese, that means helping people get their hands on the right tools and techniques, just as the CERS project did, without undervaluing local knowledge and the deep connection that people here have with their yaks.

Laorong Choma and Jacie Lemos at the CERS center.
Tibet is a vast region that comprises over a quarter of China’s territory, and of that region, two thirds is considered grassland. In recent decades, it has become apparent that large portions of these grasslands have begun to degrade and multiple factors have been attributed to causing this degradation. In a review by R.B. Harris, the author considers the current reasons given for grassland degradation, providing an extremely critical review, as he details the flawed logic and lack of research and evidence for a multitude of proposed possible factors. These range from climate change related issues to changing sociological behaviors of nomads and other pastoralists. Clearly, there has not been enough research done to accurately assess the major causes of grassland degradation, and more attention must be given to each individual factor. Among the specific factors related to grassland degradation is overgrazing. This article briefly looks at how overgrazing may be affecting pollinators of the Tibetan plateau.

Overgrazing has become an increasingly pressing issue in the historically nomadic region of Tibet. Several factors have contributed to this change in recent decades. Firstly, in the 1980s after the Cultural Revolution, China began allocating traditionally open pastoral lands to individual families to create a more structured Tibet. Pastoral allocation resulted in nomadic families being less able to react and adapt to changes in the environment to protect their herds. Families must now rent lands from other families to avoid dangerous weather, and often struggle to react quickly. Nomads then began to build permanent homes on their allocated land, which leads to decreased mobility and overgrazing. Also, many allocations were unfair, leaving some families with completely dry land, having no access to water. Secondly, ever since China opened its doors to international trade and improved transportation into remote areas, nomadic families have been under increasing pressure to interact in the larger global economy. Nomads traditionally did not raise yak and sheep to be sold, their livestock were a means of survival in the harsh terrain. Nomads have had to settle in permanent pastures to raise greater numbers of animals, which has led to local overgrazing. Lastly, nomads have had to make difficult decisions in order to survive. As more pressure is applied to engage in modern economic society, nomadic families are moving to towns and cities to provide for and send their children to school. Still, yak are a symbol of wealth, so often families move to towns and cities but keep their herds while no longer moving them with the seasons. This has contributed greatly to the rise in overgrazing surrounding towns and cities.

Overgrazing is clearly becoming an environmental issue, and it can have multiple environmental impacts. Researchers have begun studying the effects of overgrazing on plant species in the grasslands. While this research is important, research on the effects of overgrazing on pollinators, especially in the Tibetan region, is still lacking.
Bumble bees are the most abundant pollinators in high plateau and alpine ecosystems and thus deserve the most attention when discussing pollinators there. 50% to 60% of pollination is done by bumble bees throughout the Tibetan plateau. Other, less abundant pollinators include honey bees, moths, and butterflies. Bumble bees are generalist pollinators and thus pollinate indiscriminately among plant species, making them vital in maintaining plant pollination and biodiversity. While bumble bees are important in all grassland regions, recent research has shown they have greater significance at higher elevations and in mountainous regions.

Research has been conducted in other parts of the world examining how changes in flower height and availability affect bumble bee populations. Reduced flower height and availability is related to decreases in bumble bee populations. Overgrazing can cause both a reduction in flower height and availability as grazing animals selectively consume many flowering species in pastures. Overgrazing also negatively affects plant biodiversity in pastures. Grazing species like yak and sheep avoid poisonous and unpalatable plants, which can quickly take over and destroy the diversity of the grassland. Therefore, it seems critical to understand how bumble bee populations are affected.
by overgrazing, as their food sources are clearly affected. The Bumble Bees of China Initiative (BBCI) is currently attempting to document the regions in which specific bumble bee species reside as well as their population sizes. While the BBCI is doing great work in documenting current statistics of bumble bee populations, there has not been a significant look at changes due to grassland degradations and specifically, overgrazing.

If research from other regions can be extrapolated to Tibet, we can propose the hypotheses that there will be a decrease in bumble bee populations as a result of overgrazing. Several potential consequences of significantly reduced pollinator populations exist. Bumble bees are mobile species and thus a change in grassland populations will potentially affect nearby areas, such as mountainous regions. What may follow is an even greater loss of plant biodiversity in grassland and mountain ranges as lower bumble bee populations result in lower rates of pollination and seed set.

