© 2005 Coaching Association of Canada, ISSN 1496-1539 December 2005, Vol. 6, No. 1

Inside China: A Canadian Coach's Perspective

With the Communist Party's takeover in 1949, China became generally inaccessible to the Western world. In 1971, sport made one of the first chinks in the armour within which China had enclosed itself.

As the Smithsonian Magazine has noted, in April of that year, during the world table tennis championship in Nagoya, Japan, the American team got "a surprise invitation from their Chinese colleagues to visit the People's Republic. Time magazine called it, 'The ping heard around the world.' And with good reason: no group of Americans had been invited to China since … 1949." Thus began what historians refer to as "the era of Ping-Pong diplomacy".

Little by little, China grew more receptive to the West, with sport often in the vanguard. In 1980 in Lake Placid, the country made its Olympic Winter Games debut, sending 28 athletes to compete in speed skating, figure skating, cross country skiing, alpine skiing, and biathlon. Four years later, after a 32-year absence, China competed at the Los Angeles Olympic Games, winning 16 medals.

The penultimate moment in China's Olympic history to date came on July 14, 2001, when the capital, Beijing, was awarded the right to host the 2008 Olympic Games. Those Games will be the ultimate confirmation that China welcomes international athletes and the many other Westerners the Games will bring.

In modern times, China's success in international sport has been nothing short of spectacular. That success has provoked much speculation and curiosity, but for many years, few outsiders were allowed close examination of the Chinese sport system. The situation changed with the advent of the 2008 Games and China's determination to excel as no other host nation has ever before done.

China's Olympic Medal Tally

Olympic Games (1984–2004)

Olympic Winter Games (1980–2002)

Gold	Silver	Bronze	Gold	Silver	Bronze
80	79	64	2	12	8

Chinese sport leaders recognize that foreign expertise is essential for the country to achieve its goal of domination. One beneficiary of the new openness is Canadian aerials coach **Cindy Thomson**. Since August 2004, when she began to work with the Chinese aerials team as its strength and conditioning coach, Cindy has been afforded a unique opportunity to study Chinese sport first hand. Writing of her experiences in "Inside China: A Canadian Coach's Perspective", Cindy offers a compelling analysis of the strengths and weaknesses of that system and draws some provocative comparisons with the Canadian system.

The Canadian Journal for Women in Coaching believes that Cindy not only tells a story that will interest all coaches, but that she also offers a powerful incentive for female high performance coaches to explore coaching opportunities beyond our borders, an exploration that will enrich them personally and professionally, as it has her. — Sheila Robertson

DECEMBER 2005 FEATURE

Inside China: A Canadian Coach's Perspective

by Cindy Thomson

In August 2004, as I sat in a boardroom at the Shenyang sport school with 12 Chinese sport leaders and ski coaches, I was asked, through a translator, one short, simple question: "How are you going to help the Chinese aerial ski team win medals at the 2006 Olympic Winter Games?"

What a great question. It told me that these guys meant business and that I was on the spot. I had just arrived in Shenyang, rather jet lagged, from the pre-Olympic Congress in Greece, via Canada. I was tired and entering a totally different world and culture, but I was also excited about the question and felt challenged to answer it.

All I could think of was how I could make my skills and training as a high performance coach work in a completely different culture. They had taken some risk, and demonstrated their commitment, by retaining my services

A training room provided to Cindy's team along with spinners provided by the sport school and the Winter Sports Association in Shenyang. The athletes and coaches decorated the room with flags and photos in preparation for Torino.

as a strength and conditioning coach for the next six months. I took a risk in signing the contract, as I had no idea what it would be like working in China. How I answered this question could create or alleviate anxiety on both sides.

Before answering, I carefully considered how my background in Western society and sport would affect this small group and what I, in turn, could learn about society and sport from my new athletes and colleagues. It was a wonderful opportunity to share and learn. I felt, and still feel, very fortunate.

