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**METHODOLOGY FOR THE
CONVERSION OF ONE TURN- IN
TWO TURNS JUMP**

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Introduction

The importance of the basic work and of the improving of the technical gesture of one turn jump in order to achieve a better approach and a better quality of execution of double jumps, is essential for the training of advanced athletes in modern skating.

The basic setting out of a one-turn jump is very important, so as its continuous repetition and the development of the skating parameters even when the jump has been learned.

The one-turn jump has never-ending improvements: speed, height, travel, flight, control of the body in flight, speed, posture before, during and after the landing of the jump, are parameters that must be constantly and methodologically improved throughout the competitive life of the athlete.

A coach must also always remind himself that every technical approach, that he will do on the skater, will always be the basis and premise for the next one. The athlete will then be made aware of using a “logic” technique, where every movement and position will not only be useful for learning that difficulty, but functional for the next one. In this way while dwelling on the very basic work we will save time in the next steps, having already deleted from the setting out unsuitable or unnecessary movements to further difficulties .

Evaluation and analysis of technical and physical starting abilities of the athletes

A coach, before starting any work, must value the basic condition of the skater.

He must consider the technical knowledge gained, comparing it with the physical coordinating potentiality.

If we are dealing with an athlete, who has already acquired the one-turn jump, the goal is to refine some components of the basic jump, to facilitate a correct and a good setting out of the double jump.

The methodological correct choice is almost never the fastest one. The type of work you should do is of the utmost precision, avoiding leaving in athletes gaps of learning that will affect the future evolution of his technique.

Parameters to be evaluated

Each coach must have the ability to identify, watching an athlete performing a one-turn jump, if he has the characteristics of height, speed, travel and control of specific postures, which can afford him to do the same jump double.

You have to work on improving the parameters of the jump of minor rotation in order to have a qualitative result of these characteristics during the setting out and the implementation of the double jump.

It is extremely important to evaluate whether the athlete is running properly the various stages, that make up the jump. Some basic parameters will be the same both for the one-turn jump and for those with greater rotation (i. e. the basic postures of the skater, tensions of various body segments, the take off and landing edges), while others will change slightly or significantly according to the turns (the horizontal speed of the skater, the patterns, the loading time, the entity of loading; thrust and take-off speed, movements, pattern and timing of the free leg during the preparation; the thrust and the take-off of the jump, the work of the arms, their approaching and throw time and their ability of closing in flight; the quickness of the take-off of the jump, etc. ..). It should be noted that these variations are often almost imperceptible but functional to the required execution of difficulties and therefore elements on which to work).

Let us analyze now the various parameters, the fixed and the variable ones (in relation to the later rotation), that the coach must control, evaluate and teach his own athletes in each step of a jump.

Starting position

Check if the balanced position before the jump of the athlete is correct.

The position provides the maximum tension of the body maintained by the contraction of the dorsal-abdominal muscles; the trunk must be erect, the shoulders well pushed down, the pelvis pushed forward by the contraction of the buttocks, the head, extended upwards, follows the spine line. In the setting out of double jumps these features remain unchanged.

Specific preparation of the jump

Check if the movements to perform properly the jump are clear to the athlete : the position, the placing in the space (rink) of the preparation pattern, timing (duration) of each movement making up the preparation and the speed to be used for the subsequent execution of the jump. While the first parameter will be more or less fixed both in the one-turn jump and in the two-turns one, the others will change. The preparation speed falls sharply (during the setting out and acquisition of the double jump it will increase) as well as the timing of individual movements and thus the placing on the rink.