Ecosystems exist in fragile balances, with many variables interacting continuously. There will inevitably be changes to the environment if populations of the significant pollinator bumble bees decrease, with unpredictable consequences. For example, when plant biodiversity is reduced in a region, it becomes vulnerable to exotic, invasive species. This is merely one possible outcome, but when changing an important aspect of an ecosystem, much thought must be given to these hard to predict consequences.

Overgrazing clearly affects flowering plant biodiversity in grassland regions in Tibet, and plant species’ pollinators are intimately linked to these flowering organisms. To address the increasingly dangerous grassland degradation situation, more research must be conducted meticulously on many of the related factors. Overgrazing is a major source of grassland degradation and deserves more attention as a serious threat to plant and pollinator species biodiversity. Overgrazing is only a part of the larger problem of grassland deterioration, but if the problem is going to be addressed in an effective way, there must be deeper understanding of each factor.

The grasslands of Tibet support hundreds of thousands of herders, but are also a haven for some of the world’s most unique and beautiful flora and fauna. The degradation of these lands must be addressed to protect both the herders’ livelihoods and these species as the world continues to change and develop.
Drive about 30 minutes from the CERS center and you’ll hit downtown Shangri-la, a bustling city which was once a quiet town with a single paved road and no supermarket. After traveling halfway around the world to one of the most remote locations I’ve ever been, it startled me to discover that this small town was actually consumed by tourism. I still saw yaks wandering along the road and locals wearing their unique traditional clothing, but some things seemed undeniably “fake.”

In the mid-1990’s, commercial logging in this region was the driving force of the local economy, supplying more than 80 percent of the area’s income. Then in 1998, catastrophe struck. Due in part to over-logging of the Jinsha River catchment, the Yangtze river flooded, killing 4,000 people and wiping out millions of homes. The government responded by banning logging in the region surrounding Shangri-la.

In an attempt to revamp its economy, local officials turned to tourism, taking advantage of the area’s beautiful vistas, majestic wetlands, and robust mountains. Construction began on hotels, museums, parks, and more. Natives even began renting out their horses to tourists who could ride through the vast, flat wetlands. Perhaps the most drastic attempt to draw more visitors was the name change in 2001 from Zhongdian (Tib. Gyalthang) to Shangri-La—the fictional name of a mythical, peaceful, utopia that was said to bring immortality. The local government spread a rumor that their land had inspired the earthly paradise in James Hilton’s 1933 novel, Lost Horizon, where the term Shangri-la originated. They argued that well-known botanist Joseph Rock, who took stunning photographs of the area from 1922 to 1935, motivated Hilton to write the novel in the first place. They believed, or wanted to believe, that their land was the real Shangri-La and made legitimate attempts to prove it, although numerous academics claimed to the contrary. The debate continues to this day.

China is home to 55 recognized ethnic groups, of which 54 are minorities. The Han Chinese make up nearly 90% of the population and have a long history of domination in the country. With minimal exposure to and understanding of Tibetan culture, the allure of the area has brought in millions of Han Chinese visitors, making up about 95% of all tourists in Shangri-la. Many of these Han Chinese decided they couldn’t leave. Since the tourism boom, many have purchased homes and land in the area, taking the opportunity to absorb the majority of tourist related jobs.

This major demographic shift and continuous expansion raises a number of concerns in this recently remote area. In heavily trafficked Old Town atop Turtle Hill, stands the world’s second largest prayer wheel (previously the first)—
monks now are cluttered with hordes of picture-taking tourists. In 2014, much of Old Town burned down in a massive and devastating fire. The city was forced to rebuild their quaint tourist trap, but knew they needed to do it in a way that would preserve its uniqueness and still appeal to Chinese tourists. With cobblestone streets and intricate woodwork on the shop facades, Old Town now represents the contemporary idealized view that Chinese have of Tibetan culture. Some of the new buildings have been constructed in the traditional Chinese style, leaving Tibetan architecture in the past. Street and shop signs now appear in large Mandarin Chinese characters, with Tibetan words only visible at the very bottom, if at all. It’s no wonder very few locals can be found in Old Town—they can’t even read everything that’s around them. Many homes and businesses have even been torn down to make way for this new wave of tourism as well, which suggests that this transition has brought about a myriad of harmful effects.

