



Science, Movement and Health, Vol. XVI, ISSUE 2 Supplement, 2016
September 2016, 16 (2, Supplement): 570-575

Original article

CONCEPTUAL AND PRACTICAL ASPECTS IN THE PREPARATION OF A CHOREOGRAPHIC ROUTINE IN HIGH PERFORMANCE AEROBIC GYMNASTICS – EXAMPLE OF BEST PRACTICE

MEZEI Mariana¹, BOTA Aura²

Abstract*

Aim. The aim of this study is related to presenting an example of best practice in designing a choreography for a high performance aerobic gymnastics routine, according to the FIG Code of points.

Methods. The methods used in this study are the same with the methods of the choreographic creation process algorithm that involves researching and developing the ideas: study of the referential works, observation, inspiration-driven methods and evaluation.

Results. In aerobic gymnastics, the group contest implies particularly synchronic work, with frequent formation changes, but also works on different levels and contrasting movements that give the image of variety and complexity. The algorithm of developing choreography includes: selecting a musical piece, choosing the difficulty elements, distribution of these elements on the contest space and work level, interaction of step sequences, transitions and difficulty elements.

Conclusions. A factorial analysis of the gymnasts' performances highlights some aspects we consider relevant under this study: use of striking epic music, dense choreographic canvas, with multiple transitions from a formation to another, sequences of steps adapted to the exercise theme, original partnership elements, spectacular constructions capitalizing the flexibility, versatility and strength of the gymnasts and fluidity and easiness of the changes of work levels and linking.

Keywords: aerobic gymnastics, choreographic design, evaluation criteria

Introduction

This study aims to capitalize on both modernity aspects recorded by the reference literature for choreographic creation over the years, and the experience of more than 20 years in the preparation of compositions specific for different branches of gymnastics.

Starting from the etymology of the word "choreography", which literally means „dance – writing" from Greek words ("choreia" and "graphi"), we want to highlight the idea according to which choreography does not generally refer only to moments of inspiration, but also to a rigorous process of designing motion sequences that comply with the creation algorithms, based on precise rules.

Transforming the dance visions into concrete choreographic creations involves a pluralism of elements: inspiration, determination and refined craft. Certainly, one choreographer can have extremely interesting ideas for his/her activity, but transposition of his/her imagination into movements of the bodies of athletes and its shaping into a composition able to meet the requirements of high-

level athletic performance, represent a difficult but equally rewarding (Kim, 2006) challenge.

Paraphrasing Căciuleanu (2008, pg. 48-60), brilliant dancer and choreographer, artist of high spiritual mobility, the choreographic motion material is structured as an edifice. Choreography is created as a structure where the artistic side cohabits with the functional-biomechanical side; the stability of the foundation coexists with the beauty of the external shape, howsoever surprisingly is this shape.

We aim hereinafter to describe the main aspects, which confer a distinct structure to the choreographic composition (Anderson, 2006, pg.101-121) for aerobic gymnastics GROUP contest, for which Romania has obtained great results in the most important international competitions.

To this end, we will try to systematize the data related to the choreographic motion elements, as they are analyzed in the reference literature of the last years that we have adapted to the special needs of aerobic gymnastics.

The specialty works (Green 2010, pg. 4-16; Humphrey 1987, pg.45-60) analyze the manner in

¹ UNEFS Sports Club, Bucharest, ROMANIA

² National University of Physical Education and Sport, Bucharest, ROMANIA

E-mail address: tebessum@gazi.edu.tr

Received 10.03.2016 / Accepted 02.04.2016

* the abstract was published in the 16th I.S.C. "Perspectives in Physical Education and Sport" - Ovidius University of Constanta, May 20-21, 2016, Romania



which the choreographic composition harmonizes the space, time, energetic aspects, the transition elements and the technical quality of the constitutive movements, each of those having requirements expressly provided for in the FIG Code (FIG Code of points for 2013-2016) of points, which represent assessment criteria in official competitions. Hence, the technicians of the senior aerobic gymnastics national team were interested in preparing a work scheme enabling the optimization of the artistic training on the five assessment criteria: music and musicality, aerobic content, general content, use of space and artistic presentation.

