

Strategies on Captaining and Coaching Team Sparring Event.

Thesis by:

Lawrence Mantjika for Grading to 7th Dan.

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INTRODUCTION:

WHAT THIS THESIS IS ABOUT:

This thesis is about my thoughts and ideas on strategies to use to develop and train our team to compete in the team sparring event in any competition.

I will look/draw on what literature there is out there in the ancient world, as well as some theories and sayings that I have come across as I was going through the martial arts. I will outline the main principles that have contributed to my own thoughts and ideas, and how this influenced me to captain/develop my team.

I will look at the rules for our current ITF competition, and adapt some strategies to ensure a WINNING outcome for my team.

WHY I CHOSE THIS TOPIC:

I have been involved in competitions myself as a competitor/athlete/coach in the past. Mostly focusing in the patterns events, with some experience in coaching individual sparring matches. However, I have not had any experience coaching Team sparring events.

I have been appointed as one of the assistant coaches for the NZ Taekwon-Do team who will be competing in for the ITF World Championships (Inzel – Germany).

I wanted to research the various strategies, learn as much as I can to develop my knowledge and experience, in order to help my athletes maximize their results in the most efficient way. I need to up-skill myself in this event, and as such, have now committed to my own Personal Development Plan to develop myself to be able to Coach in all our ITKD tournament events.

HOW I WENT ABOUT IT:

I have used various tournaments to develop and test my strategies. I began with small regional tournaments, leading to bigger events at National tournaments; and then recently, at the ITF World Cup- 2018 competition in Sydney. All the learning to date will be applied at the World Championships in April.

I have done some reading and put some thoughts and theories together, studying the Eastern strategy books such as: Sun Tzu's Art of war, Book of 5 Rings (Musashi), Admiral Yi Sun sin's strategies.

For this thesis I will mostly reference Sun Tzu's Art of War.

I have reflected on the meanings of ITF patterns and how the various patterns are named after famous Korean generals/leaders, who used the different strategies, to defeat their enemies based on their conditions at the time.

I have also looked at some ideas from the card game of Poker, as well as having discussions with other coaches who have had previous experience in seconding team events. I have discussed and debated various strategies and scenarios with my peers, to test the robustness of some of my thoughts.

THE LAYOUT OF THE THESIS:

I will state my thesis Statement.

Then I will start my discussion with outlining and discussing the current ITF team sparring rules.

Then, I will outline the different point tallies that can happen from a bout, listing all the possible point combinations that can come about, and whether they lead to a win/draw/lose for us.

I will then introduce and discuss some of Sun Tzu's strategies that relate to this topic that have influenced my thinking, such as: how to win the WAR, by not having to win every the battle.

The importance of using spies, and conducting research to learn about the enemy and terrain (**the principle of know yourself, know your enemy, know the terrain**).

Discussing the **story of the 3 horses**.

Discussing some of the basic principles from the **game of poker**.

The Importance of **Team Morale** all through the competition.

I will then set out **some scenarios** and based on the strategy.

THESIS STATEMENT:

“TO WIN A TEAM SPARRING EVENT WE DO NOT HAVE TO WIN EVERY BOUT”

DISCUSSION:

The following is The ITF Team sparring rule based on: International Taekwon-Do Federation (ITF) By Laws ITF Umpire Rules - Rules and Regulations Appendix 1 – Scoring Procedure In force as of January 1st, 2015 (Amended February 3rd, 2017) (Pages 1-14)

SP 6. Team Sparring

Corner Umpires shall score all point(s) electronically as indicated in the ITF World Junior & Senior Tournament Rules, and the following decisions will apply:

- 1. The team obtaining - after five (5) sparring bouts - the majority of total umpire votes shall be declared the winner and advance to the next round of competition.*
- 2. In the case of a draw after the five (5) sparring bouts, each coach will select one (1) competitor to spar an extra bout of two (2) minutes.*
 - a. The competitor obtaining the majority of umpire votes, with a minimum of two (2) Umpire votes in his favour, shall be declared the winner and the Team shall advance to the next round of competition.*
 - b. In the case of another draw, the same competitor will spar again until the first scored point is made; the competitor with the majority of umpire votes, with a minimum of two (2) Umpire votes in his favour, will be declared the winner and the Team shall advance to the next round of competition.*

Other

A. In the event that a team withdraws a competitor, the other team shall receive (fifteen) 15 points. The time at which the competitor is withdrawn is not important; the same penalty applies if the withdrawal is made at the beginning of the match or five (5) seconds before the match ends.

