49 - REFLECTIONS ABOUT THE RELATIONSHIPS BETWEEN ART AND TECHNOLOGY

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Introduction

This article is originating from the research developed in the course of "Especialização do Centro de desportos da Universidade Federal de Santa Catarina" (Specialisation of the Centre of Sports of the Federal University of Santa Catalina), in which we tried to analyse the relationships among art, science and technology, taking the hybrid dance as a possibility of developing this analysis, in which the Group "Cena 11" is an exemplary.

The research was characterised, therefore, as descriptive-exploratory, of bibliographical stamp, counting with a study case developed starting from the proposal of the "Cena 11[1]" dance company, as an exemplary field for this analysis. For this, we used the observation of a group of training, live shows, rehearsals and videos of the group, structuring some axes for the analysis of this content.

The analysed group, presents particularities and importance in the national scenery and, maybe, in the international scene of dance, exactly due the prominence acquired with its proposal of hybrid dance, in which dialogues with new technologies.

In this article, we emphasise the group physical preparation and the part of technology annexed to the body in the group's show.

The dance of the techniques: physical and classic perception in the art of the "Cena 11"

In the daily of the group "Cena 11", currently, there are differentiated moments in terms of objectives and methodologies, which are gone back to the creation/rehearsal or to physical preparation. In this last one, training[2] are accomplished with two techniques of different dance. Among the techniques, we could identify the classic ballet and the *Physical Perception*, tends, this last one, the denomination attributed by the own group. The *physical perception*, technique created by Ahmed, it proposes a dance in function of the body, " a body capable to process the ideas better contained in the movement ". (Cena11, 2004) It is a technique that can be understood inside of the tendencies of the contemporary dance.

The dance in function of the body is present, in certain measure, in the contemporary dance presenting movement researches varied from perceptions, weight and other specific qualities of each body that dances. " As if they removed them the certainties, the traces of movements of a classic time, some creators of the contemporary dance take shelter in a new science. (NUNES, 2002, p.84)They are not satisfied in using only a corporal grammar built until then by classic and modern dance. (NUNES, 2002, p.84) The centre of the body, in dance, seems important in the search of the focus inversion in the execution of techniques that, frequently, leave from the body of the other and not from the dancer that executes the action, as it happened in the traditional dance classes in which the teachers execute the movements and the students repeat, trying to approximate the possible maximum of the movement that was modelled.

It seems important to stand out, in the peculiar of the group "Cena 11", the presence and the work form with choreographer. In the training supplied by him, the movements are proposed and everyone repeats them. Observing this situation in the training, we are taken to question the idea of passing incentives to reach an answer, as it guides the choreographer, it doesn't do, again, the movement to leave from something external, similar to the classes of classic ballet, including to the classic technique accomplished in the company. Important to stand out that, during the observed training, the sequences are proposed together with technical explanations, understood by the choreographer as incentives and, later, accomplished by all the members. Such situation of movement reproduction takes us to think in the relationship between cause and effect and in its search for the effectiveness.

The causality is shown frequents in the Modernity, in their experimental scientific methods, and it comes, in the minimum, surprising, in the case peculiar of the "Cena 11" and in the artistic universe of the construction of their techniques. Renato Janine Ribeiro observes that the causes produce effects and he explains:

The emphasis won't be more at the end, in the goal, but in the relationship between cause and effect. The best proof of it is that, when we spoke about cause, without adjectives, we understood the old efficient cause to generate effects. That allows, in first place, to discover the causes of the world that we have before us. The word "objeto" (object) means that: the things are put (jeto) to our front (ob). We started to see them, to look them, to treat them as decipherable. And that allows, in second place, once unmasked the mechanism of cause and effect, to also cause the effects that we want. This is the articulation between science and technology, today stronger than never, and that begins with Modernity. The objectivity in the knowledge is condition for the effectiveness in the action in a very specific sense, that it is the one of production or manufacture. (RIBEIRO, 2003, p.16)

The interest of the group in the efficiency seems incorporated to the intention of communicating the message of the shows that seems to take us to question if it would not be happening an objectivity in the public's relationships with the art. One of the indicators of this situation was observed in the ending of the Show SKR Procedure 01 (2002)[3], where happened a systematic discussion about the presentation. This debate among the choreographer, the advisor of the project and the public was shown as an interesting innovation, at the same time in that it seemed to address the spectators' glance for a certain understanding. That situation created by the group, as part of the show, approached a lot the conceptual arts in the ones which, beside the work always comes the explanation.