Methods

The methods used in this study are the same with the methods of the choreographic creation process algorithm that involves researching and developing the ideas, which we present below.

The study of reference works enables to structure a vision joining the dance rigors with those of artistic training for high-performance aerobic gymnastics.

The method of observation always accompany the creative and training approach meaning that the feedback from the athletes performing the exercise is crucial for the manner in which the choreographic creation develops or adjusts, if required.

Choreographer uses multiple inspiration sources: the wish to communicate through motion, intent to explore the emotional universe or simply finding / observation of external stimuli (images from nature, a literature work, a musical composition or an expression of visual arts). All those can represent working methods in the choreographic creation process.

Another type of methods is represented by the methods of recording and analyzing all the content elements, under a systemic vision that ensures unity, continuity and significance for the whole composition.

Any high-performance aerobic gymnastics composition is subjected to some assessment method/criteria which join the objective factor with the subjective factor, rendering the exploring effort of the choreographer or coach more challenging. (Code of score of FIG, 2013-2016)

Results

We present hereinafter the choreographic structure of an exercise for Group contest, prepared for the 2013 and 2014 competing years, selected

because it enables a comprehensible analysis of the structural elements established for the choreographic composition.

The exercises performed by a large number of participants are undoubtedly the most spectacular due to the strong visual impact generated.

A crucial ingredient in designing the group exercises is the music, which must infuse the multiple ideas and tones transposed by the choreographic material into the general space. The complex drawing of the composition must be in accordance with the music nature, enabling a large deployment of physical and artistic energies (Mezei, 2015).

In aerobic gymnastics, the group contest implies particularly synchronic work, with frequent formation changes, but also works on different levels and contrasting movements that give the image of variety and complexity. Usually, the musical choices are represented by the compositions or mixings of different rhythms, from folk to classic or modern ones.

An example of variety for choreographic vision in group contest is represented by the above mentioned exercise, analyzed by us below.

A very significant aspect is represented by the existence of a permanent interaction between the athlete and the coach/choreographer, starting from the assumption that a gym exercise, especially for group contest, represents a collaborative form of artistic expression. One of the first responsibilities of the professional is to select athletes able to transpose the choreographic vision the best possible into practice, both in terms of technical accuracy and emotional rendering skills.

- Selection of musical composition represents the first step in designing a contest exercise. To this end, the composition chosen for the routine was entitled Archangel performed by the band "Two steps from hell", from the album "Archangel" edited in 2011. The music is of epical-cinematic type, having special features which render it appropriate for a striking composition with multiple effects. The topic of the composition expresses the idea of invincibility, the search of inner energy specific for those who live on the edge and experience the adventure of a lifetime. The introduction is short and striking, enabling a progressive development of the orchestration that includes vocal and instrumental sequences. On average, the composition has a strong rhythmic structure, varied and speedy, enabling energetic explosion during the performance of the exercise. According to the requirements of



the Code of points, the musical composition included the beat with values from 150 to 160bpm/min.

- Selection of difficulty elements complied with the provisions of FIG Code according to which, the exercise must contain ten such elements from the four technical groups, respectively 2 elements from group A (dynamic strength), 1 elements from group B (static strength), 5 elements from group C (jumps) and 2 elements from group D (balance and flexibility). Determination of the difficulty elements was imposed by the requirement not to exceed a number of five elements performed or finalized at floor level, as well as by the need to introduce movements enabling a high musicality of the composition (i.e., prevailing selection of jumps as a form to express the musical accents during different exercise sequences).
- Distribution of difficulty elements over the contest space aimed to meet the variety criterion

in terms of work directions, orientation towards the main direction and balance of the work levels. Hence, nine work formations were used, with different spatial distribution (V, circle, two different diagonals-T-oriented, rhomb, interlinked lines formations), the compositional dynamics resulting from the use of grouped or opened formations all over the contest space, as well as from the avoidance of repeating the same formations for more than 2x8 musical beats.

- Distribution of difficulty elements and work levels on the musical map enables the harmonization of the space criterion with the time criterion in order to obtain higher order and synchronization for the technical elements, according to the features of the music used. Table 1 shows this distribution for the group contest exercise.

