

Research on Technical and Tactical Features of Major Overseas Opponents of Shiming Zou in Olympic Preparations

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Abstract. Shiming Zou made history by earning the gold medal at the 2008 Beijing Olympics in the light flyweight division using his unique "piratelike" fighting style. With the development of boxing, an increasing number of world elite boxers have emerged in the light flyweight division and they have become the biggest obstacles for Chinese boxing. The present paper studied the technical and tactical features of Zou's major opponent, Mongolian Purevdorj Serdamba. The research analyzed the condition and characteristics of his technical and tactical application in competitions to provide pertinent strategies and programs for Zou's further preparations, promote Chinese coaching levels and capabilities and provide scientific foundation for the sustainable development of Chinese boxing.

Keywords: boxing; techniquetactic; feature

With the development of Modern Olympic Boxing, there has been great improvement in the techniques and tactics in many countries. In particular, the Asian boxers completed a clean sweep of the four gold medals in light flyweight, flyweight, bantamweight and light heavy weight divisions and obtained a total of 9 medals, 25.5% of all the medals in boxing. The Asian players shocked the world with their quick improvement and remarkable achievements and broke down the setup long dominated by Russian and Cuban boxers.

After winning the first gold medal in the World Championships in 2005, Shiming Zou repeated his World Championship in Chicago, and won the gold medal in Beijing Olympics, China's first boxing gold medal in Olympic history. These achievements secured his dominating status and the first rank in the light flyweight division in world boxing. However, the emerging of the Mongolian boxer, Purevdorj Serdamba constitutes the biggest threat to Shiming Zou in the 2010 Asian Games and 2010 London Olympic Games. Purevdorj Serdamba is advantageous in age, height and reach in the light flyweight division. In addition, he is a typical long-distance fighter with all-round techniques and quick wits. Although losing to Shiming Zou due to shoulder injury in the Beijing Olympic Games, he fully demonstrated his power and potential by winning successively six gold medals in the light flyweight division in the 2009 Milan World Boxing Championship, surpassing Shiming Zou to become the world first. Therefore, using the most advanced data collection and intellectual analysis system, the present paper studied the technical and tactical features of Purevdorj Serdamba, hoping to provide pertinent strategies and scientific basis for Zou's further preparations and supply the most direct research service for the sustainable development of Chinese boxing.

1. Research subjects and methods

1.1. Subjects

The present research has as subjects the technical and tactical features of Zou's major overseas opponent, Mongolian Purevdorj Serdamba.

1.2. Methods

1.2.1 Literature review

The research comprehensively and systematically reviewed the literature on the analysis of technical and tactical features in boxing and the information from the official website of World Boxing Association about individual and significant events.

The timely and accurate information about the opponent and his dynamics has provided a solid

theoretical foundation and literature support for the present study.

1.2.2 Data Collection

The self-developed V.10 data collection and intellectual analysis system in modern boxing is used for collecting and analyzing technical and tactical information. The detailed collection information is shown in Table 1.

Table 1 Basic Data for Competition Information Collection

	Number of	Number	number		units	units of	units of		nning oints	nts Losing Points in Points counter attack
Information	Number of Competitions	of winning	of losing	bouts	of attacks	defence	counter attack	points in attack	Points in counter attack	
Serdamba	15	13	2	56	321	266	168	128	37	123

1.2.3 Mathematical Statistics

The analysis of mathematical statistics is completed with the statistical software SPSS13.0 (Chinese version). The analysis carried out detailed statistics about the 755 pieces of fighting information in 15 of Serdamba's competitions.

1.2.4 Video observation

Video observation is accomplished on the IBM dual core computer based on the expert consultation about related questions.

2. Results and analysis

2.1. Basic information and competition results of PurevdorjSerdamba

2.1.1 Basic information of Purevdorj Serdamba

The Mongolian boxer Purevdorj Serdamba is one of the best players in the world light flyweight division and previously had three competitions with the famous Chinese boxer Shiming Zou, with one win and two losses. Since 2003, Serdamba remains one of fewer players who have won Shiming Zou. He has advantages in age, height and confidence, with his two years' unbeaten record in all sorts of competitions. Table 2 illustrates the basic information of Zou and Serdamba.

