

CS4L National Summit, January 28th 2015 Presentation given on unceded, unsurrendered Algonquin territory. Blake MacMillan blake.macmillan@carleton.ca | bohomoto@gmail

About Me

- I am a sociologist / coach.
- Most of my questions are about the sport system.
- I'm concerned that sport systems create limitations on the way we can know, understand, practice, celebrate and do sport.

I am a sociologist / ski coach.

Sociologists have typically related to sport as outsiders looking in.

This represents both a shortcoming on the part of sociologists and a blind spot for sport.

In my effort to engage sport from within, I found myself asking questions about the sport system.

Main Point

- Desegregated environments in sport breed innovation in sport.
- To improve the sport system, we need to:
 - Start hiring disabled athletes as coaches and leaders in sport.
 - Actively seek partnerships between club-level sports and disability sport organizations.
 - Stop speaking about disabled and non-disabled sport as two different things.

If we want to turn down the levels of stagnation and turn up the levels of change, one thing we can do is break down the walls between para and non-para sport.

This means:

- hiring disabled athletes as coaches and leaders at every level in sport.
- training coaches to work with disabled athletes by default.
- clubs need to seek out partnerships with disabled sport organizations.
- begin speaking about para and non-para sport as though they are not two different sets of practices.

The Research Process

- This is Doctoral Research, which began in 2012.
- Empirical focus (lots of field work).
- Officially, the field work ends after this season.
- But I hope to continue working in increasingly desegregated environments.

My field research activities:

In 2012, I was invited by a team of 5 para skiers to "guest coach" at the Nationals in Sun Peaks B.C.

The following year, I coached that team from December to March and travelled with them to Ontario Winter Games.

This season, one of the skiers was invited to the Ontario provincial team and I was offered an assistant position with the coaching staff.

Since most members of the Ontario Provincial Team are located in Southern Ontario, Brit and I train with a local club for non-disabled skiers.

Brit just found out that she qualified for the Canada Games and I was invited to coach Ontario's delegation skiers.

The more I experience cross-fertilization between para and non-para skiing, the more convinced I become that desegregation is the spark plug that our sport system so desperately need.

Key Terms

Disability Sport

- Sport designed exclusively for disabled athletes.
- Disability sport has produced a variety of ways to think about athletic development that have been impossible to imagine in non-disabled sport.

Desegregation

- Actively working to integrate disabled and non-disabled sport while simultaneously resisting their assimilation.
- Integration means enabling institutional, practical and conceptual crossfertilization.
- Not Mainstremaing!

Disability Sport:

- Disability sport is sport that has been specifically designed for athletes experiencing disability.
- Disability sport has produced a variety of ways to think about athletic development that have been impossible to imagine in non-disabled sport.
- One way that disability sport is kept separate from non-disabled sport is by celebrating it differently.
- Disabled sport is most commonly celebrated for its social effects, namely inclusiveness, equality, empowerment and inspiration.
- Non-disabled sport is celebrated on its own terms, often sportive excellence.

Desegregation:

- Desegregating sport means integrating disabled and non-disabled practices.
- By integration, I mean enabling an intuitional, practical and conceptual *cross-fertilization* between the two sets of practice.
- More specifically: I want clubs and teams to start actively recruiting disabled athletes and coaches; I want people to think of para and non-para practices of a sport as different disciplines of the same practice, like how the backstroke is to the butterfly, or tennis doubles is to singles; I want para teams and coaches to work alongside their non-para colleagues, particularly at the club level.
- I prefer the term "desegregation" to "integration" because I'm actively resisting their assimilation.

• In other words, I'm against "mainstreaming" as a way of integrating sport.

Mainstreaming:

- The issue with mainstreaming is not that it doesn't work.
- There are many Paralympians that graduated from mainstream sport.
- But... mainstreaming is not ideal because it only benefits a very small number of athletes.
- Mainstreaming is integration at the individual level.
- Desegregation is integration at structural level.

Outline of Session

- 1. Twenty minute talk;
- fifteen minutes to walk around the room, post cards, read other people's cards, and write new cards;
- 3. twenty minutes to discuss the cards as a group.

Something is not working

Anne Pankhurst & Dave Collins (2013) "Talent Identification and Development: The Need for Coherence Between Research, System, and Process." Quest 65:1, 83-97.

Problem Areas:

- Specialization (Research: Specialize later; Practice: Specializing early)
- Practice (Research: Deliberate Practice is inappropriate for children; Practice: Training is increasingly "deliberate")
- Athletic Development (Research: Physicality should shape the training environment; Practice: Training should shape physicality)
- Prodigies (Research: Success at a young age does not translate to success as an adult; Practice: Always strive for success)
- Stakeholder (Research: Development level coaches have a conflict of interest; Practice: So what.)