Item No	Musical beats	Description – rhythm and tempo changes	Element of difficulty	High / average/ low level
1	1x8	Introduction-strongly, firmly accentuated		
2	1xb			
3	1x8	Repetition	Straddle/L Support 2/1 turn	Low level
4	1x8			
5	1x8	Crescendo accents		
6	1x8			
7	1x8	Repetition		
8	1x8	Strong accent	½ Turn pike jump ½ twist to push up	High level
9	1x8	Decrescendo	Explosive A-frame to wenson	Low level
10	1x8	Decrescendo	High V-Support reverse cut ½ twist to split	Low level
11	1x8			
12	1x8			
13	1x8	Accents	Scissors leap ½ turn	High level
14	1x8	Phrase finalization		
15	1x8	Change of rhythm: slow	Structure 1	
16	1x8			
17	1x8			
18	1x8	Phrase finalization		
19	1x8	Crescendo accentuated	Free illusion to free vertical split	Average level
20	1x8			
21	1x8		1/1 turn straddle leap to push up	High level
22	1x8	Phrase finalization		
23	1x8	Strong crescendo		
24	1x8			
25	1x8	Repetition	1/1 turn Cossack jump	High level
26	1x8			



27	1x8	Repetition voice –choir	2/1 air turn	High level
28	1x8			
29	1x8	Final: decrescendo – change of rhythm	1/1 turn with leg at horizontal to vertical split	Average level
30	1x4	Accents	Structure 2	
31	1 beat	Strong, firm accent		

• Interaction of step sequences, transitions and difficulty elements represents an aspect that confers to the exercise as a whole, the image of a coherent system, motion fluency, without sharp fractures when passing from a component to another.

In principle, this requirement implies both creation of a dynamic drawing for the work formations rolling out on different musical phrases, as well as establishing of the route of each performer over the entire contest space, during the exercise.

Concretely, the exercise included:

- 8x8 beats, step sequences performed with change of formations, interlinking of athletes, on different movement directions and varied combinations of specific steps of high and low impact.

- 7x8 beats, transitions and linking that ensure the work diversity, by changes of level and selection of some positions and motions able to ensure a spectacular graphic for the exercise

• Designing and selection of structures imply creation of surprisingly moments, capitalized by the musical accents and the combination between acrobatic elements and flexibility elements, performed at high levels and with speed.

Table 2 shows the choreographic design of the studied exercise, marking by different colors the component elements in order to emphasize their space-time distribution, characterized by variety and dynamism.

		1	2	3	4	5	6	7	8 beats	
Introduction	1	Introduction		Transition with change of level						
	2	Linking			Element – low level					
Fundamental Part	3	Element – low level			Transition with change of level					
	4	A.M.P.								
	5	A.M.P.								
	6	A.M.P.								
	7	Element with change of level								
	8	Element – low level				Linking				
	9	Element – low level								
	10	Transition with change of level								
	11	A.M.P.								
	12	Element – high level								
	13	Transition			Linking			Transition		
	14	A.M.P.								
	15	Construction 1								
	16	Construction 1								
	17	A.M.P.								
	18	Element – high level								
	19	A.M.P.								
	20	Element with change of level								
21	Linking				Partnership					
22	Partnership				Transition with change of level					
23	A.M.P.									
24	Element – high level									
25	Transition				Acrobatic					
Final	26	Element – high level				A.M.P.				
	27	A.M.P.								
	28	Element – high level				Construction 2				
	29	Construction 2								
	30	Final pose								

Discussions



An aerobic gym exercise lasts 1.30 minutes, while the exercise preparation process lasts two weeks on average to outline its basic structure. The process continues also after this period of time, to improve the composition and to include detail elements conferring originality and accuracy to the movement.

In its final form, analyzed in this study, this exercise was presented at the World Games, the

European and World Championships. In those competitions, at the group contest, Romania obtained gold medals at the World Championship, respectively silver medals at the European Championship and World Games. Considering the three assessment criteria of the referees, our female gym performers distinguished by a very high score, especially for the artistic criterion, obtained in all the competitions they have participated, as shown in Table 3.