Table 2 Basic information of Zou and Purevdorj Serdamba

Division	Name	Birth date	Nationality	Height	posture	Pre-Olympic best result	Post- Olympic best results	ranking	Fighting style	results
light flyweight	Purev dorj Serda mba	1985.4	Mongoli an	1.64m	Left	Champion of 2007Asian Boxing Championshi p light flyweight	Champion of 2009World Boxing Champions hip light flyweight	1	Long distance fighting	One win, two losses
light flyweight	Shimi ng Zou	1981.5	China	1.62m	Left and right posture	Champion of 2005 \ 2007World Championshi p light flyweight	Champion of 2010 World Grand Wushu Festival 49kg	2	Long distance fighting	Two wins, one lose

Note: The world ranking in Table 2 is based on the publications by world Boxing Association in May, 2010

2.1.2 Competition results of Purevdorj Serdamba

2.1.2.1 World ranking of Purevdorj Serdamba

Since he participated in the boxing competitions of World University Games held in Kazakhstan's capital,

Almaty in Oct. 3-9, 2006, his first participation on behalf of Mongolia, Purevdorj Serdamba shocked the world with his remarkable results within only a matter of several years' time. According to the AIBA WORLD RANKING as of 02 May 2010, Purevdorj Serdamba has risen to the world first in light flyweight division from the world second after the 2008 Beijing Olympics, exhibiting great potentials. See Table 3 for world ranking.

			Ũ			
division	Player	Country	Score	Rank	Rank	Rank
	1 layer	Country	02/05/10	02/05/10	01/01/10	01/01/09
light flyweight	Purevdorj Serdamba	Mongolia	2062.5	1	2	4
Light flyweight	Shiming Zou	China	1575	2	1	1

Table 3 World ranking information in light flyweight division

2.1.2.2 Results of Purevdorj Serdamba in world competitions during 2006-2010

Purevdorj Serdamba has sound basic skills, strong special capabilities and comprehensive techniques and tactics. Since his remarkable fifth place in the boxing competition in the World University Games when he for the first time represented Mongolia, he achieved splendid performance in Asian Boxing Championship, World Boxing Championship and Olympics Games. In particular, his wining over Shiming Zou in the finals in the 2007 Asian Boxing Championship shows his rich experience in significant competitions. See Chart 1 for detailed world boxing competition results.

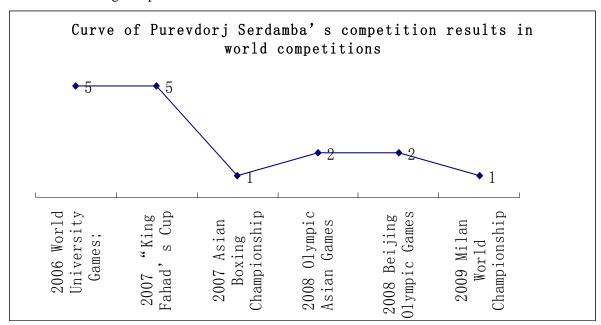


Chart 1 Statistics of the results of Purevdorj Serdamba in world competitions

2.2. Technical and tactical analysis of Purevdori Serdamba

2.2.1 Statistics and analysis of PurevdorjSerdamba's attacking techniques

From Table 4 it can be seen that, Purevdorj Serdamba is good at attacking using single punchs and two-punch setups, among which the backhand straight is used for 93 times, scoring 41, with the success rate of 25%; then forehand swing, 45 times, with the scoring points of 35 and winning rate of 78%; and straight-swimming, 28 times, with the scoring points of 35 and winning rate of 61%. Analyzed from the structure of technical movements, all the techniques employed are most simple punches; seen from the difficulties of setup techniques, the complicated and difficult setup not only slow down the speed, but also are likely to expose weakness, enhancing the attaching chance of the opponent.

Scoring points

Winning rate

3

25

41

44

%

35

78%

Attacking Stra Stra Swi Thr Stra Swi Hoo abo Cechniques For Bac ight ight Foreh Back Sec ight kee ve ng ng-Backha eha kha and hand ond Forehand hoo thre hoo hoo swi pun nd nd nd strai swi Swing k k k ch straig straig ng e swing hoo hoo ght ng Statistic setu setu setu setu setu pun ht ack k k setu setu p p ches indexes p p p Times of using 12 93 45 36 0 9 33 28 3 5 32 4 8 6 7 29 10 10 Using rate 4% 14% 11% 0% 3% 9% 1% 2% 1% 2% 2% 2% % %

1

11

%

8

24

%

17

61

%

0

0%

2

40

%

10

31

%

1

25

2

25

%

1

17

%

1

14

%

Table 4 Statistics of Purevdorj Serdamba's application of attacking techniques

2.2.2 Analysis of Purevdorj Serdamba's application of defending techniques

6

17%

0

0%

Table5 Purevdorj Serdamba's application of defending techniques

defending technique	Blocking defence	Leftward dodge	Rightward dodge	slap defence	Moving defence	Head carry defence	Armswing defence	Reclining defence	Backward dodge
Times of using	13	73	11	8	68	13	5	36	39
Using rate	5%	27%	4%	3%	26%	5%	2%	14%	15%
Success times	7	42	3	3	27	6	3	30	22
Success rate	5%	29%	2%	2%	19%	4%	2%	21%	15%
Losing points	6	31	8	5	41	7	2	6	17
Losing rate	5%	25%	7%	4%	33%	6%	2%	5%	14%

Table 5 reveals that the leftward dodge and moving defense techniques are Purevdorj Serdamba's major defending techniques, with the using rate of 27% and 26% respectively. The next techniques are backward dodge and reclining defense, with the using rate of 15% and 14% respectively. The above data indicate that Serdamba has comprehensive defending techniques and defending effectiveness.