Most notably, the commercialization and commodification of Tibetan culture in Shangri-La has contributed to its overall degradation, all sparked by the shift of economic reliance to tourism. In some ways, tourism in Shangri-La has reinforced stereotypes of Tibetan people. Locals have simply learned to perform their cultural heritage in ways that appeal to Chinese tourists, solidifying their status as backward or unusual. For instance, traditional performances held in town square where dancers are covered from head-to-toe in colorful ancient clothing buttresses the Chinese historical view of them. This can lead to a superficial or inaccurate depiction of the culture, as these types of performances aren’t commonplace in modern life. Numerous
tourist attractions carry the same type of superficiality and blind visitors from seeing the true Tibetan way.

It cannot go without mentioning, however, that tourism brought a host of benefits as well—after all, tourism “saved” Shangri-la. First, and most obviously, the economy was upheld because of tourism; it filled the 80% gap that the logging ban triggered back in 1998, and has grown immensely ever since.

Another result of tourism is a greater sense of national unity. With locals and travelers interacting on a daily basis, the barrier between the two cultures has been let down, which counters the point of reinforcing stereotypes. Instead tourists can see Tibetans as they really are, if they choose to interact with them instead of only with the Han Chinese shop owners. Additionally, many Tibetans feel a new sense of pride and revitalization of their cultural heritage. With busloads of outsiders pointing at their culture and thinking it’s unique or interesting enough to pay money for, locals find it easier to stand by their traditions. Exposure to Tibetan culture has also provided greater recognition and appreciation of the region from the Han Chinese.

It is important to grasp the bigger picture regarding tourism’s effects because it helps us make better decisions when we travel and fully understand our impact. This then begs the question I think we all need to consider. What specifically can we do to become better tourists?
In March 2018, I had a meeting with Esther Ann, Chief Sustainability Officer of City Developments Limited, a Singapore real-estate development company with a global presence, including in China. I had earlier sent a funding proposal to CDL for the interest group I had set up, Singapore Youth for Climate Action (SYCA), for our activities in 2018, and had gone to that meeting thinking it was a discussion for that. Not long into the meeting, I realised Esther was not going to touch on that, and instead, after acknowledging she was supportive of SYCA’s work and was keen to see how we would grow from an informal interest group to something a bit more structured, she mentioned she would send me off to Shangri-La in China for a short internship. Thankfully, the organisation I was working with was also supportive of this and they let me off!

Esther had in mind for me to learn from China Exploration & Research Society (CERS), a non-profit organisation focused on exploration, research, and conservation of nature and culture since 1986, and observe how they grew and run their organisation, thus developing and growing my organisational skills, and hopefully, my abilities to develop SYCA into a non-profit or social enterprise as well. To have this opportunity presented to me was like a charm. So off I went to CERS’s Zhongdian Centre from 12 July to 5 August, with the plan being that while CERS was hosting the ACE in China programme, I could be there to support them. From

TOP TO BOTTOM:
Shangri-la old town.
Dr Katia Buffetrille on the mountain top.
the ACE website, I learned that “The Sports and Environmental Leadership Program will convene a cohort of Duke and Stanford student-athletes for a three-week program that promotes youth development through sports and fosters a greater commitment to environmental protection among ethnic minority youth in underserved communities on the Tibetan Plateau.”

While the student athletes were running the programme, I was mostly helping to document the activities by taking photos and videos. I also had the opportunity to do a sharing about the work that I do with People’s Movement to Stop Haze (PM Haze), and our field project in Sungai Tohor, Indonesia to rehabilitate that peatland area as part of a strategy to address the haze problem that clouts the Southeast Asian region.

Men on a Mission

For me personally, after participating in a similar program in 2015, in Pathein Township in Myanmar, I felt the educational content that these Stanford and Duke student athletes came up with was much more fun and engaging.

Aside from the summer education programme, what I loved about my internship was that I was not only learning something new about Tibet and the complexities of this place and its people, but also I had the opportunity to learn about a number of inspiring people.