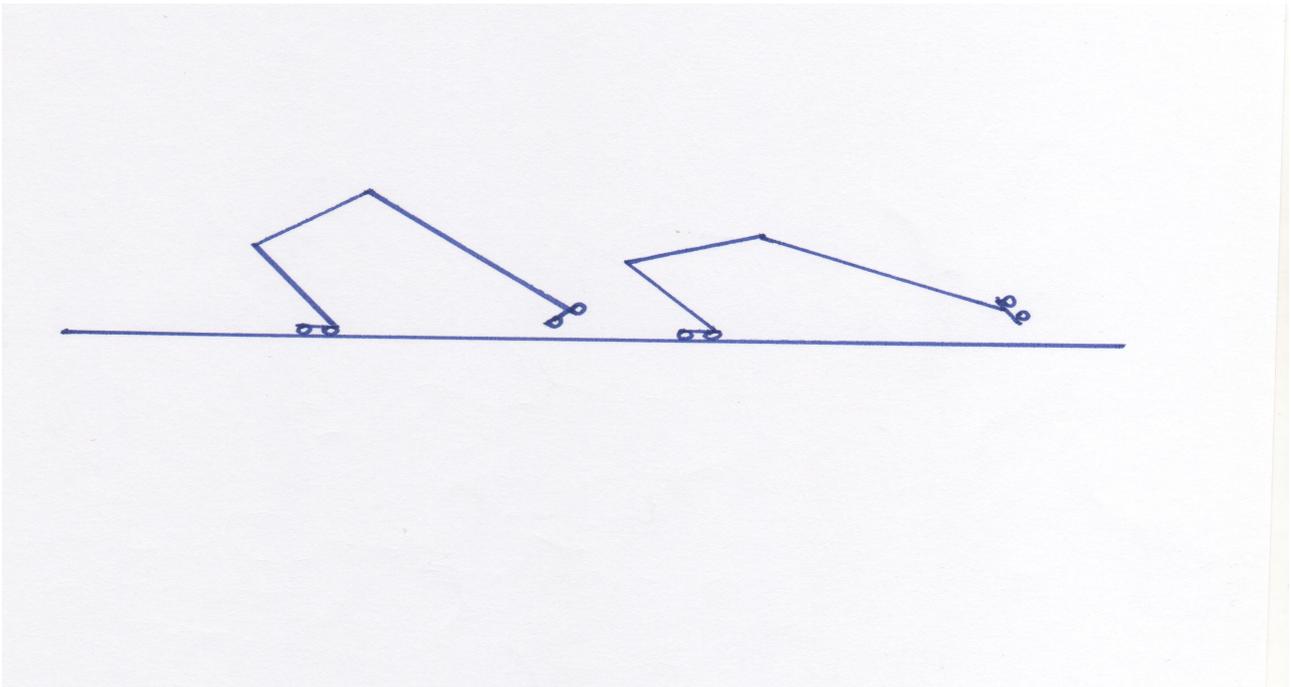
Loading

Check if the position of the athlete is correct during the maximum loading of the jump.

After having checked the acquisition of basic gestures both in the chest, legs (free and employed) and arms should be taken into account the variable parameters depending on the number of turns required to the athlete as: the best bending angle of the supporting leg (which of course will decrease proportionately to the bending required to generate the thrust), the following loading time (which will be longer proportionately to the increasing of the bending required); the best inclination of the body axis with the resulting displacement of the trunk on the sagittal plane and according to the bending of the supporting leg.(such tilt of the body axis will tend to increase with the increasing of the bending of the supporting leg); arm movements in relation to the timing of the loading (increasing the bending of the loading leg, the movement of the arms will be adapted to new times and then delayed); the work of the free leg: its distance from the supporting leg, its travel and its timing in relation to those of loading (to the increasing bending of the supporting leg must correspond a greater extension of the free leg that will draw in the air a wider travel. It will adjust to the new loading times with a longer control of the position.)

In the drawing we can see the loading phase of a toe loop (picture left) and the loading phase of a double toe loop (picture right). As you can see, the angle of bending of the supporting leg in the toe loop is wider than that of the double one just for the greater bending that the athlete performs to develop greater thrust.

You may also notice the difference in the distance of the free leg, which increases proportionally to the increase of the bending of the supporting leg.