2.2.3 The analysis of Purevdorj Serdamba's attacking techniques

Table 6 Statistics of Purevdorj Serdamba's attacking effectiveness

Attacking technique	Fore hand straight	Back- hand straight	Fore- hand swing	Back- hand swing	Forehand hook	Back - hand hook	Straight - straight setup	Straight -swing setup	Straight -hook setup	Swing -hook setup	Swing - swing setup	Hook - hook setup	Three setup	Over three setup
Using times	4	34	49	21	0	0	14	18	0	0	11	0	11	6
Using rate	2%	20%	29%	13%	0%	0%	8%	11%	0%	0%	7%	0%	7%	4%
Scoring points	0	8	12	6	0	0	2	5	0	0	1	0	2	1
Winning rate	0%	24%	24%	29%	0%	0%	14%	28%	0%	0%	9%	0%	18%	17%

Table 6 shows that the forehand swing technique is used for 49 times, 29% of using rate. It is the most frequently used attacking technique in the competitions. Next to forehand swing is backhand straight

technique, which is used for 34 times with the using rate of 20%. Then follow the backhand swing and straight-swing set up techniques, used for 21 and 18 times respectively with the using rate of 13% and 11%. Therefore, the four defending strategies are most often used techniques by Purevdorj Serdamba in boxing matches. The scoring rates of the four attacking techniques are 12 points, 8 points, 6 points and 5 points respectively, with the success rates of 24%, 24%, 29% and 28%.

Table 6 also reveals that Serdamba is good at using simple punches in attacking, with effective results and high success rate. However, the statistics also show that he is also skillful in using simple straight punches and straight setups in attacking, but not good at using hook techniques or any hook setups. The using rates of forehand cooks, backhand hooks, straight-hook setup, swing-hook setup and hook-hook setup are all zero. Therefore, specific training plans can be programmed aiming at the specific weaknesses in Serdamba's attacking techniques, providing better guided training.

2.2.4 Analysis of Purevdorj Serdamba's tactical features

Attacking effectiveness Statistic indexes	Fake movement	pressing technique	force attack	Corner technique	Straight attack	Fight-adjust combinations	First attack-then- defense technique
Using times	26	18	63	15	99	13	87
Using rate	8%	6%	20%	5%	31%	4%	27%
Scoring times	6	5	20	5	49	2	41
Success rate	5%	4%	16%	4%	38%	2%	32%

Table 7 Statistics of Purevdorj Serdamba's attacking effectiveness

From Table 7, it can be seen that the most frequently used techniques in competitions by Purevdorj Serdamba is the straight attacking technique, with the using rate of 31%, then come the techniques of first attack then defense, pressing, cornering and the combination of fighting and adjustment. Judging from the success rate, straight attacking technique is the highest, 38% successful. Next come first attack then defense technique and then force attack technique. Seen from the overall using rate and success rate, Serdamba is skilled at techniques of straight attack, first attack then defense and force attack, and he exhibits quite balanced employment of different techniques.

Defending techniques	Hold defensive	Leaning defensive	Distance defensive	Negative defensive	Pointse defensive	curing	First defense then attack
Using times	28	67	116	17	9		29
Using rate	11%	25%	44%	6%	3%		11%
Success times	10	39	70	4	6		14
Success rate	7%	27%	49%	3%	4%		10%
Losing points	18	28	46	13	3		15
Losing rate	15%	23%	37%	11%	2%		12%

Table 8 Statistics of Purevdori Serdamba's effectiveness in attacking techniques

Table 8 shows that in boxing matches, Purevdorj Serdamba uses most the technique of defense, with the using rate of 44% and success rate of 49%. From the table it can be seen that Purevdorj Serdamba has employed a variety of defending techniques and has strong defensive consciousness, which lays solid foundation for his winning of the matches.

Table9 shows that the techniques of single-handed counter hit on the head, single-handed counter hit on the belly and the combined counter hit on the head are the most frequently used counter attack techniques in boxing matches. The technique of single-handed counter hit on the head was used most times, with the using rate of 39% and the scoring times of 22 points; the technique of combined counter hit on the head comes next, with the using rate of 34% and scoring times of 12 points. The video observation also shows that Purevdorj Serdamba is quick and sudden in counter attack, leaving no preparatory command for the opponent, with the head as the target.