Throughout the three-weeks, we were exposed to explorers through films and books, like 69 year old Wong How Man, Founder of CERS, who among other things, had discovered the source of the Yangtze River, and Joseph Rock, the Austro-American botanist and explorer, who spent more than 20 years among the Naxi in Yunnan in the 1920s and 1930s. And there were the priests from the Saint Bernard Mission of Switzerland who came to the Tibetan plateau to preach the Gospel in the 1940s, and who had one of their own, Father Maurice Tornay, killed while on his way to meet the Dalai Lama. And finally there was the chance to meet in person, CERS’s very own Research and Program Director, Dr. Bill Bleisch.

Bill first came to China in 1987 when he was 34 years old, and has since worked and lived there. Bill himself had some interesting phases in his life, and one of the things that struck me was when he compared himself to How Man, and said he was not an explorer like How Man. To me, however, this idea of being an explorer and seeking the unknown, regardless if there is a structured programme or guide to follow, regardless if the area of interest is a physical space, culture, language, still boils down to a core principle of having courage to try out something new, to put yourself in this area of danger and vulnerability, and then coming to this point where one feels like his or her life has changed. To me, being an explorer is not just about exploring what’s out there, but also exploring our own interests, emotions, and dreams, and so in that sense, Bill is an Explorer too.

Woman who Dare

All of those explorers were male, but I was also taken by the female figures while I was here. One of them was Tsering Drolma, CERS Education Coordinator and Vice-Director of the Zhongdian Centre.
What I found endearing about Drolma’s story is that she had only gone through four years of English class before putting herself out there at Duke University, from where she eventually graduated with a Bachelors in Sociology in 2012. For me, coming from an education background in which I was taught English all the way from kindergarten, I cannot imagine going to a new country and to a university and having to use English 24/7 after just four years of English class. The fact that she graduated from Duke, came back home to work at CERS, and has been organising summer education programmes for local kids was heartening to me.

Another fascinating figure I got to know was Dr. Katia Buffetrille, a French ethnologist and Tibetologist, who has worked closely with CERS since 2003. Katia has so much information to share, I do not know what to highlight! Katia turned 70 years old this year, and she mentioned that as soon as she turned 21 in 1969, she went to Nigeria and then India. Along the way, Katia stumbled on Tibet and fell in love with it. At a point where she could only speak French, then decided to learn Tibetan instead of English, because it was more fun. She eventually had to learn English as well. In 1996, at age 48, Katia got her PhD, with her focus area being on sacred mountains and pilgrimages in the Tibetan world. She has also completed the pilgrimage to Amnye Machen Mountain three times, performed three circumambulations around Kawakarpo sacred mountain, two around Kailash, and one around Tisbri. I walked around the Old Town with Katia a few times, and have to say I feel she is way more fit than me!
Ashira

I’ve learnt how to appreciate things in perspective. I come from Hong Kong, where the fast moving city life doesn’t really allow time to stop and look. Buses, concrete buildings, and people all pass by in a blur. You slowly learn to see things from the same point of view: skyscrapers will forever be beyond your reach, ants will forever be stumbling upon your feet. Observing seems pointless, dull.

It is perceived common sense that we observe with our eyes. The HKUGAC CERS Shangri-la expedition taught me, however, that sometimes we need to observe with our arms and legs. What might seem a yellow speck on the open grasslands might actually be a tiny buttercup once you bend your knees and stoop down. Hold your nose up to the very petals of the flower and see the thin layer of gloss upon each petal. What might seem like a vast overflowing river might actually be a mere part of a river system. Hike up to the mountain’s peak and see the microscopic system of river channels beneath you.

Let us not limit ourselves by what we are used to doing. To observe is more than using our eyes or even binoculars - it is a combination, using all our body parts. One of the highlights of the trip was our hike around Wudi Lake. We had to crouch down and look at the skeletal-looking cushion of plants, had to go on our tip toes and pull ourselves over the giant tree trunks. There was so much to see: even of one plant, different angles offered a different looking plant. I understood why explorers do what they do - observing wasn’t boring at all, in fact it is much more entertaining than staring at the same neon screen for three hours straight.