I dug into the reservoir of my great Canadian education and my personal experiences, and two philosophical statements that I have trusted for the better part of my coaching career came to me. The first I learned from professor Monika Schölder during the second year of my undergraduate studies at the University of Calgary, and that is "Sport is a reflection of society." I felt that understanding something about Chinese culture and society would make me a more effective coach within China's sport system. The second I learned while taking my Level 3 alpine coaching course, and that is "You get what you train."

My short answer to their short question was an extension of the two statements. I said that we (in the spirit of cooperation) needed to work (diligently) toward and exceed a level of training that reflected the podium performance expectations in Torino. After they nodded approval, we had extensive discussions on how to reach this objective; specifically, how training, coaching, programming, and periodization affect short- and long-term athlete performance and excellence at major events. With that, my work for the next half year was cut out for me.

The following is a report on what I did, with the help of my colleagues, in the hope of achieving the desired results (more medals and fewer injuries for Chinese athletes), reflections on these experiences, and comparisons between the Chinese and the Canadian sport systems.

Aerials were introduced to the Olympic Winter Games program in Lillehammer, Norway, in 1994, where the Chinese first participated in the sport internationally. They have competed on the World Cup circuit since 1996 and hosted their first FIS World Cup in February 2004.

A judged event, aerials can be described as the performance of trampoline- and diving-like manoeuvres on skis. Athletes perform two to three flips and, throughout their flips, they twist one to five times. Takeoff speeds range from 50 to 65km per hour depending on the jump. The height achieved is anywhere from 10 to 15 metres. From start to finish, the performance takes about 15 seconds, and the athletes are in the air for about three seconds. The event is subject to weather and snow conditions and variability from site to site and week to week during the competitive season.

Aerials require athletes to have two diverse skill sets, the primary one in acrobatics and the other in skiing, along with a considerable lack of fear. Traditionally, training has been purely technical, achieved through trampoline work, water ramp training, and on-snow training. Only in the past few years have teams considered the importance of physical and mental training in achieving results. The Chinese have made their way in aerials through observation of other teams and working harder than those teams. In my experience, everything they do is something they have seen on the World Cup tour. This explains why some concepts are new to their program.

Mistakes in aerials provide instant feedback and can be painful, generally leading to injuries. After a few too many mistakes, athletes are often afraid, which usually leads to more mistakes, and so the cycle goes. It could be argued that confidence and with that leak of four are the most important algorithm.

that confidence and, with that, lack of fear are the most important elements in aerial skiing, for both performance results and injury prevention.

Nina Li's winning form in the air

My goal was to help the Chinese team develop a training environment that maximizes performance and produces excellence. To do this effectively, I needed to evaluate their program and the athletes and coaches. My criteria were based on the construct that seven basic high performance elements — physical, technical, tactical, mental, equipment, health and well-being, and support structures — must be identified, evaluated, and developed according to program and individual needs.

I used a combination of physical and functional tests, an evaluation of competition results and coaches' training logs, and observation to help me draw conclusions about their training program. I also drew on my observations of the team on the World Cup circuit.

I asked many questions about their culture, expectations (of everyone), and leadership (who made decisions). To achieve the objectives, I would have to work within their system making as few cultural mistakes as possible. My interpreter, Mr. Dong, was extremely helpful — we had, as the Chinese say, "good co-operation" — and he offered many interesting insights into Chinese culture and the rapid changes that are happening in China.

After three weeks, I had reached some conclusions. Basically, all of the elements, with the exception of financial and administrative support, needed development. The Chinese were operating at what most Canadian coaches would call the "learning to train" or "training to train" phase, yet because they continued to win World Cups, I expected a fairly high level of understanding of the seven elements. Such was not the case.

This lack of understanding led me to reflect on what aspects of training are most important and need to be emphasized in the development of high performance athletes, not only because I needed to prioritize our work, but because I needed to understand why they were performing at such a high level without all the "frills" of a Western program such as physiotherapy, trainers, sport psychologists, safe training facilities, safe equipment, and nutritionists.