Starting from the facts, the speculations can offer a real and intelligible sense to the phenomenon observed and they're several mutual connections, although without understanding its origin. Those ideas permeated the aesthetics that is considered positive, as it points Denis Huisman:

They intend to use methods as rigorous as the one of the sciences. The work of art would be apprehended by precise criteria of elucidation, and a discursive language, not intuitive, it could fill out the distance between the artistic producer, and his work, and the civilisation status in which it appears. It would be gotten to explain the world in the ways and its genesis,

[1] The group under question is from Florianópolis, having its begining on january of 1986. Currently, the "Cena 11" group is directed by the coreographer and dancer Alejandro Ahmed, join the group since its first formation. It is important to enphasize that, the history of Ahmed enterlace, in a definitive form, the artistic build of the group.
[2] Training is the atribution gave by the group to the phisical preparation moments.
[3] The names in parentheses indicate the premiére year of the show. The group presented this shows untill the end of year 2004.
[4] The falls moviments can be considered registered blends in the company vocabulary.
[5] In the training the dancers use kneepad , elbowpad,protection to "ilíaca crista", shoes among others.
[6] The dancer's names are fiction, as a way to preserve their identity.This procedure wasnt only respected with the group coreographer because his public figure, a privilegius informer of this research, and because of the decisive function that represents in the group profile, could be easily identify.
[7] This ill characterise, in a certain way, by a bones weekness, been able to provoque breaks in the same.

and the art would be so formalise as the several ones knowing of a time. (HUISMAN, 1994, p. 53)

The dance influenced by the ideals of the science seems to be more present in its classic form, in other words, in the classic ballet. The dance classic, a lot of times, is referred as legitimate daughter of Louis XIV, creator of the Real Academy of Dance, that marks " the desire of immobilising movement in rules, whose objective is to supply an official label of formal beauty". (BOURCIER, 1987, p.114). The classic ballet, present to the man an ideal image of himself: the recklessness, the jump out of time and the space, the symbolic gratuity are also a liturgy that puts in relationship with his permanent dream of reaching, at least for an instant, the illusion of having become an immortal been" (BOURCIER, 1987, p. 221).

Composing the corporal vocabulary of the analysed group, is the training of classic technique. Such training include elements of the classic ballet technique of the, however not in all its complexity, self appropriating some characteristics necessary to the group.

Many of the present ideas in the classic ballet intermix the technique and art of the "Cena 11". Among them, there is an approach of the technique "Physical Perception", executed by the company, to the ballet. In the group "Cena 11" the idea exists of denying the effort during the technical execution in the movements of falls[4], mainly in the presentations of the shows, but that allow us to observe in the training, the pain and the corporal training similar to that in ballet. It is possible to approximate these two techniques and to understand their participation in the construction of the group's art.

It could be observed the pain expressions of some dancers during the training, even with the use of protection[5] equipments. During the accomplishment of some movements, verbal manifestations of pain were frequent. In some training, we found resources that seemed to diminish and to inhibit the pain as spray, ointments and tablets. In spite of the lack of warranties about the use of those resources and, even less, on the consequences of continuing the execution of the movements after its use, we observed some contexts in which they were made presents.

The pain is a constant that is observed in those two types of training. The pain manifestations happen on specific parts of each dancer's body. Maria[6] is an example of those constant pains and every beginning of training she make a massage in her left knee using ointment and puts a tensor. In the training of classic technique, some movements are not accomplished by that dancer. The teacher passes the movement and asks: " How does it hurt Maria?" She almost make a yes with the head and say " as always, Daniele ", with a smile in the face (field Diary, 24/08/04).

That conviviality demonstration with the pain indicates similarities with what happens in the sport of high level. The dance also tries to overcome limits similar to the records, a lot of times giving to the pain a naturalisation treatment that, sometimes, seems to be valued, as a prestige, corresponding to the production logic at any price.

Differentiating of the Classic Technique, the training of Physical Perception make possible to develop techniques starting from the calls "limitations" of the body. The glance of Ahmed " was always gone back to the limits of the body and the possibilities that it proposes for the transformation of the body of the other, being this "other" a spectator and/or an accomplice of the action that a body is submitted". (Cena 11, 2004)

The body that is in discussion, in the dance of the "Cena 11", however, seems to be loaded of ambiguities. In some moments, there is a certain banality and/or restriction of the body comprehension interlaced or reduced to the understanding of it as a physical dimension. There is the creation of the corporal technique of the group starting from material characteristics of the body, in its nature dimension, forgetting that, " besides being a historical process, the body works as a processor of the history, through which are transmitted and modified cultural legacies. (SANT'ANNA, 2000, p. 50)

The will of to explore the limits of the body and to accompany the ambitions seems to permeate the corporal technique of the group, with all the tensions existent there. When Ahmed is questioned: Does the body have limits? Which is "? He answer: It does. Now, where are they?!? What feed us, is that question about limits. That's why we use technology as extension of the body. I believe that our clothes, besides the function of sheltering, has the cultural subject of to communicate and to identify.

