

## THE BODILY COMMUNICATION IN THE GAME GOALBALL

A COMUNICAÇÃO CORPORAL NO JOGO DE GOALBALL

LA COMUNICACIÓN CORPORAL EL JUEGO DE GOALBALL

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### Keywords

Language.  
*Goalball*.  
Visually impaired  
persons.

**Abstract:** The present study analyzed body communication by visually impaired *goalball* athletes. It is a descriptive, qualitative and Barthesian-semiological study. The sample consisted of 22 male athletes. The final match in Brazil's North-Northeast *Goalball* Championship was recorded and analyzed. Results describe signifiers of the game's moves at Expression Level, showing motion-perceptive wealth; at Content Level, describing multiple cognitive, emotional and sociocultural meanings of players' movements. *Goalball* is found to be an educational game because, besides its coordination and communication complexity, it allows players to extend their attention to their whole bodies.

### Palavras-chave

Linguagem.  
*Goalball*.  
Pessoas com  
deficiência visual.

**Resumo:** Esta pesquisa objetivou analisar a comunicação corporal da pessoa com deficiência visual, atleta no jogo de *goalball*. Caracteriza-se como descritiva, de abordagem qualitativa e análise semiológica barthesiana. A amostra foi constituída por 22 atletas, categoria masculina, registrando e analisando o jogo final do Campeonato Norte-Nordeste de *Goalball*. Os resultados descreveram os significantes das jogadas, no Plano Expressão, evidenciando a riqueza perceptivo-motora. E, no Plano Conteúdo, os múltiplos significantes cognitivos, emocionais e socioculturais do movimentar-se dos jogadores. Concluiu-se que o *goalball* é um jogo educativo porque, além da complexidade coordenativa e comunicativa, possibilita aos jogadores expandirem a atenção pelo corpo inteiro.

### Palabras clave

Lenguaje.  
*Goalball*.  
Personas con daño  
visual.

**Resumen:** Este estudio objetivó analizar la comunicación corporal de la persona con discapacidad visual, atleta en el juego de *Goalball*. Es caracterizado como descriptivo, de enfoque cualitativo y análisis semiológico barthesiano. La muestra estuvo conformada por 22 atletas, categoría masculina, registrando y analizando el juego final del Campeonato Norte-Nordeste de *Goalball*. Los resultados describieron los significantes de las jugadas, en el Plano Expresión, evidenciando la riqueza perceptivo motora. Y, en el Plano Contenido, los múltiples significantes cognitivos, emocionales y socioculturales de los movimientos de los jugadores. Se concluyó que el *Goalball* es un juego educativo, porque además de su complejidad coordinativa y comunicativa permite al jugador expandir su atención a todo el cuerpo.

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## 1 INTRODUCTION

According to studies by Çolak *et al.* (2004) and Amorim *et al.* (2010), goalball was created in 1946 by Hans Lorenzen (Austria) and Sett Reindle (Germany) to help rehabilitating blind war veterans. The sport was introduced to the world in the 1976 Paralympic Games in Toronto (Canada), and the first world championships were held in Austria in 1978. Since then, its popularity has been on the rise: it is currently played in 112 countries and all regions belonging to the International Blind Sport Federation (IBSA).

In Brazil, goalball began at São Paulo's Clube de Apoio ao Deficiente Visual (CADEVI), taught by Professor Steven Dubner. The first Brazilian Championship was held in 1987 in the city of Uberlândia, MG, and has been held annually since then, together with Regional Championships, in order to raise the technical level of that sport in the country. It is a team sport that has been little studied but has seen increasing Paralympic development in several countries (AMORIM *et al.*, 2010).

Goalball consists of two teams of three players each, with a maximum of three substitutes per team. Its court is rectangular (18 x 9 meters) and divided into two halves by a center line, with one goal at each end (9 x 1.3 meters). It uses a ball with bells. The ball is thrown with one or two hands (imitating a bowling pitch) to cross the line of the opposite goal. The other team tries to stop the goal, with its players crouching or kneeling. With lateral displacements, they seek to occupy the largest possible area, laying on their sides on the court to defend. The winning team is that which scores the most goals in two 10-minute halves. The rules for international goalball competitions are adopted by the Brazilian Paralympic Committee (2013).