Implementation:


In the event that a team withdraws a competitor, the Jury President will give verbal permission to the Computer Assistant to execute the “Withdraw - (Red or Blue)” command on the computer, resulting in the opposing team automatically receiving 15 points.

B. In the event that a competitor is: 1) injured and therefore unable to continue competing according to the doctor’s decision; 2) disqualified; or 3) receives three (3) directly given fouls, the other team shall receive four (4) points.

Implementation:

In the event that a competitor is injured, disqualified or receives 3 fouls, the Jury President will give verbal permission to the Computer Assistant to execute the “Disqualify - (Red or Blue)” command on the computer, resulting in the opposing team automatically receiving 4 points.

This same process is repeated for all 5 bouts, and all the scores are added together, the winner of the team sparring is the team that scores the highest tally.



International Taekwon-Do Federation (ITF)


By Laws

ITF Umpire Rules - Rules and Regulations

Appendix 1 – Scoring Procedure

In force as of January 1st, 2015 (Amended February 3rd, 2017)

(Pages 1-14)



Scoring Example:

Ring 1 M Sp, Team, Sen.

124 BEL 16 SWE 1628

Belgium Sweden

2 1 0:00 1

Foul Result X Foul

08 1 2 1 1 1 03

4	2	1	2
4	3	3	3

Ring 1 M Sp, Team, Sen.

124 BEL 16 SWE 1628

Belgium Sweden

2 2 0:00 4

Foul Result X Foul

03 0 0 1 3 0 06

5	6	3	6
4	4	4	7

Ring 1 M Sp, Team, Sen.

124 BEL 16 SWE 1628

Belgium Sweden

3 3 0:00 5

Foul Result X Foul

07 0 1 2 1 1 04

5	5	4	4
5	6	4	3

Ring 1 M Sp, Team, Sen.

124 BEL 16 SWE 1628

Belgium Sweden

6 4 0:00 6

Foul Result X Foul

02 0 3 0 1 0 05

9	5	7	5
8	5	6	7

Ring 1 M Sp, Team, Sen.

124 BEL 16 SWE 1628

Belgium Sweden

6 5 0:00 7

Foul Result X Foul

01 1 0 3 1 1 02

3	3	2	2
3	3	3	5

Winner red after 5 bouts

Umpire Votes	Points Total
bout 1: 1 1 2	1 1 2
bout 2: 3 1 0	4 2 2
bout 3: 1 2 1	5 4 3
bout 4: 1 0 3	6 4 6
bout 5: 1 3 0	7 7 6
extra bout: [Red] [Blue]	[Red] [Blue]
first point: [Red] [Blue]	[Red] [Blue]

The following matrix illustrates the different scores that can be achieved after 5 bouts. It also gives an example what happens if one team withdraws one of their fighters and the various points that the teams have to get to still get a win if they were to take the 15 point penalty if they withdraw a fighter.

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Winner red after 5 bouts

	Umpire Votes	Points Total
bout 1	1 1 2	1 1 2
bout 2	3 1 0	4 2 2
bout 3	1 2 1	5 4 3
bout 4	1 0 3	6 4 6
bout 5	1 3 0	7 7 6
extra bout		
first point		

Winner blue after 5 bouts

	Umpire Votes	Points Total
bout 1	4 0 0	4 0 0
bout 2	3 1 0	7 1 0
bout 3	1 1 2	8 2 2
bout 4	0 0 4	8 2 6
bout 5	0 1 3	8 3 9
extra bout		
first point		

Winner blue after 5 bouts

	Umpire Votes	Points Total
bout 1	3 0 1	3 0 1
bout 2	1 0 3	4 0 4
bout 3	3 0 1	7 0 5
bout 4	0 0 4	7 0 9
bout 5	2 1 1	9 1 10
extra bout		
first point		

Draw after 5 bouts

Draw in the extra bout

Winner red after first point

	Umpire Votes	Points Total
bout 1	4 0 0	4 0 0
bout 2	1 1 2	5 1 2
bout 3	1 1 2	6 2 4
bout 4	1 1 2	7 3 6
bout 5	1 1 2	8 4 8
extra bout	1 3 0	1 3 0
first point	2 1 1	2 1 1

Withdrawing red in bout 3

Winner blue after 5 bouts

	Umpire Votes	Points Total
bout 1	4 0 0	4 0 0
bout 2	4 0 0	8 0 0
bout 3	0 0 15	8 0 15
bout 4	4 0 0	12 0 15
bout 5	3 0 1	15 0 16
extra bout		
first point		

Withdrawing red in bout 3

Winner red after 5 bouts

	Umpire Votes	Points Total
bout 1	4 0 0	4 0 0
bout 2	4 0 0	8 0 0
bout 3	0 0 15	8 0 15
bout 4	4 0 0	12 0 15
bout 5	4 0 0	16 0 15
extra bout		
first point		

I have drawn up the following matrix to outline all the possible Judging results after each bout.