Coach Dong Ji (in front), Shuang Cheng (aka Baby Spice), Nina Li (aka The Champ), and Nannan Xu

The volume of serious injuries was distressing, which is why they chose to hire a strength and conditioning coach before a technical coach. It rapidly became clear that I was there to help the team win medals *and* prevent further injuries from occurring.

I felt the pressure. When I worked with the Canadian team, we achieved a few Olympic medals and we only had two ACL ruptures in four years. But I had resources and well-developed athletes to work with. Here we didn't even have a squat rack, the jumping surfaces were concrete, and everyone at the sport school was doing 400m sprints following a lift in a misguided attempt to shuttle lactates. Thus, there needed to be a process of creativity for myself (how to achieve a training effect without perfect training facilities) and a collaboration and education process for the Chinese coaches and athletes

I began by developing a plan to get the team on track for more effective technical training by

- developing athletes' confidence in the program
- improving the sport-specific physical fitness
- upgrading equipment such as skis, boots, and bindings
- ensuring a safe training environment
- educating coaches about effective feedback and the use of video
- instituting planning and sequencing of training sessions and cycles

From my observations, most of the Chinese team were stuck in what I call the fear cycle — mistakes, fear, injury, mistakes, fear, and so on — and were having a hard time getting themselves out of it. They had failed to win a medal at the FIS World Championships or the Olympics since 1998. During the 2003/04 season, seven athletes ruptured their ACLs in as many months. Two of the injured were marquee athletes: Nannan Xu, the first Chinese woman to win a winter Olympic medal, a silver, which she achieved in 1998, ruptured her ACL in Lake Placid in February 2003. Xiaotao Ou, the first Chinese male to win a World Cup and in so doing achieve the highest score on the World Cup circuit, blew his knee about four days before I arrived in China.

Because of the injury situation, training was difficult for all involved. Coaches were becoming concerned and cautious. The injured athletes were losing confidence in the program. When I visited Xiaotao in hospital, the first question he asked me was if I thought the Chinese trained too much. I was shocked, because it is highly unusual for a Chinese athlete to question leadership and programming. I took this as a clear indication that everyone was doing a lot of thinking about injuries and injury prevention. Thus, my first priority was to figure out why they were getting all these injuries and what changes needed to be made to prevent further harm.

It was my experience that the Chinese culture expects and extols the virtues of hard work and self-sacrifice. If you have tried to cross a street in China at any time of the day, you have taken your life in your hands, so safety is an interesting concept. I think the athletes felt that if they were not beating themselves into the ground, they weren't working hard enough. Thus, training was all about volume, with little attention paid to all the other key elements such as sport-specific conditioning, recovery and regeneration, equipment, facilities, and skill development (motor learning).

The coaches especially had a difficult time letting go of the high-volume training, and that I understand. In any culture, it is easy to get caught in a cycle of "we must work harder to get better results." I think the Chinese culture intensifies this attitude, as does the collective nature of their society.

In aerials, overtraining rears its ugly head in loss of timing and co-ordination, which will get an athlete hurt. Compared to most sports, training volume in aerials is really quite low — the fear and concentration required eat up valuable energy — athletes will perform 10 to 20 jumps per training session, and only 10 to 20 per cent of those jumps will have a competition degree of difficulty. This low volume makes it challenging to accomplish significant technical changes.

The injuries and overtraining gave me some important information. I recognized that the athletes had done the base work — an absolute requirement for excellence in my opinion. I also realized that the rather impressive World Cup results the team had achieved were attained the hard way — survival in a high-volume training program and just outenduring other athletes. I did not want to change the integrity of all this base work; for me, the goal was to push the line of volume and quality, as the athlete who can and does more volume at the highest quality will win. But you can't do this high level of volume and quality with injuries, chronic or acute.

I saw that everyone in the program — athletes, coaches, and leaders — was willing to work hard, work through pain, and co-operate in order to develop a program that would keep the athletes healthy and on the podium.