Thrust and take-off

Check if in the phase thrust and take-off the athlete performs the correct movements and assume the required positions to reach the maximum extension of the employed leg.

The parameters, on which we must focus our attention because variables, according to the rotations required, are:

times and directions in the synergy between the supporting leg and the free one (the need of a stronger thrust will require quicker times for the extension and take-off to encourage a greater explosiveness and require a precise coordination between the throw timing of the free leg and the extension of the supporting one, as well as a thorough evaluation of the direction of the free leg during the take off, that will not help the height of the jump but, using the most proper path, will assume as quickly as possible the “screw” position).

use of the trunk advance focused on the timing (even if the advance between a one-turn jump and a double one remains almost unchanged, the quickness with which it takes place must be proportional to the rotation that you want to obtain. We must remember that the advance of a jump is the quick torsion of the trunk, that the skater must necessarily run before the take-off from the floor and just this movement, as moment of inertia, give impulse to the rotary motion)

the use of arms, their timing and trajectory of reference for the next momentum (the path that the arms have to run from the time when the skater is in a position of maximum loading will be wider than the one-turn jump and proportional to the rotation to be achieved: starting from the moment you take off the rink, in fact, if the arms are already semi flexed and do not reach a good extension, doing then the complete closure, it will result an increase in angular velocity shorter of what would be obtained if at the time of the take-off they had been extended)

Flight

Check the position of the athlete during the flight.

The position in the one-turn jump provides an upright trunk and legs at most stressed. In the toe loop and salcow the position of the free leg is stretched out in flight as the landing of a jump, while for the flip. Lutz and ritt it will be a screw (the crossing of the free leg of course will not be too narrow and low compared to the employed leg also because of the minimum time in flight; the arms indicate the closing, but do not perform it completely in order to reduce to a minimum the rotation speed to enable it to a one-turn jump. To work on acquiring more rotations, attention will be given precisely on those parameters, seeking a complete stretching of the lower limbs, a lower and more narrow screw, a greater and quicker closure of the arms, a perfect maintenance during the translator and rotator motion of the jump of the body axis (which will maintain a constant rotation speed in flight without decrease, due to a low body resistance)

Landing

Check if the position of the athlete in the landing is correct.

The position provides a back outside balanced step with the employed leg well bent, trunk erect, head high, the free leg just stretched forward and then stretched back with the toe slightly open and the arms stretched forward and then side-ward. Also at this phase of the jump you can work on some elements (particularly on the time) that can afford to delay the take-off time of the jump favoring the possibility to rotate in flight as possible. To do it, of course, we will perform faster the take-off.

Expected results

If the athlete will be able to perform successfully the one-turn jump from a tour with these characteristics, he will be prepared mentally to find the same result even in double jumps.

The result to be achieved is to have some jumps, fast, having the travel with the right relation of height / length, the proper position of the body during the flight, the right pressure of any edges at the take-off and at the landing of the jump, and the respect of the specific positions of the jump. If the jump, at the landing, has the same starting velocity means that these components are present.



Dario BETTI
1) Preparazione



Dario BETTI
2) Caricamento



Roberto RIVA
3) volo



Roberto RIVA
4) arrivo

How to Get Them

The listed parameters can always be improved gradually and individually. It is advisable to stimulate the attention of the athlete on the improvement of one parameter at a time, so that it can transpose from his body as many sensations as possible.

You cannot claim that the athlete improves values as height, flight, travel position in flight and speed of execution simultaneously, but you must instead schedule specific training sessions for each parameter to improve.

The aim is to increase the height and the rotation of the jumps

To increase the height: increase the speed, loading of the supporting leg, achieving complete and rapid extension of the supporting leg, increase loading and momentum of the arms, increase the potential momentum of the free leg

To increase the rotation: Find a slight advance of the trunk, and increase the closing of the arms and the speed of the movement, improve the crossing of the legs.