Possible results from the judges for each fighter				RED - draw - BLUE	
Judge for Blue	0	1	2	3	4
Judge for RED					
0	0-4-0 (draw)	0-3-1 (blue win)	0-2-2 (blue win)	0-1-3 (blue win)	0-0-4 (blue win)
1	1-3-0 (red win)	1-2-1 (draw)	1-1-2 (blue win)	1-0-3 (blue win)	
2	2-2-0 (red win)	2-1-1 (red win)	2-0-2 (draw)		
3	3-1-0 (red win)	3-0-1 (red win)			
4	4-0-0 (RED)				

Here we can see that for each bout there are 15 possible combinations of judges' results:

1. There can be 3 possible results that would lead to a DRAW result.
2. There can be 6 possible results that would lead to a WIN to RED.
3. There can be 6 possible results that would lead to a WIN to BLUE.

We can see here, that with a team event, we can still win the event without having to win every bout, the story of ***"Tian Ji's three horses"*** is applicable as a guiding strategy.

In the past the thinking was not very developed, we were concerned with trying to win every bout. We would pit somebody who we would think could win over the other person. The thinking wasn't strategic to ensure an *overall* win, but was to try to win every bout.

The following gives an outline of the story that is recorded in the **Chinese Literatures : Records of the Grand Historian**.

During the kingdom of Qi, there was a man by the name of Tian Ji who liked horse racing. It so happens that the King of Qi also likes horse racing.

Tian Ji and the King races their horses against each other, of course the King has better horses, so Tian Ji loses all of the time.

Tian Ji's friend Sun Bin who was a great strategist offers to help Tian Ji win by using a certain strategy based on the rules that there are 3 rounds, and the one who wins at least two rounds will be the overall winner.

So Sun Bin did a bit of research and ranked Tian Ji's horses in order of: good horse, better horse, best horse. He did the same with the King's horses.

Sun Bin discovered that both the King of Qi and Tian Jin had always tried to only use the "good" horse against the opponent's "good" horse, the "better" horse against the opponent's "better" horse, and the "best" horse against the opponent's "better" horse.

The reason why the King always wins is because he has slightly more superior horses in all three levels.

*So Sun Bin outlined the new strategy to Tian Ji that the idea is not always to win every single race, that the game is to win **MOST** of the race. He told Tian Ji to:*

race his “good” horse against the King’s “best” horse.

Race his “best” horse against the King’s “better” horse.

Race his “better” horse against the King’s “good” horse.

As a result, Tian Ji loses the first round, but wins the second and third round, and eventually wins the race.

In this story, we can learn that:

1. To win a war we don’t need to win every battle. In other words, we can decide which battle to put our resources into, and to learn from the saying **“pick your battles”**.
2. To use intelligence and see the bigger picture of the desired outcome, and to work to that knowing that some **sacrifices need to be made**. So the use of strategy is crucial to ensure the overall win.
3. We need to know the **rules** of the game inside and out.
4. We need to know **our own** capabilities, and if possible the **opponent’s** capabilities.

The above learning’s are actually within the teachings of the **great Sage and strategist Sun Tzu**. The particular lesson that this would tie in with the famous quotes from Sun Tzu’s work **“The Art of War”**.

1. “If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle.”

– Sun Tzu, The Art of War

Discussion: here SunTzu, explains that we must know our own capabilities, as well as the enemy’s. We must find out what are the competition’s advantages and disadvantages, what their strengths and weaknesses are. By the same token, we also need to know the same about our selves.

Sun Tzu warns that if we do not realize our own capabilities, AND we have no idea about the enemy, then we are guaranteed to be defeated in every battle.

If we know our selves very well, then while we can still win, we will also suffer losses.

However, if we understand our own capabilities, and know the enemy's capabilities, and are able to utilize this strategically, then we will be guaranteed victory.

The following teaching relates closely to this saying, with an extra proviso:

2. *"If you know the enemy and know yourself, your victory will not stand in doubt; if you know Heaven and know Earth, you may make your victory complete."*

– **Sun Tzu, The Art of War**

The extra proviso to ensure a COMPLETE VICTORY is "to know Heaven and Earth" in other words "the terrain", that is to say: the conditions of the war, the rules, the ground where we fight, the time of the fight, the judges, the referees, team morale and all other external conditions.