Since coming back to Hong Kong, this profound way of seeing the world has truly broadened my perspective of my home town. No longer is it this boring cityscape I’ve seen a hundred million times, rather it is a place that I continue to explore every day. Whilst following the same path to school, take a minute to stoop down and look at all the amazing species of bugs crawling on...
the concrete. Being an explorer doesn’t only mean to go
to exotic places where no one has been before; being an
explorer is to uphold a curious heart, and to find things
no one has before, even in familiar places. You’d be
surprised by how many interesting things lie beneath
our noses that are unknown to us. All we have to do is
use our arms and legs to see.

Yoyo

During my stay in Shangri-La, I gained a lot, not
only in terms of knowledge about nature and cultural
exploration, but also in terms of my personal growth
and experiences.

I have learnt how to research in a different way. For the
numerous projects that I have done at school in Hong
Kong, I always relied on Wikipedia or other websites
to finish and I seldom spent time on finding out if the
source was reliable or not. It was an usual practise for
me to just type in the research topic and copy and paste
the result that I got from the search engine. However,
one of my major tasks during the trip was to research a
topic mainly based on first-hand information. At first,
I was not sure if I could really complete the project
without all those informative websites and the useful
search engines. But when I really started to collect
information by interviewing the locals, I soon realised
that first-hand information was more accurate and more
detailed than what I could have found on the internet.
We were grateful for having the CERS conservation
director, Dr. Bill, to give us a talk, and we could
collect more information for our project by asking him
questions at the end. The responses that he gave us
were based on his own opinions and experiences, which
I could never find on any websites.

Apart from interviews, I also collected second-hand
information from books. Flipping through those stacks
of books was indeed a little tiring, but it was actually
a fun part of my research to find information, like a
treasure hunt. Whenever we found something useful for
our project, we would actually high five to celebrate
and carefully jot down the book name and the page
number. When I no longer finished research just at
the click of the mouse, I learnt to enjoy the research
process and not to rely on information from the
internet.

The CERS trip also was a new travel experience for me.
I used to go on vacations with huge luggage, staying
in famous hotels and visiting every bustling landmark,
just like every other tourist. I seldom have had a chance
go on a vacation that allowed me to adore the beauty of
nature, as my family members prefer travelling to urban
cities. On this trip, instead of visiting crowded tourist
spots, I hiked the mountains and relished the breath-
taking landscape of Shangri-La. I could really escape
from the crowd and enjoy the peace and tranquillity of
nature. I didn’t stay at a luxurious hotel, but it was way
more comfortable to see nature when I opened the door
everyday. This was a trip that totally differed from the
previous ones, giving me a new definition of travelling.
When I plan my next vacation, I am definitely going to
persuade my parents to visit nature instead of crowded
cities.

My ten days in Shangri-La were filled with new
experiences and enduring events and I am thankful
for having this invaluable opportunity to visit such a
fascinating place.

Ryan

During these ten days in Shangri-La, I can finally
understand and admire the true beauty of nature and
the world. As we were in Hong Kong before the
trip, everyone just stuck with the pace of the city.
Everyone was either focusing on their smartphone or
enjoying their own music. Living in such a metropolis,
surrounded by humans and concrete buildings everyday,
I was never able to witness or to feel the power of
nature. A short exploration in Shangri-La has expanded
my knowledge of the world and also my thoughts of
mother nature.

I was surprised about what I was able to see on the
trip and what I could explore and discover. With the
assistance of CERS, I learned a lot about the region
and the unique biodiversity in Yunnan. During the
stay in the Lisu village, it was very lucky for us to
have a chance to observe the golden monkeys. It was
a precious experience to have close observation of the
monkeys. Unlike in the zoo, we can truly see their true
nature and their natural behavior in nature, for example,
the conflict between two adult males. Not only did we
have the experience to learn about the monkeys first-
hand, but we also got guidance from the director of the
nature reserve. For myself, the beauty of nature was
there in the reserve, where the monkeys and the forest
rely on each other. Nature itself is a miracle. It creates
a unique cycle of life for all the living creatures in the
world. No matter how enormous or how tiny they are,
nature seems to find its ways to organise and to provide
different roles for every species. We had the chance to
witness the system of nature where it was not controlled
by anything, just the beauty of existing nature.