In a recent study, Anne Pankhurst and Dave Collins (2013) try to identify the top five most pressing issues for people working on and within the sports system. They based their study on a systematic review of the literature. According to the researchers, the five most trending areas of sport system research are: Specialization; practice; athletic development; prodigies; and stakeholders.

The researchers then compare the general scientific consensus about each issue with what commonly occurs in practices of sport. Predictably, they notice significant discrepancies between research and practice. They write, "this article will demonstrate that a mismatch or mis/non application of theory to practice underlies much of this situation" (84).

If they mean to identify a *mis*-application, than Pankhurst & Collins are in fact calling into question the central theoretical tenants of their own field. They are calling into question the basic assumptions on which we build sport systems.

What is a Sport System?

- Sport systems are a natural evolution of liberal forms of government.
- We tend to think that sport systems bring sports into a connected web that stands alone.
- What we experience as a coherent and independent sport system is actually a larger system of government having an effect on sport.
- Sociologist call this system "biopolitics".
- The sport system is the effect of biopower.

Generally, the sport system is thought of as an institutional mechanism for the provision of sport and the development of athletes.

The origins of the contemporary sport system, sport historians tell us, are Cold War era politics. The Soviet Union and their Eastern Bloc allies tried to systematically produce a core of machine-athletes that would dominate international competition. Western countries adopted the best aspects of these practices and so the contemporary sport system was born.

A more telling history is that sport systems are a natural evolution of liberal forms of government into the area of sport. At the heart of these forms of government is something that sociologists and political scientists call "biopower". Instead of thinking of the sport system as a new supportive-type infrastructure, think of it as the colonization of sport by biopolitical techniques of government.

Sport System as the Effect of Biopower

- Biopower is a combination of statistical and biological sciences that is used to produce and intensify the vital (or life) forces of a population.
- Ex: Birth Rates, Death Rates, BMIs and other "measures of the population's health"
- Thermostat: double function of measurement and regulation.
- Two most important forms of biopower in sport:
 - Average age of peak-height velocity (PHVs)
 - Average age of performance-level decline (PLDs)

In general, biopower is a combination of statistical and biological sciences that is used to produce and intensify the vital (or life) forces of a population.

Examples of biopower include birthrates, death rates, and a number of different measures of "population health." Notice that the population itself is imagined as a living organism.

Importantly, biopower not only represents measures of biological norms but also orients a government towards a kind of bio-homeostasis within its population.

Like a thermostat, biopower has a double function of measurement and regulation.

BMIs are a text-book example, which is ratio of height to weight that has come to be the standard measure of obesity. With a rise of obesity rates there is a corresponding rise of policies, programs, institutions, and educational campaigns etc. that aim to decrease the obesity rates. Both obesity and the government's response to obesity are *produced* by BMIs (this is sociology 101).

Presently, the two most important measures for the regulation of a population's sportive capacity are (1), the average age of peak-height velocity (or PHV) and (2) the average age of performance-level decline (or PLD).

Almost all the key concepts within the LTAD are created in reference to these two

measures.

To crudely illustrate the way these biomarkers effect sport, consider these two examples: (1) If successful athletes tend to begin specializing after their growth spurt, the volume and intensity of programs for 14 and 15 year-olds will also tend to increase. (2) If the performance levels of skiers begin to decrease at age 32, there will be a corresponding set of policies and procedures for getting skiers on the National teams at least four or five years before that age.

Sport in the Era of Biopolitics

THE GOOD:

- Increased governmental commitment to expand access to organized sport, particularly for children.
- Increased awareness and practice of age-appropriate forms of sport practice.
- Increased levels of performance.

Undoubtedly, the application of biopower in the field of sport has effected practices positively.

- Biopower is behind the increased governmental commitment to expand access to organized sport, particularly for children.
- Biopower is fueling the increased awareness and practice of age-appropriate sport.
- And, let's be honest, biopower helped bring home some of the 25 medals we won at Sochi.

In many ways, biopower is well-matched to sport.

Sport in the Era of Biopolitics

THE BAD:

- Regulated in ways that are over-determined.
- We need <u>de</u>scriptions of athletic life that don't become <u>pre</u>scriptions for athletic living.

The mis-match of biopower in the field of sport is related to its regulating function.

Behind the practices of sport, there are numbers that are useful tools for describing aspects of sport that are not otherwise observable.

Problems arise, however, when these descriptive tools become prescriptive without consideration to their effects on practices.

Remember that at the centre of biopolitical regimes is a population that is itself imagined as a living organism. The problem with the organism metaphor is that it gives us ways to imagine life without biography.

In terms of athletic excellence, organismic prescriptions of life (i.e, prescriptions of life absent of biography) can be harmful because athletic success is actually more biographical than it is biological in nature.