3. *"Victorious warriors win first and then go to war, while defeated warriors go to war first and then seek to win"*

– **Sun Tzu, The Art of War**

This is a teaching that we need to **prepare** well: train, plan, and think things through, do our research, learn about ourselves, learn about the enemy, learn the terrain, go through all the possible scenarios, we can then be confident that we will win, before even going to war.

4. *"Thus we may know that there are five essentials for victory:*

1 He will win who knows when to fight and when not to fight.

2 He will win who knows how to handle both superior and inferior forces.

3 He will win whose army is animated by the same spirit throughout all its ranks.

4 He will win who, prepared himself, waits to take the enemy unprepared.

5 He will win who has military capacity and is not interfered with by the sovereign."

– **Sun Tzu, The Art of War**

This teaching reiterates again all the points we have discussed before, with few more additional points:

1. Points 1 & 2 : We must know the wisdom of when and who to fight. This again reiterates the teaching of “Tian Ji’s three horses”. Whom to send out to compete with which particular opponent.
2. Point 3 is about building the culture within the team, to be aligned with the same objective, values, and passion. All team members are working toward the same outcome/goal. This is pivotal in keeping morale up when we are facing challenges.
3. Point 4 is about preparing ourselves through training, improving our techniques and speed, Working through a lot of scenario sparring.
4. Point 5 is when we must allow the team to develop with the coaches, and not have any outside interference by those who have no idea in what they are doing. The coach who is training the team will be the best person to second the team. Rather than bringing in an outsider who has not worked with them, not matter how senior that person will be.

5. *“So in war, the way is to avoid what is strong, and strike at what is weak.”*

– **Sun Tzu, The Art of War**

Again Sun Tzu is confirming the strategy of not always meeting the strongest opponent with our own strongest player. Always ensure that we match a better sparer to the opponent’s inferior sparer. With an allowance that if we ARE outgunned then send the **least skilled** person of the team for the sacrifice so to speak. However, within that, we can still come up with strategies to **minimize the damage**, and try to go for a **draw** rather than accept a loss. Failing that, minimise the amount of points of what we would lose by in that particular spar. The strategy for this is to develop everybody’s skill in evading being scored-on by a stronger opponent. The following quote from Sun Tzu gives us an insight how to achieve that:

6. *“The wise warrior avoids the battle.”*

– **Sun Tzu, The Art of War**

We can train our athletes to do a defensive strategy of avoidance type of sparring, to ensure that we are not scored on, if we can't ourselves actually score on the competition. Some ideas of training are: off the line sparring, side stepping, countering techniques, and be in motion at all times, to let the bout conclude it's time without any points scored on us. Keeping all efforts of avoidance in such a way that we will not receive a penalty for 'avoiding' sparring.

7. *“Appear weak when you are strong, and strong when you are weak.”*

– **Sun Tzu, The Art of War**

This refers to the importance to present a certain image to the opponent. There is a time to feign strength and confidence, if in reality we learn that the opponent is stronger than us. Do not show weakness; instead, appear strong!

There will also be a time when we would want to feign weakness to mislead the competition to letting their guard down.

Use deception as part of our 'psychological' warfare, the following teaching (below) reinforces point 7 above.

8. *“All warfare is based on deception. Hence, when we are able to attack, we must seem unable; when using our forces, we must appear inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near.”*

– **Sun tzu, The Art of War**

9. *“In the midst of chaos, there is also opportunity”*

– **Sun-Tzu, A Arte da Guerra**

Create chaos in the opponent's thinking, using subterfuge and deception. There will then be opportunities that would present its self, even in a strong opponent, that we can take advantage of.

10. *“If your enemy is secure at all points, be prepared for him. If he is in superior strength, evade him. If your opponent is temperamental, seek to irritate him. Pretend to be weak, that he may grow arrogant. If he is taking his ease, give him no rest. If his forces are united, separate them. If sovereign and subject are in accord, put division between them. Attack him where he is unprepared, appear where you are not expected.”*

– **Sun Tzu, The Art of War**

This again reiterates point 9 previously, clearly stating that deception is crucial in war. This is a strategy for when we need to send our fighter out to spar a superior/more skilled opponent. Some excellent points here, that we can use to coach our athletes to use against a superior opponent.

The next teaching again reconfirms all our discussions so far with use of deception:

11. *“Engage people with what they expect; it is what they are able to discern and confirms their projections. It settles them into predictable patterns of response, occupying their minds while you wait for the extraordinary moment — that which they cannot anticipate.”*

– **Sun Tzu, The Art of War**

The next quote teaches the coach how to develop and train an effective team:

12. *“Treat your men as you would your own beloved sons. And they will follow you into the deepest valley.”*

– **Sun Tzu, The Art of War**

As leaders and coaches we must care for and treat our students/athletes with respect, love and compassion, to develop loyalty and depth of determination. A loyal student would train harder and dig deeper into their potential, listen and practice harder to develop them selves. When the time comes to test them in sparring/battle, they would try their hardest to fulfill our common goal and work as a team.