Counter attack techniq ue	Single- handed counter hit on the head	Single- handed counter hit on the belly	Combine d counter hit on the head	Combined counter hit on the belly	Combined counter hit on the head and belly	Combined counter hit on the belly and head	Straight counter hit on the head	Straight counter hit on the belly
Using times	65	46	57	0	0	0	0	0
Using rate	39%	27%	34%	0%	0%	0%	0%	0%
Scoring times	22	3	12	0	0	0	0	0
Success rate	34%	7%	21%	0%	0%	0%	0%	0%

Table 9 Statistics of Purevdorj Serdamba's effectiveness in counterattack techniques

2.3. Technical and tactical features of Purevdorj Serdamba

As an excellent promising young boxer, Purevdorj Serdamba achieved remarkable results in a series of world matches and Olympic Games and accumulated a great amount of competition experiences. At the same time, he has made great progress in his technical and tactical abilities and undoubtedly become the most competitive opponent against Chinese boxers in the light flyweight division. Purevdorj Serdamba is a typical long distance fighter with left-handed posture. On the whole, he is all-rounded in techniques, quick in speed, and strong in concealment and exact in hitting. Besides, he has good sense of distance and strong capability in seizing opportunities to attack and defend, quite an intelligent boxer.

The features of Purevdorj Serdamba's techniques can be summarized into the following aspects: 1) Compared with Shiming Zou, Purevdorj Serdamba has less movement but has good control over the center of gravity, majoring in distance-controlled movement. 2) He is rigid in defensive posture, versatile in techniques, skilled in movement and dodging defensive techniques and effective in controlling the initiative in competitions. 3) He mainly uses straight punches, with sudden attack and quick speed. 4) His techniques have slow paces and fewer changes and fluctuations. 5) He is very flexible in technique capabilities and has quick minds.

Repetitive video observations indicate that Purevdorj Serdamba is rather monotonous in offensive and defensive technique applications, with fewer changes, which is easily taken advantage of by the opponents. The cases of his losing in points are mainly in the initiative period of attacking and during the rally with the opponent, when he was hit by the opponent's backhand straight punches.

2.4. Suggestions

Modern information technology has been widely put into the training and competition process of competitive sports and become the genuine scientific support for research. Through the summary of the successful experience in the preparation of the National Boxing Team for the Beijing Olympic Games, the coaches and players are quite convinced about the information and have included for the long term the information technology in the preparations for boxing matches. The analysis of Purevdorj Serdamba's technical and tactical features could provide Shiming Zou with useful information about the opponent, making him well aware of the features of the opponent and get fully prepared for the winning of the future matches.

The following suggestions are put forward for Zou's further preparatory trainings.

- 1. Purevdorj Serdamba is the long distance fighting boxer, and long distance is the most appropriate fighting distance, because in competitions, players need to control distance, avoid mid-way attacking, enhance upper body dodging movement and wisely hit sideway to initiatively win points in the opening stage of the match. Therefore, it is necessary to keep distance, enhance protection and control straight punches so as not to lose points in the beginning of the competition. If the opponent cannot punch in, he will force attack, then we could take advantage to deliver backhand straight in counterattack.
- 2. Take advantage of our strengths to attack the weak points of the opponent. Avoid his straight attacking punches and use more counterattack techniques.

- 3. Quicken movements and use combinations of fighting and adjustment to avoid exchanging attacks with the opponent and losing points.
- 4. Enhance arm protection in quick-in and quick-out process to avoid the backhand straight punches from the opponent's counterattack.

3. Conclusions

- **3.1** With his solid foundations in techniques, strong special capabilities and all-rounded techniques and tactics, in addition to his young age and his southpaw in the light flyweight division, Purevdorj Serdamba is on the rise in his competitive potentials and has constituted a great obstacle against Chinese boxers in the light flyweight division.
- **3.2** Purevdorj Serdamba has clear consciousness in technique employment and is good at taking opportunities in the opening of the competition. He aims at taking initiatives in attacking to control the pace of competitions. Once in the leading position, he changes from the offensive into the defensive posture and takes more advantage of the competition rules: if the opponent punches in, he will lean on him, leaving no distance to the opponent for counterattack or attack, upsetting the opponent's attacking pace and benefiting from his rich big game experiences.
- **3.3** Similar to Shiming Zou, Purevdorj Serdamba could make full use of his flexible movement technique, and earnest look for the right distance and opportunity for attacking, with stable mentality.

4. Reference

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