The injuries indicated that a few things required development. I wanted to change the fear cycle into a confidence cycle, so I pursued high-quality.

A strength training session.

safe training on the water ramp, and we worked together on a lot of basic jumping skills on water. In the gym, we focused on lifting techniques and core stabilization and worked toward implementing recovery and regeneration techniques such as post-training aerobic exercise, flexibility sessions, and relaxation sessions in conjunction with imagery training.

This training required education, understanding, and creativity. For example, all the jumping surfaces for plyometric training were concrete, but fortunately we had access to a gymnastics hall; with the assistance of springboards and mats, we were able to achieve the correct box heights for training — definitely not ideal, but workable until the boxes could be built (which happened in the summer of 2005).

We also had extensive meetings, discussions, and evaluation sessions in which everyone's opinion was asked for and heard. From the first day, my opinion was considered a valuable part of these meetings, and I was made to feel part of the team, demonstrating the importance of co-operation in Chinese society. I used these meetings as an opportunity to share my knowledge and experiences with my colleagues to give them new ideas.

Working together, the coaches, our team leader, and I put together a plan through which we would develop each of the basic elements based on our ultimate goals. The collective nature of Chinese society and the desire to do well made the implementation of our plan effective. In the ensuing months we worked hard to achieve the following objectives:

Objectives	Actions	Results
Re-establish athlete confidence in	Education	Improved athlete confidence
the program (and themselves)		,
(* * * * * * * * * * * * * * * * * * *	Special exercises (injury prevention)	Greater belief among injured athletes
		that it was safe to return to activity
	Sport-specific exercises	
		Forty per cent increase in World Cup
	Planning	podiums 2004/05 season
Improve sport-specific and	Training camps, focused on education	Overall fitness improvement of 15–20%
functional physical fitness	and lifting technique	·
		Greater sport-specific fitness acquired
	Physical and functional assessments	
		Decreased incidence of injury
Upgrade equipment to decrease	Upgrading of skis, boots, and bindings	Decreased risk of injury
injuries and improve training quality		
		Improved jumping performance through
		better boot angles (this still requires
		work)
Reduce the number of training	Monitoring of fatigue and training	Decreased incidence of injury
injuries and improve training quality	volume	land and the late of the late
through environmental and training	Manitorina of the positive of items in	Improved training effects
factors	Monitoring of the safety of jumping	
	environment, landing hill, surfaces,	
Improve the effectiveness of	speed checks, and wind Use of video overlay programs with	Improved training effects
coaching feedback	ideal performance images	improved training effects
coacring reedback	l luear performance images	
	Improved timing of video feedback	
	(immediately following performance)	
	(initinediately following performance)	
	Objectives for group and individual	
	video review sessions	
	Simple verbal feedback	
Plan and sequence training	Long, detailed meetings with coaches	Detailed plans made for specific
sessions and cycles	and leaders, followed by individual	athletes in preparation for the 2006
	meetings with athletes	Olympic Winter Games
Introduce mental skills	Six classroom lectures introducing the	Athletes are better equipped for training
	basics of sport psychology	and competition due to mental planning
		and preparation
	Individual goal-setting sessions	
	Consistent museling of law areas	
	Consistent practice of imagery	
	Group relaxation sessions	
	Croup relaxation sessions	
	Development of training logs	
	Development and implementation of	
	competition and training plans	
Further the coaches' education	Periodization	Coaches better understand that their
		role in athlete performance is more than
	Motor learning	feedback and training volume
	Strength and conditioning	
	,	
	Equipment	
	Bulgo	
	Rules	
	Evaluation of outcome, performance,	
	and process	
	and process	

My work in China was solidified when the team hired fellow Canadian and aerial technical coach Dustin Wilson three weeks before the competition season. Dustin worked hard to build on the work of the previous months, and the technical information he provided was key to the success of the Chinese during the 2004/05 competition season. Nina Li became the first Chinese to win an FIS World Cup Grand Prix and overall title and won China's first gold medal at the 2005 world championships in Finland; her teammate Xinxin Guo was the bronze medallist. Liu Zhang Ying was the FIS Aerial Rookie of the Year. The team more than doubled their World Cup wins, from four to nine, with three new athletes winning events for the first time. They finished third in the FIS Nations Cup standings, a considerable achievement as they only participate in one of the four freestyle events.