The next three quotes give us some strategies that we can work on during sparring:

13. *“When you surround an army, leave an outlet free. Do not press a desperate foe too hard.”*

– **Sun Tzu, The Art of War**

This is a great strategy to encourage an opponent to go a certain way in the ring, in situations where they are a ‘runner’ we can entice them to run or move to a certain direction for our counter technique.

14. *“When the enemy is relaxed, make them toil. When full, starve them. When settled, make them move.”*

– **Sun Tzu, The Art of War**

Force the opponent to spar in a different way to their preferred style. This will create openings. This is good to create openings for opponents who are fully defensive and well covered.

15. *“Rouse him, and learn the principle of his activity or inactivity. Force him to reveal himself, so as to find out his vulnerable spots.”*

– **Sun Tzu, The Art of War**

Spend time to find out about the opponent by forcing him to reveal himself, force them to make a move, test their reaction time, their speed, technical ability, and get a feel of the content of their toolbox, find out what their most commonly used techniques are, range, speed of movement etc.

This last quote summarizes the importance to use deception to hide our true potential from the enemy while at the same confusing them and create doubt:

16. *“The whole secret lies in confusing the enemy, so that he cannot fathom our real intent.”*

– **Sun Tzu, The Art of War**

HOW I TRAIN MY ATHLETES:

Apart from our usual skill practice, I would speak to them about the strategies to fight the different styles of fighters, as well the different situations they can find themselves in:

1. Use a lot of scenario sparring drills: place conditions and set scenarios for the athletes and develop these as drills: such as corner sparring, what to do when you are in a corner, and how to get out from being trapped in one place.
2. Get experience by entering a lot of tournaments, come up against different types of sparring, umpires, judges, seasons, temperature, time of day, energy levels. More than anything, expose them to the tension and high pressure conditions. The more they are used to this, the less likely they will be in awe of the event, which may lead to a loss of confidence.

LEARN GET TO KNOW THEM SELVES:

Help the athletes to find out things about themselves, to become self aware of what their limitations are, what their “triggers” are, what turns them on, and what turns them off. Work together with the athlete so that the Coach will also know the same things as mentioned before. As a Coach, we need to “know “ our athletes. We need to know their fitness level, mental state, physical ability, their weaknesses and strengths. This time is also crucial for the Coach to build a **trusting relationship** with the athlete, to promote loyalty.

LEARN THE RULES:

Take the time to explain the RULES to them fully, and have some time to discuss and examine the rules. Practice under the rules.

LEARN STRATEGIES AND TACTICS:

Take the time to train them in all the strategies that they can do when fighting all the different types of opponents. Use the opportunity to watch a sparring match, and discuss and analyse the strategies used in the bout, if any. See what the mistakes are and what are the things that are done well. Then go and practice these points ourselves, apply into the scenario sparring process.

Get them to study/read the works of Sun Tzu, then hold discussions on what they mean and how to apply into a TKD sparring situation.

LEARN ABOUT OURSELVES AS A TEAM:

Ensure that the team has a lot of time during the training to practice against each other, this is a way of finding out who is the best sparer, and who is the worst, and the ranking in between.

Practice our skills and strategies under actual conditions, enter as many tournaments as possible. Practice, discuss, practice, re-plan, and test the theory. Then, repeat the process many times over.

I would then spend some time with my team, and ask each person to rank our team, and allocate them numbers 1-2-3-4-5.

1 being “best” fighter

2 being second best

3 being third best fighter

4 being 4th rated fighter

5 being the “worst” fighter

As a coach I would do the same thing, I would rate my athletes using the same criteria. Then I will compare the results and decide on the final ranking. I find that this process is usually quite straight forward, and most would agree with who the 1st/2nd places are and also which person will be the 5th/4th place, with some minor variations.

I would ensure that they all understand the strategies involved: the story of the 3 horses.

Understand that if they come up against a superior fighter, then the job is not to necessary win the spar, but to minimize the loss of points, by using the different tactics. The outcome we want would be: a draw, or any of the following outcomes (if we are RED) in order of preference:

RED – draw – Blue

0 – 4 – 0

0 – 3 – 1

0 – 2 – 2

1 – 2 – 1

In the situations where we want a win then the following outcomes would be desirable in order of preference:

RED – draw – Blue

4 – 0 – 0

3 – 1 – 0

2 – 2 – 0

1 – 3 – 0

0 – 4 – 0

LEARN ABOUT THE ENEMY:

Before a tournament I would have a meeting with my team, to discuss the competition. In the event where we receive a draw in advance and we know whom we will be facing off against, we have time to research about the competition.