I consider the culture as biological extension. This is what we are feed of: information. (Revista Combi, 2003, p.41) This idea seems to present ambiguities, because

The resistance that the body offers, of the human materiality, becomes, in the attempt of leaving that maze, one of the centres of technoscience attack, in the measure of the aspiration for rendering the modern maxim of the landlord on the nature, of the high-taken human being to the "dominus" condition, divinity. Being eliminated the low womb, expression of the organic limits, is suppressed what would impede the human being of considering himself a God, as Nietzche could say. (VAZ, SILVA & ASSMANN, 2001, P.82)

Starting from the limits of the body, we can notice the paradox: at the same time we struggled and we want the alive body, it is necessary to deny it for us to believe in our eternity. Again we referred to the interest of overcoming the pain, present in the corporal technique of "Cena 11". To deny the existent pain in the fall movements accomplished at stage and, in a certain way, the possible training of the bodies seem a denial of the human characteristics and the desire of overcome the " limits " of its materiality.

The paper of the technology coupled to the body in the shows of the group "Cena 11".

To question the several functions assumed in the use of the technologies coupled to the body, in the art of the "Cena 11", we start from a reflection of Tomaz Tadeu da Silva:

The technologies *ciborguianas* can be 1. Restoring: they allow to restore functions and to substitute organs and lost members; 2. normality: the creatures return to an indifferent normality; 3. Reconstruct: they create after-human creatures, which are the same to human beings and, at the same time, different from them; 4. Improvement: they create improved creatures, relatively to the human being. (SILVA, 2000, P.14)

The art of the group "Cena 11" includes many of these mentioned possibilities. In spite of their being some resistance to the after-human nomenclature, we will try to understand the use of the technologies in the body elaborated by the group. We noticed that many interventions or modifications on the body are happening, above all, in the modernity. However, while we consider the term *after-human*, won't we be denying the human's own historical character?

Spanghero uses the term after-human to refer to the dancers of "Cena 11", approximating them to the idea of holographs. Those approaches are accomplished in the description of the choreography "Violência" (2000).

The author seems to corroborate when she uses the term with the idea proposed by Tomaz Tadeu da Silva, because coupled to the dancers' bodies are: legs and metallic arms, bogobol, skates, buccal speller, boots, knee pads and others resources. " Those artificial pieces turn their bodies higher, stronger, amplified, asymmetrical, capable to jump, to turn missile and throw themselves. The prostheses guarantee them "overpowers" and with that, their dance is made". (SPANGHERO, 2003, p.94)

The choreography "In'Perfeito", previous to the Violence, grew on the limits of the body, with the incorporation of prostheses, in the allusion to the man-machine. Those ideas interlace the search of that who constituted as the limit *seeking the perfection*. The search for the perfection seems that begin from a preconceived idea of something perfect. As the choreographer's history permeates, deeply, the history of the group, and knowing that he overcame the disease congenital imperfect *osteogênese*[7] through the dance, the technology can be understood as much normalize as restoring. In the dance of the "Cena 11", what is understood as imperfections are the limits of the corporal materiality, while the technologies are seen as artifices (for instance, the prostheses) that enlarge the potency of the body. Including the possibilities reconstructive of the

technology to build improved creatures, compared to the human being, in other words, more agile and strong, among other characteristics, mainly regarding the motive capacities.

Corroborating this reflection is, again, the theme of the show “In'Perfeito” that, divided in eight actions, it begins with the man being created by God and finish with the genetics manufacturing the " new human beings ". The stages of the research accomplished in the construction of the show SKR - procedure 01 was: the research and creation of individual accessories to distend the executioner's body, working as operations of the atmosphere in the body and/or instruments for a better work with the atmosphere; and contact with techniques and thoughts to enlarge the qualification of the choreographic investigation, as much in the technical preparation of the bodies as in the use of technological resources.

The accessories to distend the body and best to work with the atmosphere form to amplify the qualification in the technical preparation they approach the *ciborguianas* technologies in their possibilities as better makers, because they intend to form relative better creatures to the human being. We understood that it is necessary to question those interventions originating of technoscience and harnessed to the idea of progress. The function of the technology used in the dance of “Cena 11” lens to reach superpowers and to enlarge potencies, demonstrating to be subsidised by the idea of progress. In the science, especially in the biomedical ones, the idea that everything is possible is present, with its assumed neutrality, objectivity and efficiency. " Industry and ideology are returned to that work, subsidised by a science and a technology that, simultaneously, despise the limits of the materiality and exalt the free individual's modern notion, based on the ambiguous and dangerous faith that “it is possible to have the body desired” (SILVA, 2001, p. 62).

The reconstruction and restructuring of the body presents in the civilise process and the dance as artistic manifestation that follows the humanity in their path, influence and are influenced by those corporal modifications. In dance, that process happens, therefore in " all those social practices that intend to be an intervention on the body have as foundation, in bigger or smaller degree, the knowledge produced by science and, especially, for the biomedical sciences. “(Silva, 2001, p. 5)

Some Considerations...