Besides the beauty of nature, nature is also powerful
in the way that it creates the whole ecosystem and
the landscape of Shangri-La. During the trip to the
Langdu Yak Cheese Factory, we travelled through
a lot of glacier valleys on our way. It is spectacular
and impressive to see how powerful nature was to
create mountain peaks and valleys. I am a geography student in Hong Kong, and what we learn is only from the textbook or the internet. In Shangri-La, we can see it for ourselves, observing real life examples. We also reached the highest point of the whole trip with the elevation of 4610m. It was the point when I truly understood the power of nature, to truly feel its power to form the plateau and to rise from the earth’s surface. I admire the nature of its creation and strength in structuring the earth.

However, nowadays nature is facing the risk of destruction by humanity. Human activities, for example logging, mining or construction, take place more rapidly. It takes place near the Yangtze river or inside the forests. These activities not only create disaster and affect humans, but also disturb nature. With more presence of humans, the beauty of nature is fading and starting to disappear. It will be a shame if Shangri-la, the paradise, also becomes the same as Hong Kong in the future. Ancient forest turning into concrete jungle, nature reserve turning into zoo, camping site turning into hotel site. The future generation may not have the chance, as we did, to experience nature. It reminds me that humans need nature to survive, but nature doesn’t need humans in order to survive. So I think it is time that humans really start to protect nature and save it for future generations.

Jacky

Despite joyful observations and valuable lessons, there are always some difficulties. I spent most of my 16-year life in Hong Kong, which is a coastal area at low altitude. The first few days were tough in Shangri-La, where we had to deal with the high altitude. Most of us were gasping for air on the first few days and some of us even had to take Diamox. It was rather difficult to stay focused on learning during the trip while our bodies were trying their best to get used to the environment with scarce oxygen available.

However with our perseverance to access first-hand information and exploration, we were still able to get through the tough situations and managed to enjoy throughout the whole trip.

Surprisingly, a language barrier was not one of the difficulties that we faced in our trip. Initially we thought the locals we met had very heavy accents and it would be hard to communicate with them if we had to interview them to get any first-hand evidence. Nonetheless, the locals were very friendly and tried their very best to comprehend what we asked and responded to us with a very polite manner. For example, the director of the nature reserve was really patient in answering questions raised by our groupmates about useful plants and Lisu golden monkeys. I can clearly see that the convenience brought by knowing three languages can help us when interviewing locals.
This will be one of the most remarkable trips in our life; a totally new experience for me. We have tried many new things and had many new observations during the whole trip. The valuable lessons in the CERS trip are something special and unique, for example, the golden monkeys and Yangtze river. It is impossible to obtain first-hand evidence of these things by staying in Hong Kong and reading textbooks. Hong Kong is just a tiny and negligible place on earth. With many more different cultures, biomes, species outside this small place, exploring the world means seeing the whole world in different perspectives. Besides all the lessons we got from this CERS trip, the trip is also a huge inspiration for me, boosting my motivation to get my backpack ready, and explore cultures and species around me. The world is ours, and up to us to explore.

ANTICLOCKWISE FROM TOP LEFT:
The golden monkeys were not afraid to stay close to us!
Ryan observing the landscape with binoculars.
Jacky aiming at the target in the Crossbow festival.
We visited the beekeeper and had a taste of the fresh honey.
Passing by the Yangtze river in the middle of our car trip.
A vast view of greenery surrounded wooden houses mismatched comically with gigantic pieces of glass. This unharmonious blend of nature and artifact has triggered some flashes of memories – everything seemed to be the same as I saw them last time. I can vividly remember the same antic houses with golden dragon sculptures in their front gardens scattered around Shangri-La a year before. With all those skyscrapers blooming around Hong Kong, described by neighbourhood countries as a ‘concrete forest’, I was quite frustrated to see traditional arts disappearing in such a paradise. Interested in arts and culture, I have decided to dig deeper in this area in these ten short days.