We would meet to discuss every single person in the competition's team. There are times when some of my team members may have come across these people before either in a training/social setting, or they may have watched them sparring before. Or they may know some one who knows the person. We bring all the facts that we know about the competition. We discuss what type of sparer they are, we gauge which of our team members would be able to defeat the person.

In the event when we have never seen or sparred the person, then we would prepare by using the internet to search about the person. We have found that a high performance TKD person would have a high profile, and the likelihood is that the person would be on facebook/you tube, we can read about them, and in many cases we can see video clips of them sparring. The internet is a goldmine of information for many people: coaches, athletes, teams, umpires. Research is quite straight-forward in this time and age!

Using the information that we have, as a team we would rank our opponent based on this research, in the following order:

- 1- best fighter
- 2- second best fighter
- 3- third best
- 4- fourth best
- 5- fifth best

To confirm this ranking, on the tournament day, we would ensure that we would watch these people spar in their individual sparring events (use of spies as suggested by Sun Tzu). Based on this we would do a re-assessment of our original ranking.

STRATEGY ON THE ACTUAL TOURNAMENT DAY:

Scenario 1: We know who the competing team is, we have seen them spar, we have watched them before, and our team have personally sparred them in the past. In this situation we have fulfilled Sun Tzu's principle of "Know your self and know the enemy". We are able to accurately rank each of the competition in the sparring proficiency ranking of: 1 – 5.

Procedure: a coin toss is used to decide which team will be the first to choose and put up a fighter.

SCENARIO 1A: In the event that WE WON the coin toss:

The competition will put up their first fighter, and we have the advantage to decide which fighter to put up against them.

In this case where we know a lot about the enemy and we are quite sure of the enemy's capability, and we are sure of our own capability then it is quite a simple decision. In this case I will treat it like a simple game of cards "do not lead with our Ace".

Please refer to the decision matrix (below) to see which fighters I can choose, to ensure the likelihood of a win. There are 10 possibilities where we can have the probability of winning, each with a different possibility of outcomes in the 'win score', ie: how close the winning points will be.

The picture below shows the "fighter matching" matrix.

Sparring matrix					
Fighters	Red 1	Red 2	Red 3	Red 4	Red 5
blue 1	B1 vs R1	B1 vs R2	B1 vs R3	B1 vs R4	B1 vs R5
blue 2	B2 vs R1	B2 vs R2	B2 vs R3	B2 vs R4	B2 vs R5
Blue 3	B3 vs R1	B3 vs R2	B3 vs R3	B3 vs R4	B3 vs R5
Blue 4	B4 vs R1	B4 vs R2	B4 vs R3	B4 vs R4	B4 vs R5
Blue 5	B5 vs R1	B5 vs R2	B5 vs R3	B5 vs R4	B5 vs R5
There are 10 possibility of win for RED					
There are 10 possibility of win for Blue					
There are 5 possibility of Draw for each team.					

So let's say, in this case the fighters of the competition are evenly matched with my fighters, that is to say that our 1-5 fighters, ranks closely to the competition's 1-5 fighter.

1. The competition leads with his #3 fighter, then if I want to guarantee a win, I will put forward either my own #1, or #2 fighter. In this case, I still want to keep my #1 fighter, because I'm confident that my #2 fighter can still easily defeat the competition's #3. The same logic can be applied if they have lead with their #4, or #5 fighter (I would play our #3 or #4 fighter).
However, if they had led with their #1 fighter, and none of my fighters can defeat this person, I will put up my #5 fighter against him. I will instruct my fighter on the strategy of not engaging, and put in place a defensive/running strategy, to minimize our loss tally. A note here is that I would need to be thinking about the safety of my #5 fighter. If I feel that my #5 is totally outgunned, then to make sure he is not injured, I may decide to put in my #4 fighter instead.
2. Depending on the outcome of the first bout: If we win, then the competition still needs to put up the fighter for the second bout. In this case I can still pick and choose whom I need to send to face this chosen fighter to ensure a win from here onwards. And so on.
3. I we had lost the first bout, then, we have to put up our next fighter first. In this case, I will still choose to hold on to my number 1 fighter. Depending on what the current score is, I will decide on which fighter to put forward.
The following is a decision matrix on which fighter I will put up depending on what the score was. If the score was....then....