GROUP						
Competitions	C/F	Artistry	Execution	Difficulty	Total	Place
2013 - WJ	C	8.850	8.550	3.333	20.733	3
	F	8.850	8.700	3.333	20.883	2
2013 - EC	C	9.230	8.850	3.277	21.352	2
	F	9.100	8.950	3.388	21.438	2
2014 - WC	C	9.250	8.850	3.555	21.655	1
	F	9.350	8.800	3.555	21.705	1

Conclusions

A factorial analysis of those evolutions highlights some aspects we consider relevant under this study:

- Use of striking epical music, with a theme illustrating the triumph of good over the evil;
- Dense choreographic canvas, with multiple transitions from a formation to another, using the main diagonal, a beginning in force with movement from the back of the contest space towards the public that captures the attention of the judges;
- Sequences of steps adapted to the exercise theme, mainly of high-impact type, performed with high accuracy;
- Original partnership elements, with factor of risk.
- Spectacular constructions capitalizing the flexibility, versatility and strength of the female performers;
- Fluidity and easiness of the changes of work levels and linking.

Joining the aptitudinal factor with the consistent training where the choreographic concept could be maximally capitalized lead to positive echoes on the performance of the gymnasts from Romanian team across the professionals, as well as to reckoning by the general public.

Aknowledgements

Thanks to everyone who helped me to realize this material, which I have provided bibliographic materials.

References

- Aerobics gymnastics, "Code of Points 2013-2016", F.I.G.
- Anderson SP, 2006, Dance Composition Basics, Human Kinetics.
- Bota A, Mezei M, Bidiugan R, 2014, Enhancing technical accuracy in high-level aerobic gymnastics by means of MVN motion capture systems". International Scientific Conference on e-Learning and Software for Education. Else 2014. "CAROL I" NATIONAL DEFENCE UNIVERSITY, Bucharest.
- Căciuleanu G, 2008, Vânt. Volume. Vectori, Curtea Veche, Bucharest.
- Cerny M, 2007, Choreography-3rd Edition-A Basic Approach Using Improvisation, Human Kinetics.
- Epuran M, 2005, Metodologia cercetării activităților corporale (Methodology of body activity researches), 2nd edition, FEST, Bucharest.
- Gagea A, 2002, Cercetări interdisciplinare din domeniul sportului (Interdisciplinary researches in sport field), Destin Print House, Deva.
- Green DF, 2010, Choreographing from within, Human Kinetics.



- Grigore V, 2001, Pregătirea artistică în gimnastica de performanță (Artistic training in high-performance gym), ANEFS, Bucharest.
- Humphrey D, 1987, The art of making dances, Revised edition, Princeton Book Co.
- Kim CJ, 2006, Composer and choreographer: a study of collaborative compositional process. Dissertation presented to the Graduate school in partial fulfillment of the requirements for the degree of Doctor of philosophy, University of Florida.
- Manos M, 2001, Creația artistică (Artistic creation), Chapter "Artistic training in high-performance gym", Bucharest.
- Mezei M, 2015, Repere metodice în educarea expresivității în gimnastica aerobă de înaltă performanță ("Methodic benchmarks in training the expressivity in high-performance aerobic gym"), Communication Session titled "Pluri- and inter-disciplinarity: current approaches", organized within the International Conference for Quality of Life: a Challenge for Social Policy, Section: Recent Social Transformations. Integrating perspectives over social worlds", ICCV, Bucharest.
- Mineva M, 2013, Research and Optimisation of the Education and Training process in Aerobic Gymnastics. Doctoral Thesis, Sport Academy, Sofia, Bulgaria.
- Sergiev G, 2001, Research on the classification structure and methodology of teaching in sports aerobics, Dissertation, Sofia, NSA, 2001.
- Teodorescu S, 2009, Antrenament și competiție ("Training and competition"), Alpha Mdn. Print House, Buzău.
- Yin RK, (Romanian translation from 2005), Case Study. Design, Analysis and Data Collection, Polirom Print House, Iași.
- <http://www.artsalive.ca/en/dan/make/process/final.asp>