Countering Biopower

- For the remainder of my talk, I'm describing two strategies for countering the effects of biopolitics.
- Both strategies emerged from cross-fertilization between para and non-para sport.
- Strategy #1: Learning to train outside the "Windows of Trainability"
- Strategy #2: Training a Sixth 'S'

Today I have time to discuss only two strategies for countering the prescriptive tendencies of biopolitical forms of government.

These are, Training Outside the Windows of Trainability and Style as a Sixth S.

What I'm actually doing here is making the descriptions of the LTAD les prescriptive, or creating connections between the biological accounts of athletic excellence provided by the LTAD and more biographical renderings of the same phenomena.

Strategy#1: Training Outside the Windows

- Brit is 19 years old and struggles with fundamental movement skills.
- Despite lacking fundamentals, Brit also needs to begin specializing.
- How do I develop her fundamentals while also working towards the specific requirements of skiing?
 - HINT: This is as much a practical question as it is a physiological one.
 - Jot an answer down because it might be a useful card.
 - How does this problem manifest in your sport?

The athlete that I'm presently working with is a member of Alpine Ontario Para Racing Team. Brit is 19 years of age. Brit struggles with fundamental movement skills.

To be clear, Brit's lack of skills are partly related to her impairment. Coordination, muscle control, sensation and depth perception have been a challenge for Brit since birth. Everywhere except the pathology lab, however, Brit's lack of movement skills are just that. She simply has not been given the opportunity to learn a broad base of movement patterns.

Despite lacking so many fundamentals, Brit is also at a stage when she needs to begin specializing. She's 19 and a member of the provincial team. If she does not get on the national team's radar next season, it is unlikely they will invest in her development. How do I help her catch-up on fundamental movement skills while also working towards the specific requirements of skiing?

The unlikely leader...

- My answer came from Crossfit.
- Brit did not join an actual Crossfit affiliated gym but her gym uses a similar model.
- There are two aspects of the Crossfit model for training that were useful for me:
 - The structure of "group fitness"
 - Multi-modal approach to training.

The answer, it may sadden some of you to know, did not come from science, policy, coaches or any groups or institutions located within the sport system. The answer came from Crossfit.

The gym that Brit joined is not actually a Crossfit affiliate but it is fair to call it a Crossfit "spin-off." Spin-off gyms take from Crossfit two element that are essential for developing fundamentals for athletes that fall outside the windows of trainability.

- First, the structure of group fitness;
- second, a multi-modal approach to exercise.

Group Fitness

- · Less cost prohibitive than "personal training".
- By imagining fitness as a sport rather than an outcome, Crossfit actually just takes the sport model and applies it to fitness.
- Why didn't we think of that?

The advantages of group fitness are easy to explain: It is a less cost-prohibitive way of training with a coach. Before Crossfit, we thought of training as a means to an end; training was not itself a sport. In fact, this is the number one complaint I hear about Crossfit. By approaching training as a sport, Crossfit takes the coach-group model and applies it to personal fitness. Why didn't we doing that?

Multi-Modal Training

- Is Crossfit as multi-dimensional as its advertisements claim?
- Almost all Crossfit moves are power moves, which centre on the hip and shoulder.
- Fine motor control is neglected in actual Crossfit.
- Multi-modal training for sport can take from Yoga, non-combative martial arts, performance art and physiotherapy.
- The emphasis is on movement patterns.
- This is a very effective way to develop fundamentals for adults.

The movements in actual Crossfit are not as varied as their advertisements suggest. In Crossfit, multi-modal is limited to power based movements, which means movements that centre on the hips and shoulders. Hip and shoulder movements cover a wide range of fundamental skills but neglect the fine motor control that defines many sports, ski racing included.

I tried working with another para skier in an actual Crossfit gym and the results were disastrous. She was a wheelchair user and so the hip-based exercise were impossible to adapt. As a result, her experience of Crossfit was doing nothing but intense shoulder exercises for the entire hour. For obvious reasons, wheelchair users have to protect their shoulders as much as possible. Needless to say, I was not her favourite person until her shoulders healed.

Unlike a real Crossfit affiliate, the Spin-off gym that I'm presently working with draws from a range of movement practices that are not centred on hips and shoulders. These include Yoga, dance, rock climbing, slack-lining, martial arts, ball sports, and practices of physiotherapy. Power moves, such as squatting, are still a regular occurrence in this gym but the emphasis is placed on developing movement patterns rather than increasing measurable outputs.

In regular LTAD progressions, children learn these patterns as a consequence of trying a variety of sports, presumably under the watchful eye of a coach or teacher. As a 19 year-old, Brit does not have the time or social space to begin taking up new sports. Crossfit and

its various spin-off gyms are right to strive towards creating their own movement practices that are mashups from a variety of movement disciplines. This is one way to develop fundamentals outside the "optimal windows of trainability."