0-1-3 I will put up my #2 or #3 fighter.
0-2-2 I will put up my #3 fighter
0-3-1 I will put up my #4 or #5 fighter
1-0-3 I will put up my #2 fighter
1-1-2 I will put up my #3 fighter
4. In theory I should win every bout from now on, by just matching my higher ranked fighter against the competition's fighter.

SCENARIO 1B: we LOST the coin toss.

In this case we have to have to put up our fighter first in Bout 1, and the competition upon seeing who it is that we put up, will decide which of their fighter to put up to fight ours.

So, I would still stick to the rule of the Game of Poker and not play my ACE (#1 fighter). Instead I may lead with my #4 fighter. If they put up their own # 4 then I will expect either a win/draw/loss.

If they put up their #5 then I would expect a win.

If they put up their #1/#2/#3 I would expect a loss.

Depending on the loss score in Bout 1, as I previously mentioned, I would then put up my # 2 or #3 for Bout 2.

If I win Bout #2 I will wait until I see which fighter the opposition puts up, and I will put up my fighter who I deem will win against this person (see the outcome matrix).

If I lose Bout #2: I will lead with my #2 to ensure a win, or at least to draw out #1, and if I was to lose, I would minimize the losing points. However, from here onwards I can guarantee a win with my remaining fighters.

If I win Bout #3: the competition will still have to put up their fighter first, I will simply refer to the decision matrix, and put in a fighter who will defeat that fighter.

If I lose Bout #3: we are in trouble now, so morale of our team may start to drop. I need to ensure a win: in this case I will play my Ace to ensure a win, I will play my #1 fighter. This will ensure a win.

If I win bout Bout #4: then I will put in my last fighter who ever that is, this should again guarantee a win to me.

If the total outcome after all 5 Bouts is a Draw, then I will appoint my #1 fighter to fight in Bout #6 (only if Fighter #1 not injured or disadvantaged in some way, in which case my next option is my #2 fighter).

SCENARIO 2:

We DO NOT know the enemy. But we know OURSELF!

In this scenario, we know nothing of the opposing team. This would happen in an international event, where we have no idea whom we will come up against.

The only thing we know for sure is “OURSELF”.

There are a lot of unknowns.

Sun Tzu says: “. *If you know yourself but not the enemy, for every victory gained you will also suffer a defeat*”.

In this case we need to be prepared that we will suffer some defeats. The trick now is to minimize the amount of defeats, and if possible try to win as many as possible, relying on the individual skill of each of our fighters, having trained them on how to spar the various styles of possible opponents. The coach will work closely with the fighter to defeat their opponent. We need to find out about the opponent on the spot in the quickest and safest possible way.

With the unknowns, it would be good to then use other knowledge to help us prepare and maximize our chances of winning.

In this case we need to ensure we **know the ‘TERRAIN’** to maximize our chances. We need to know who our referee will be, who the judges will be. Then we have to play our players close to our chest, and try to quickly gauge the competition as we go.

As a coach I need to watch and gauge the first and second sparer that the other coach puts up, from there I should be able to rank which is better out of the two. I can try to guess the other coach’s strategy, as well as try to guess the ranking of the 3 remaining opposition fighter.

So our first opening moves are to test out the competition. I need to be careful whom to play first.

SCENARIO 2A: We won the coin toss.

The competition puts up their first fighter (we have no idea which skill rank they will be). So to be safe, I will play my #4 fighter.

If we WIN Bout 1, then the competition needs to put up their second fighter for Bout 2.

My thought process: if our #4 best fighter was able to defeat this person, this means that the fighter we have just defeated should be either a #4 or #5 fighter. Which means that their #1, #2, and #3 fighter are still waiting to come on.

Based on this reasoning, for BOUT 2 I will play my #5 fighter.

BOUT 2: if we WIN bout 2 with our #5 fighter, then I can say that the remaining fighters of the competition are ALL inferior to my remaining fighters. In which case I would then play them in the following order: next up will be #3.

Bout 3: if we win again, then it is confirmed that all their fighters are inferior to my fighter. I can play either my #2 or #1. And should be a very high probability of winning for both.

If we lose bout 3 for some reason, then I can assume that the one who beat my #3 fighter is an opponents #1, #2.

Either way I will now put up my #3 fighter for Bout 4 to ensure that I draw out their best fighter. Still keeping my #1 .

Then finally in Bout 5, I will put my remaining #1 fighter, which should be a WIN.

IF WE LOST Bout 1: then this means the fighter who beats my #4 (in Bout 1) is a more skilled, and it is possible that they are ranked #3, #2, #1. I would assume that if the coach is experienced, then the likelihood of him to put up #1 fighter as a first up fighter would be low, so I would assume that opposition fighter for Bout1 would be a #2 or # 3 fighter.