It is suggested that, increasing the horizontal speed of sliding, it must be an expansion and at first a phase of slowing of execution movements, to perform them later faster, making the jump more dynamic

Macro-distribution of one-turn jumps

Depending on the performing system, the jumps can be divided into two main groups:

Axel, Salchow and Toe loop where the take off is of the left leg with the throw of the right leg.

Ritt, Flip, Lutz, where the take off is of the right leg with the throw of the left leg. We do not take into account the Thoren that will be always a one-turn jump.

Axel and Salchow

The work of the coach is to teach properly the movements of going down of the free leg and of the arms and the bending of the supporting leg ,coordinating them one with another. These will be greater than the one-turn jump learned before, and the subsequent series of coordinated movements: momentum of free leg and arms upward and simultaneous extension of the employed knee.

Toeloop

The work of the coach is to teach the correct movement of the right leg that runs along the direction of the travel and rises upwards once reached or gone over the toe stop, in coordination with a short advance of the trunk, with the momentum of arms from the bottom upwards and the extension of the legs.

Ritt

The work of the coach is to teach the correct movement of the left leg that, after a quick rise, decreases and reaches the lowest point (when the left foot is parallel and close to the right one) only to be then thrown bent up in coordination with a greater lowering of the arms (as regards the one-turn jump learned at the beginning), which will then be thrown up and the complete extension of the right leg.

Lutz and Flip

The work of the coach is to teach the correct movement of the left foot that must slide over the toe-stop in coordination with a major lowering of the arms (as regards the one-turn jump learned at first), and the extension of the right leg.

To let understand the movements well, they must be performed by first slowly and then increasing the speed.

In any way, to learn the correct movement, one must not just look up the momentum, but insist on coordinated movement arms / legs.

An exaggerated momentum of the free leg or of the arms will compromise the proper closing of them, the crossing of the legs and the alignment of the body during flight.

Methodology of the work

The work on one-turn jumps around in anticipation of double jumps, as mentioned above, should be developed for the duration of their learning, once acquired and refined these double jumps will be continuously developed for the setting out of the triple jumps.

Obviously at first, this kind of work will occupy most of the training session, going then decreasing gradually going for the testing of the various movements that make up a double jump and then to come to the implementation of the same.

Clearly in the approach to double jump it is not possible to demand that the athlete competes immediately with its full implementation, but it is indeed advisable to get there gradually with intermediate exercises.

Exercises for learning the double jump

You can make preparatory exercises both without (perhaps using a mirror) and with skates (with the aid of a camera).

Without skates:

postures, performing of basic body schemes, specific technical movements, feet together jumping with and without rotation, jump with the screw with and without rotation, specific jumps with one or more rotations.

Task of the coach will be to set out and adjust a position or movement on other positions and movements, so that the athlete understands the relationship that exists and the positive or negative relationship of cause and effect, that links them up to reach the perfect implementation of the jump to learn.

Example

You decide to work without skates on the movement of loading thrust and take off of the waltz jump, to develop the axel. The coach has to let the athlete understand that at the controlled momentum of the free leg during the take off of the jump corresponds constant isometric tension of the trunk; the union of these two basic schemes will ensure that the thrust of the free leg has the right direction, and then is functional at the height of the jump; without such control of the body the step would be not only ineffective, but most likely counterproductive. Once acquired this ability you will work on speed and direction of this movement until it becomes functional to a greater rotation.

We could then work on the coordination arm-leg always in the waltz jump defining technically each step and then work on this to reach an axel and so on, working on the interaction of more basic schemes until the athlete tests in a conscious way the complete jump without skate.

With skates:

After having tested separately the movements of the various phases of the jump, defining also the proper positions in the space (rink) and setting the speed, a good method is to test the jump to learn with one and a half rotation and avoiding that the athlete crosses the legs and let him land forward on two feet.

This exercise alerts the athlete to the new rotation, trying each time to increase the jump. When the coach sees that the jump is high enough, he can ask the athlete to cross his legs and try to make the complete rotations.