However, studying local architectures is surely a challenging topic to start with. A while back then I was struggling to change to an easier subject with more first-hand resources. Telling my thoughts to Katia, a French specialist in Tibetan pilgrimages and religious studies, she responded with a gentle laugh. “Oh well just because it is hard, doesn’t mean that you can just run away from it.” I guess she made a valid
point: as a Tibetan expert, I could imagine how many obstacles she had to overcome before she found something useful for her research. Then I recalled my research topic last year was food culture, which ended up to be a disaster, as what we presented was merely facts from books. Maybe it is always a good thing to try new things that are out of my comfort zone for a while. As soon as I get my feet down to the project, I realized that I was completely wrong about my prediction about information sourcing—in fact, resources are all around us.

We are travelling most of the time from site to site. On the way, Tibetan houses appear everywhere across Zhongdian. During the crossbow festival, I was grateful that Ms. Yu, a Lisu woman, was kind enough to lead me around her new Tibetan house. It was always nice to have a local to tell you interesting facts about their culture. As urbanites, a large proportion of our knowledge is from the internet and books. The mode of learning is mainly passive and submissive. This kind of experiential learning, especially in such an exotic place, was a fresh stimuli for caged birds like us.

I have really enjoyed that there is no absolute guideline of what we do for research. Students are free to present their work in any format. As a Visual Arts student, I was really looking forward to doing my project based on sketches and illustrations. After three years of blood, sweat and tears dealing with high school exams, I was really happy that I have finally gotten a chance to draw whatever I like without any constrictions. Knowing that, I was really happy to bring my camera and sketchbook with me everywhere I went, drawing quick sketches of everything I saw.

One important thing that I have learned on this trip is to never let any opportunities sweep away. There is nothing for which we are unable to find related information. As a famous Chinese saying goes, ‘whenever three people come together, there is always a teacher among them.’ Without introduction from Dr. Bill and Drolma, never would I have known that our driver is in fact the project manager of CERS Hainan project, that the cheese maker from the local factory was an architect, nor that the villager head from the Lisu village is a member of the communist party. People you first thought to be ‘ordinary’ people are, in reality, the most interesting people you could get your project going. I was lucky that Mr. Wong and “Mr. Beard” from the Zhongdian centre are experts in Tibetan architecture. Before interviewing them, I had always one question that remained unsolved, about those large pieces of meat hanging just beneath the ceiling in every Tibetan house. I flipped through books, seeking for an answer, but nothing was to be seen.

Dr. Bill was right about people. He told me that in places here where there are still a lot of mysteries, asking people is more reliable than printed texts. I was lucky back then, Mr. Wong and Mr Beard have taught me things that were unexplainable solely by my observations - those are hams that were preserved by wood fires below. As Mr Beard was an architect before he started working in the cheese factory, the heated conversation made him really enthusiastic. Originally I was only looking for the key to a few answers. But Mr Beard has told me things that were beyond any articles or academic reports about Tibetan architectures. Drawings about the physics behind the internal pillars, his stories about building houses are things that I did not expect from him. After gathering all these information from the interviews, in that particular instant, I have finally gotten a basic idea of research. It is always an open-ended question. No one will ever know everything even in one single category of studies. We should always be open-minded for new findings.

Ten days is only a gust of wind- it comes and goes silently and quickly without us noticing. I knew that calling a ten days’ worth project research is an insult to their true counterparts. This CERS trip, however, has taught me the spirit of enquiry. I recalled the first day How Man had a late night meal with us back in the Zhongdian Centre. “Be like a child. A child always question things around them without any presumption.” I believed that is one of the mottos of How Man, one of the many qualities leading to his success today.

For students like us, these ten days might only be a blink of an eye. But the spirit of enquiry goes with us for a lifetime. After all, it is a never-ending journey.
Being a biology student, I always want to apply what I have learnt from school and internet to real life situations. ZhongDian, LangDu and Xiangguqing are full of interesting species and broad biodiversity, which was constantly luring me to dive in and study. While there, I tried to identify different plant species, like paper birch, pine, spruce, fir, stinging nettles, pumpkins, different lichens and some chilli peppers. But those aren’t even 0.001% of species there - the biodiversity is way out of my imagination - I was overwhelmed by the trees and shrubs.

Because of this stunning nature, our group would like to focus on how people there use those plants and fungi. As a food lover, I researched edible plants. Local people use quite a lot of plants in their dishes, different types of vegetables and mushrooms, which are usually spiced up with peppers and chilli, to add a special kick to their dishes. Another reason they add chilli peppers is to make them feel warmer - the winter in Yunnan is freezing cold. Chilli contains capsaicin, which hijacks your thermoreceptors, causing your brain to generate a false warm sensation and helping you to get through tough winters.