Which means they still have : #5, #4, and two of (either #3, or #2, and #1).

While I am left with my #1, #2, #3, #5.

So for Bout 2, because it's my turn to put up first, I would now lead with #2 (this would depend on the points tally, if it's close then I may lead with my #3 instead).

IF WE WIN BOUT 2: Then I know that the fighter I've just fought would be either an opponent's #3, #4, or #5. So now I know that they are left with #1, and either (#3, #4, #5). I am still left with my #1, #3, #5.

FOR BOUT 3: Depending on the total point: I would lead with #3 if we have a numerical advantage, but if it's a close tally I would lead with #1 to save morale.

If we WIN Bout 3: this means that the fighter we have just fought is #4 or #5.

They are now left with: #1, #3, and I am left with my #1 and #5.

This is now crucial to see what the tally is. If the difference is close, then I will lead with #1, To ensure a closer win.

IF WE LOST BOUT 2: this means that the competition was more skilled than my #5 fighter. At least I now know that I have drawn out their #2, or #3, or #4.

In the meantime I still have my own #1, #2, and #3 to play.

In which case, for Bout 3 I need to play my # 3 to try to draw out their number #1.

After which I can be sure that I should win the next 2 bouts, and thus win the overall tournament.

There are so many scenarios that we can go through, and the possibilities are endless. The thinking can become quite confusing, and we may not be able to think into such depth, because **TIME is of the essence** during the tournament.

As a coach we haven't got our computer models to call upon, decision tables or matrix and any other calculations to make the best call. This may be possible in a game of chess where each player has a lot of time to think it through. In a TKD tournament, we at best, may have 30 seconds to make our mind up, and therefore will need to be able to generalize and only make the simplest of calculations.

So this then poses the QUESTION: **what is the best way to be able to call it correctly with the minimum time, without having to perform such calculations?**

There is a simple way, and it's about going back to the story of the 3 horses.

There are 2 simple calculations that the coach will need to work with:

1. Calculate how many wins each side has after each bout.
2. What is the current running total of the points for each team.

This can be done quite simply, we can delegate the team members to help keep track as to how many wins have we had, and they calculate the running total of the points allocated after each bout.

Here is an example of what I would do:

1. In the event that WE KNOW OUR OPPONENT.

1.1: IF WE LOSE THE COIN TOSS:

BOUT 1: I will lead with my #5 fighter.

If we lose, then I will put my #2, or #3 fighter in for BOUT 2 (this will depend on which of the opposition's fighter defeated my #5).

If we lose again, then this is where checking the overall tally will be crucial. If the point difference is huge, I will need to throw in my #1 fighter to get a win. As not only do I need to catch up with the points, I also need to ensure I bring up the morale of my team. And I need to take control of the fight.

BOUT 3: If the point difference is not too big I will put in my #2 or #3 fighter to ensure a WIN.

BOUTs 4 and 5: If we win then it's the competition's turn to first put up their fighter, and once they put their fighter up then I can select my appropriate fighter to defeat that one. In theory from then on, I will win, because I will always be able to put out the correct fighter to defeat the competition.

1.2: IF WE WON THE COIN TOSS:

IT will be the competition who will put up the fighter first, and from there, I will be able to easily send in the correct fighter to defeat him, as per the 3 horses strategy.

2. IN THE EVENT THAT WE DO NOT KNOW THE OPPONENT:

2.1: IF WE LOST THE COIN TOSS:

BOUT 1: I would lead with my #5 fighter.

BOUT 2: If we Lose, I would send in my #3 fighter.

However, if we win, then I would wait to see the person sent in by the opposition. Try to gauge his skill level, body size, height, length of legs, build, and then send in the appropriate person in to try to defeat him. And so on.

Lastly:

Some general rules to follow:

1. If we are winning all the bouts, then it's OK to keep your #1 fighter till last, just in case we need to make up the numbers.
2. If After 2 bouts, we lost all 2, then do not wait, we need to put in our #2 or #1 fighter (the deciding factor is the tally of point). It's important not to let it move too far apart, because it's too hard to leave it until bout 4 and bout 5 to try to catch up.
3. DO NOT LEAD with our #1 if at all possible.

In the event that after 5 bouts we have a draw, then I would of chose the #1 fighter for Bout 6.

On the Proviso that: our #1 has no injury, and has proven to win his bout, during bouts 1-5.

If #1 lost his bout during that time, I would choose the next ranked sparer, who WON his spar during the bouts 1-5.

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