Strategy#2: Training a Sixth 'S'

- The Five Ss of Athletic Expertise:
 - Strength;
 - stamina;
 - speed;
 - suppleness;
 - and skill.
- How can we decentre the ability from the body and re-centre it closer to the an individual's embodied experiences?

The five S's are strength, stamina, speed, suppleness and skill.

The problem with the five Ss, as model of athletic expertise, is that it locates ability within the individual. As we already know from our previous discussion about fundamental movement skills, life experiences are as much a part of ability as biological profile. I don't think it's necessary to throw away the five Ss but to add to them in ways that depathologizes their significance. I have a sixth element of athletic expertise that decentres the existing five from the level of the individual and positions them closer to the level of the social, where they are actualized. IT gives us a way of describing athletic expertise without the associated prescribing that comes with biopolitical athletic development.

The sixth element of athletic expertise is style.

What is "style"?

- Style is not looking good while doing sport.
- Style names an athlete's ability to move coherently with their field of play.
- Style is athletic composition.

As a dimension of athletic expertise, style does not only mean looking good while doing sport. Style is a name for an athlete's ability to move coherently within their field of play. We have this metaphor of physical literacy to describe movement; tellingly, we rarely extend the metaphor of literacy to include grammar, syntax and most importantly, composition (Whitehead probably does but its not yet in predominant discourses). We are teaching the mechanics of movement but almost discouraging them from being movement innovators, or finding their own movement-based voice.

Historical Parallels

- The concept of lifestyle sports began to emerge in the late 1960s, at about the same time that physiologists began modeling athleticism.
- The first X Games took place in 1995. The first LTAD pilot program launched in 1999.
- The more that organized sport moves away from stylized conceptions of athletic skill, the more sophisticated alternative sport becomes:
- Food for thought: What can sport systems learn from Red Bull?

Field Research: Asymmetrical Skiing

- The left ski boot and right ski boots are made identical.
- Most people have differences between the left side and right side of their body.
- When a skier struggles to ski with fluidity and grace, its no from lack of trying.
- The geometrical symmetry of their ski boots forces them to move with symmetry.
- In other words, the boots predetermine symmetry in skiing before the skiers even put them on.

The left side and right side of Brit's body move in remarkably different ways. With two-footed movements such as squatting, hopping, crouching, etc., Brit can compensate for their difference very easily. Her whole body moves as one. Skiing, however, is not a two-footed movement. Even with several years of very explicit and deliberate attention, Brit struggles to ski symmetrically. So, she stopped trying to ski like everyone else and started developing a style of her own.

The first problem we discovered is that all her equipment is symmetrical. Before working with Brit, I knew very little about boot fitting. It turns out, there are two conflicting philosophies about the practice:

- The first dictates that boots are used to conform the body into an ideal skiing position.
- The soles of the boot are canted in order to align the skier's knees directly above the balls of her feet.
- The other approach dictates that boots should conform to the skier's body.
- If the skier's knees are inside or outside the ball of her foot, the boots should not force them back into alignment but rather should follow the skiers leg so her skis are flat when she is standing at her neutral.
- Which approach do you think worked for Brit?

Brit is still trying to create rhythmic skiing but she need equipment and conceptual space to figure out what that will look like for her. The more I worked with Brit's, the more she developed this new asymmetrical style of skiing, the more I began noticing how the non-disabled athletes could also benefit from the same type of approach. It sounds obvious in

retrospect but it turns out that most people have glaring differences between the left and right side of their body. When a skier struggles to ski with fluidity, grace and rhythm, its not from lack of trying. The geometrical symmetry of the ski boots forces them into a kind of anatomical asymmetry. The boots predetermine what symmetry in skiing looks like before the athletes even put them on.

Conclusion

- The ski boot is a good analogy for the mismatch between the research about sport system and actual practices of sport.
- The more we try to refine a model for athletic development, the more athletes struggle to develop within the structures of that model.
- We need to build models that have built-in flexibility.
- The kind of flexibility is practical (how to train outside the windows) and conceptual (style as a dimension of athletic skill).
- Desegregating sport is one way to transform the overly prescriptive (biological) models into more open (to biography) way s of organizing and structuring sport.

The ski boot is a good analogy for the mismatch between the research about sport system and actual practices of sport. The more we try to refine a model for athletic development, the more athletes struggle to develop within the structures of that model. We need to build models that have built-in flexibility. The kind of flexibility is practical (how to train outside the windows) and conceptual (style as a dimension of athletic skill). It is impossible to come these types of solutions in advance. The best way to come up with them is to learn from disabled sport.