Other than those capsaicinoids and piperines, mushrooms are one of the most famous food in Yunnan, like boletus, morel and matsutake. These wild mushrooms are difficult to grow in other areas of the world due to their climate requirements, contributing to their low supply worldwide. Because of their rarity and high demand in markets, they are sold at about RMB250/kg, which contributes quite a lot to locals’ revenue.

As for carbohydrates, local people seldom have rice, but instead mostly eat barley, from barley bread to tsampa, one of the interesting traditional foods, which is powdered roasted barley. When mixed with butter and milk tea, it forms glutinous clumps, like mochi, and is quite a common food there. Because of the high consumption rate of barley, large barley fields are omnipresent, as if the whole land were covered by a sheet of gold, shining and shimmering - it is really eye catching and phenomenal.

Despite that, the most shocking place on the trip must have been the Wudi Lake. The lake is surrounded by dense, old conifer forest, mainly spruce and fir. The forest floor is covered by years worth of needles. This thick layer gives rise to the soft texture of the ground—springy, comfy and spongy, even spongier than the matings on playground floors, yet not drenched in humus or slime. Walking on it is a pleasure by itself. The fresh air, filled with scent of spruce sap, is so rewarding and soothing, the smell of nature and forests. But occasionally, it is mixed with some mossy aroma. Then, look forward, and the whole slope is layered by a thick blanket of sphagnum moss, nothing but moss and
conifers. I suddenly had an urge to dig my fingers into that dense moss. There was no obvious reason to resist it.... “Suup....!” My whole hand was well-hidden under.

The thickness of moss really did surprise me, because it is a biological indicator for very high-quality air. As someone who has grown up in Hong Kong, clean air is almost out of reach. That made me think about the cost of pollution resulting from our acts. Mining, logging, burning fuels, and other devastating projects, are all creating problems. Imagine if the air is heavily polluted. The conifers will die because of the acidity, resulting in depletion of the needle bed on the ground, cutting nutrients to mosses and other plants, then the animals and insects are going to move out of the forest or starve to death. This chain effect is like a row of dominos, and sooner or later, humans will be affected. As a matter of fact, we are already being affected, slowly but surely and the impact is accelerating.

In ten years time, who will remember those primitive conifers forests? Who can still have a chance to see a natural turquoise blue lake? Who will be able to smell the scent of forests and trees? No one can change history, and it will be too late for the frog to get out of the water when it is boiling.

Preserve what we have, before the future turns into the past!
The Duke-Stanford Student-Athletes Civic Engagement Program (the Duke-Stanford Group), is a group of 9 student athletes. The is the third consecutive summer that CERS hosted this particular group and they stayed at the Zhongdian Center for three weeks, teaching local children English and sports. The Duke-Stanford Student-Athletes Civic Engagement Program is a pioneering joint program between the two universities to send athletes in various sports to developing countries to broaden their experience in practicing their sports as well as to provide health and environment related service to local communities. They all play different sports ranging from swimming to wrestling. The students truly enjoyed working out a few hours every day at a high altitude of 3300 meters and immersing in the local Tibetan culture through interacting with the children.

HKUGAC aims to provide a holistic education in a predominantly English environment in which students can discover the joy of learning through hard work, perseverance and creativity. By offering 10 students the opportunity to participate in CERS trip in Yunnan since the summer of 2016 the College helps students develop the capacity for empathy and become responsible, compassionate inquiring, and globally minded people who contribute to the society. Next year, more students will be exploring in other research sites of CERS in summer and winter times.

Nor Lastrina Hamid is an environmental advocate, volunteering and working in various environmental groups since 2010. Topics wise, she is more interested in climate change and its impacts on coastal communities. Working with CERS has made her more appreciative of narrative complexities, nationhood, and identity as well as the importance of finding the balance between environmental and cultural preservation. Lastrina’s internship at CERS was sponsored by City Developments Limited (CDL), a leading global real estate operating company with a network spanning 100 locations in 28 countries, and headquartered in Singapore. CERS and CDL have a long history of partnership.