Xiaopeng Han and XinXin Guo with Nina Li (right), winner of the 2005 FIS overall World Cup Grand Prix and winner of China's first world championship gold medal

Despite the lack of high performance ancillaries that we have come to expect in Canada, some aspects of the Chinese program and culture are the reasons why I think they will dominate sport (specifically Olympic sport). China could be described as a collective culture that holds the virtues of respect, hard work, and co-operation in high regard.

It is very important to do well in international competition, as the athletes feel that doing so reflects on the group and society. The government has identified international sport performance as an opportunity to demonstrate the modernization of China, and with this identification comes money, support, and expectations.

Through experience, they are beginning to understand that they lack the expertise and facilities required to sustain well-developed high performance athletes. They develop the athletes, but have a hard time sustaining them. This is the message from Athens. They are committed to closing this gap, and that is why they are buying the expertise.

In the fall of 2003, fellow Canadian coach and current Canadian Freestyle Ski Association CEO Peter Judge worked in China. His hiring, along with that of Dustin and me, clearly demonstrates the country's commitment to medals and what it takes to get them.

Facilities remain challenging, but these, too, are changing. Indeed, the university and sport school in Shenyang has built a small ski hill, complete with dormitories and classrooms, 20 minutes outside the city, with world-class halfpipe and aerial sites for training and developing athletes and holding international competitions. (We Canadians will have to work very hard and be very creative to compete with the products of these sport schools.) All of this is further indication of their commitment to modernize their society and win on the international stage.

Chinese athletes are products of sport schools. They live in dormitories, often four to a room (an Olympic medal will get you your own room) from the time of starting sport school around the age of nine. They have often had the same coach throughout that time. Their surrogate family is their team and coaches, as they see their own family rarely. There are, however, lots of phone calls, and everyone has a cellphone. The team is very close; I witnessed a level of support, caring, and compassion among teammates and coaches in China that I have never seen in Canada.

Coaches have considerable stature and respect in Chinese society, particularly if their athletes have performed well at the Olympics. They are responsible for and accountable for delivering results — happy athletes are an afferthought — and they are rewarded accordingly



The Team

are an afterthought — and they are rewarded accordingly. Olympic medals translate into bonuses for the entire coaching staff, not just the coach who works with the athlete on the podium.

Winning athletes are considered the result of personal hard work, great coaching, and effective programming. The program-based development of athletes is most likely a reflection of their collective society. This mentality translates into a training philosophy of co-operation and hard work.

Athletes and coaches are willing to make training happen regardless of the conditions. Some of their facilities would be condemned in Canada, and location is not important; they are willing to work hard to make training work, wherever they are, without complaint. If you are complaining, you are not co-operating. My conclusion is that you can get to a certain skill level with less-than-perfect facilities, especially if you are not all wrapped up in how poor the facilities are and focus more on performance.

Nonetheless, there comes a time when athletes need to train at the best facilities, close to other competitors, and the Chinese recognize this. This commitment to get the very best training for their athletes was demonstrated when the team was packed up to train for four weeks in Park City, Utah, with the full support of the China Winter Sport Association.

This is where China shines. Everything may not be perfect — there are issues in every system — but they fully support their athletes and staff. Everything is taken care of, which gives everyone the opportunity to focus on their specific jobs. Throughout my time in China, my only concerns were coaching, being on time, and communicating my needs (Internet, equipment, laundry, and so on). It was great; all I focused on was being a better coach every day. The downside is that no one really has to think or problem solve when it comes to day-to-day living, which is partly why they had to hire someone like me to solve their injury problem.