We noticed the possibility to point some central focuses accomplished in this research, among them, the interlacement of the scientific ideals with the artistic universe. That approach was not identified in other periods of the history of the art, to a such point that if it turns difficult, in some moments, the distinction between science and art in the artistic work of the analysed group. The interlacement of the scientific ideals in the artistic universe is happened in a long already in the dance, although without the technology now possible for this art form. The present technology in the dance seems materialise/raise what was in a long time intended in the classic ballet, in other words, the overcome of the human being limits and the formalise and a systematic way of this cultural manifestation. The interest in presenting an ideal image of human being, present in the classic ballet, tends to infiltrates in the technique Physical Perception developed by “Cena 11” and propose to do a dance in function of the body, questioning their limits. The apparent innovation in the universe of the dance, on part of the group in subject, allows, with a more systematic analysis, to notice some relationships that corroborate the precepts of the classic ballet and a traditional practice of dance, harnessed to the precepts and traditional scientific ideals.

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REFLECTIONS ABOUT THE RELATIONSHIPS BETWEEN ART AND TECHNOLOGY

Abstract:

The present work intended to investigate the relationships among art, science and technology, taking the hybrid dance as a possibility of developing this analysis. For so much a descriptive-exploratory research, of bibliographical nature , was built using a case study developed starting from the proposal of the company of dance "Cena 11", as an exemplary field for this analysis. In this article we emphasized two axes for the analysis of this content: The dance of the techniques: physical perception and classic in the art of the "Cena 11", being constituted the analysis of the physical preparation of the group; The function of the technology attached to the body in the shows of the group, that characterized the analysis in the way as the art of the group comes to the audience.

KEY-WORDS: Art, hybrid dance and technology

LES REFLEXIONS SUR LES RAPPORTS ENTRE L'ART ET LA TECHNOLOGIE

Résumé

Ce travail enquête le rapport entre l'art, la science et la technologie en prenant la danse hybride comme exemple de ce rapport. La recherche a le caractère descriptif-exploiteur avec la distinction d'être bibliographique et elle met en valeur une étude approfondi de la troupe de danse “Cena 11”, celle-ci qui a une proposition exemplaire dans ce domaine. L'étude a été faite à partir d'observations des répétitions, des spectacles et des répétitions enregistrées en vidéo. On a mis en évidence

deux voies pour faire l'analyse de ce contenu : l'un aborde la danse technique la perception physique et classique chez « Cena 11 » où l'on observe la preparation physique des danseurs ; et l'autre tourne vers le rôle de la technologie liée au corps dans les spectacles de la troupe « Cena 11 » , ce qui caracterise le moyen pour lequel la proposition se fait transmettre au public.

LES MOTS CLEFS : art, danse hybride et technologie

REFLEXIONES SOBRE LAS RELACIONES ENTRE ARTE Y TECNOLOGÍA

Resumen

Este trabajo pretendió investigar las relaciones entre arte, ciencia y tecnología, tomando la danza híbrida como una posibilidad de desenvolver este análisis. Por lo tanto, se desenvolvió una investigación descriptiva-exploratoria de cuño bibliográfico, contando con un estudio de caso desenvuelto a partir de la propuesta de la compañía de danza “Cena 11”, como un campo ejemplar para este análisis. En este artículo destacamos dos ejes para el análisis de este contenido El primero aborda el análisis de la preparación física del grupo, el segundo versa sobre el papel de la tecnologia acoplada al cuerpo en los espectáculos del grupo.

PALABRAS-CLAVES: arte, danza híbrida y tecnología.

REFLEXÕES SOBRE AS RELAÇÕES ENTRE ARTE E TECNOLOGIA

Resumo:

O presente trabalho pretendeu investigar as relações entre arte, ciência e tecnologia, tomando a dança híbrida como uma possibilidade de desenvolver esta análise. Para tanto, desenvolveu-se uma pesquisa descritivo-exploratória, de cunho bibliográfico, contando com um estudo de caso desenvolvido a partir da proposta da companhia de dança Cena 11, como um campo exemplar para esta análise. Para isto, realizamos observação de um conjunto de treinos, assim como de espetáculos ao vivo, ensaios e vídeos do grupo. Neste artigo, destacamos dois eixos para a análise deste conteúdo. O primeiro aborda a dança das técnicas: percepção física e clássica na arte do Cena 11, configurando-se a análise da preparação física do grupo; o segundo versa sobre o papel da tecnologia acoplada ao corpo nos espetáculos do grupo Cena 11, que caracterizou a análise da forma como a arte do grupo se apresenta ao público.

PALAVRAS-CHAVE: Arte, dança híbrida e tecnologia.