Obviously the first attempt of the athlete will be to make the right number of rotations and will therefore try to turn at the expense of height. The work will be to bring the athlete to the sensations of height he had experienced with the one-turn jump and one turn and a half jump, trying to perform a “wider” jump.

Main mistakes of the athlete at the first attempts of double jumps

As already mentioned the jumps will be low and rotated and will generate the following mistakes:

- **axel:** the right leg will rotate rather than move straight
- **double toe loop:** the athlete will look for an exasperated cross of the employed leg or an opening of the toe-stop and of the arms (like in the axel)
- **double salchow:** you will often see a round throw of the free leg and a simultaneous shift of the body axis on the left.
- **double flip and double lutz:** an enlargement of the employed leg and thus a round sliding of the left foot.
- **double ritt:** the athlete performs a round movement of the left leg throwing it back.

The not complete extension of the supporting leg will be probably common to all. You can also see advances in the head, advance of the left arm, of the hips or of the entire trunk and lack of alignment of the body axis.

The return to the jump with less rotation to correct these types of mistakes is often advisable. In any case the coach, in the presence of such defects, must emphasize and dwell on them up to their real solution.

Advantages and disadvantages of the type of work proposed

Following this system to improve the jumps with less rotation we will have:

- better quality learning of the future double jump
- continuous improvement over time of the double jump
- the prevention of accident and the reducing of dangerous falls

This methodology of work brings to a longer work, that often delays the first success of the double jump, but it ensures a better quality of performance and lowers the possibilities of mistakes.

Increasing technical knowledge and bodily sensations in athletes we make them more aware of the difficulties that they will prove, being master of every single movement that compose it. This type of work provides the athlete with a greater control of his own body and with an increased awareness of the movements to be performed, with more confidence in the first attempts. Mistakes and dangerous falls will be certainly reduced (those, that are usually result of jumps performed instinctively) and the confidence of the athlete to the difficulty will increase.

Gabriele Quirini



Gabriele Quirini was born in Rome on 27/10/1973. Artistic Roller Skating coach and choreographer, team manager of AS Frascati Skating Club, coach of the Italian Team for Artistic Skating, coach C.E.P.A. (European Committee of Artistic Roller Skating) and national teacher S.I.P.A.R. (Italian Artistic Roller Skating School).

He won with his athletes 19 world titles, 11 world silver, 4 world bronze, five European titles, 26 European titles of Category and several national titles. He has held stages in Spain, Portugal, Argentina, Paraguay, Chinese Taipei, England for the promotion and high specialization of roller skating abroad.

Among his most important athletes the World Champions Luca D'Alisera, Erica Colaceci, Anna Iannucci, David Profita, Dario Betti, Andrea Poli, and winner of medals at the Worlds: Cristina Trani and Rosalba Genito. Choreographer of Gasparini Gasparini, Zanforlin Degli Esposti, and Daniel Morandin he has also worked in the past with the world champions Leonardo Pancani, Sabrina Tomassini, Ivan Cruciani and several international champions. He was assistant choreographer at the opening ceremony of the Winter Olympic Games in Turin 2006.

Michele Terruzzi

Born in Monza 14.11.1969. Degree in Architecture.
Coah of Roller Club Cornate D'Adda. He is Federal Coach of the Italian Team since 2002, held an stage for C.E.P.A. in 2008.

As coach he has won in World Championships 19 gold medals and 2 bronze medals, In European field 38 gold medals and several silver and bronze medals as well as many national titles.

He currently holds stages in France and Portugal and in several Italian clubs

His most representative athletes: Roberto Riva, Pietro Mazzetti, Sabrina Pizzi, Paolo Fois, Ilaria Dolara , Federica Mola, Cristina Casati, Mauri Consuelo, Marina Pizzi.

He also worked in the past with Andrea Barbieri and is currently the consultant and choreographer of Silvia Lambruschi and Alessandro Amadesi.