China has strong leadership and followers who may move slowly when the leaders are not around. It was my experience that leaders take their role very seriously and view it as their duty to guide a program in the right direction. They look to their staff for expertise and then make their decisions. Trying to get anything done without our team leader was difficult. She often had to attend to other business and would be absent for several weeks. Because staff did not, could not, and would not make decisions, things would often not reflect the greatest efficiency.

Finally, the sport system in China is centralized and run by people who have expertise in leadership, bureaucracy, and sport. Although not ideal, as needs do get tied up in bureaucracy and lack of understanding of a particular sport, it is at least a recognition that sport requires specific leadership, unbiased commitment, and expertise. In contrast, most sports in Canada are run by people who have expertise in being parents, whose motivation is questionable, and who, on occasion, may consider consulting experts. The differences in subsequent agendas and results are obvious.

In China, there is no fair selection process for teams. Leaders and coaches choose whom they feel will best represent the country. Coaches often play favourites, as they have coached an athlete from a young age and have considerable attachment to that athlete. Furthermore, the system gives more resources to athletes thought to have greater potential.



Jump shaping in Aershan, "our mountain" in Inner Mongolia. Holy Cold!! And a 24-hour train ride.

The key aspects that will ensure the success of the Chinese in international competition are the 20 million athletes in their programs, their co-operative nature, the patriotic desire to win, and the support given to athletes and coaches by the sport system.

The Canadian sport system gives our athletes tremendous resources such as education, medical care, coaching expertise, facilities, and fair selection procedures when compared to China. However, our system lacks athlete support through effective programming. Our system is athlete-centred, which is a great philosophy, but one that has somehow changed into being athlete-driven, with obvious results. Our focus is on the individual, and thus we tend to throw the majority of our resources — what few there are — toward individual athletes first. Programs are often secondary and hang on to weak ropes of sustainability.

In many sports, we have given all the power to athletes who simply do not have the expertise required to win, and yet they are expected to figure it out on their own. Currently, we neither guide nor build our athletes from entry level to high performance. (Alpine skiing may be the exception.) No wonder we end up with a bunch of self-centred, bitter, and blame-transferring athletes — "I didn't/I can't win because ..." (generally something that is the system's fault) — who take all the credit for their good results and transfer the blame when they lose.

Canadian athletes tend to have the view that they are self-made, which to a large extent is correct. Thus, the system often gets very little credit when athletes win. I find the predominant attitude is that athletes win in spite of the system. Although disjointed, our system does give our athletes skills and opportunities, but for this it gets very little credit. Indeed, Canadian taxpayers give athletes a monthly salary, and post-secondary education is often free.

In the individualistic and athlete-driven approach, effective programs are impossible. We give athletes money and resources for which they are not accountable. Therefore, they can often choose how they would like to train and compete. In a sport world where science plays more and more of a role, athletes lack the expertise to make unilateral training decisions. A system that pays the athletes' way through programming (camps, training, equipment) can thus have greater influence on their development and, as is evidenced by recent Olympic and international results by program-based nations such as China, Australia, Russia, Germany, and the United States, seems to be a more effective approach.

My experiences have led me to the belief that we Canadians cannot be competitive on the international stage with athletes from nations that are program based. Although considerable work is being done across Canada on long-term athlete development models, we still lack the teeth of centralized, well-structured, and well-led programming. Our models, no matter how good, cannot be implemented effectively without resources and co-operation.

It comes back to "You get what you train." While Canadian athletes are figuring out what to train, the Chinese are being guided and supported and are training to win.

Cindy Thomson is a professional coach who has a physical education degree from the University of Calgary and a master's in coaching studies from the University of Victoria. From 2000 to 2004, she was the strength and conditioning coach for Canada's Aerial Freestyle Ski Team. Before that she was an alpine technical coach for 11 years. She has been working with the Chinese aerials team for the past year and will continue through the Olympic Winter Games in Torino. When not in China, Cindy resides in Whistler, B.C.



Cindy Thomson