However, we can list goalball as a content in school Physical Education – for students with visual disabilities or not – since Libâneo (2001) points out its educational capacity in physical, cognitive, emotional, social, ethical, aesthetic and environmental dimensions. This study showed that goalball covers all these dimensions of human personality. For Libâneo (2001, p. 1) “[...] the Physical Dimension integrates everything that concerns human movement, mastery of space, gestures and body expressions”. Goalball requires strength and coordination for throwing, anaerobic endurance for short and rapid movements, flexibility for fluidity in movements (AMORIM *et al.*, 2010), in addition to motor skills: throwing and receiving the ball, running and crouching, turning around and balancing (MORATO *et al.*, 2011; ÇOLAK *et al.*, 2004). Its Environmental Dimension happens as it requires space-time perception and keen awareness of the other senses (hearing and touch). Meanings related to constituent elements of the environment must be incorporated, since the whole action system lies in spatial orientation, as confirmed by Mauerberg-deCastro (2004).

The Cognitive Dimension is required due to the need to maintain concentration, construction of internal spatial maps and use of clues for guidance. In addition, all movement in goalball is learned through symbolic mediation of verbalization (AMORIM *et al.*, 2010). That knowledge is originally linked to our Aesthetic Dimension, since our body is the primary sensitive instance. It is body action situated in the world through the perceptual-motor movement of our ontological condition, hence the thesis that all movement is communicative (GOMES-DA-SILVA, 2012).

We stress the Social and Ethical Dimension because the practice of goalball, besides producing socialization, since it is based on cooperation and opposition and is regulated by

a code of international rules, also leads to facing the discriminatory socio-cultural context by reflecting the way diversity is a cultural heritage.

The Emotional Dimension of goalball – ability for self-control – pervades all others. Because, according to Maturana (2002, p. 170), “[...] emotions are bodily dispositions that always specify the domain of action in which there is an animal – human or not – and feeling emotions, such as the flow from one emotion to another, is the flow from one action domain to another”. Therefore, motor, cognitive, aesthetic, moral and social actions are coordinated by emotion.

We call this congruent interlacing experienced in the coexistence environment in goalball “corporality zone” because it is a practical language (GOMES-DA-SILVA, 2011). It is a communication zone in which players coordinate techniques and tactics, reciprocal interactions take place between players, opponents and environment, and the sequences of connected conducts. Maturana (2002, p. 152) calls this consensual emotional moment “conversation”; and that, even before the semantic notion, is the basic biological process of language.

Thus, when Physical Education teachers are working with goalball or other body practice, more than isolated development of motor skills, perceptual training and socio-cultural understanding, they are working with language, which integrates all these elements, because it is the game’ “corporality zone”. Therefore, sports practice is a space for coordinated action, for language experience.

Language is when a flow of coordinated conducts takes place, such as body communication, which is a consistent interweaving of participants’ sensorial-motor correlations operating in a space of consensual coordination. Language as interweaving of correlations is compatible with the understanding of Barthesian semiology, from which we structure our analysis of goalball. Barthes (1992, p. 17) sees language as a heteroclite unit that connects disparate terms; it cannot isolate, “since it participates simultaneously in the physical, the physiological and psychological, the individual and the social”. It also defines language as “[...] all significant synthesis, whether verbal or visual: a photograph will be a kind of speech for us in the same way as a newspaper article; even objects will become speech, if they mean something” (BARTHES, 1987, p. 133).

Language is correlation of terms or signic units. The *sign* is related to *signifying*; so it is a project for significance, information, mediation and interaction. Signs interconnect states of the world, so they are dynamic entities; they develop in an ongoing process to articulate *language* (social institution; abstract, conventional system) and *speech* (contextual, individual act of selection and update). The science that studies the activity of signs is called Semiotics. From the late nineteenth century on, two scientific traditions were systematized: American semiotics (Charles S. Peirce, USA, 1857-1914) and European semiology (Ferdinand de Saussure, Switzerland, 1857-1913).

The European tradition developed distinct streams, with Roland Barthes in France, Umberto Eco in Italy and Iuri Lotman in Russia, to point out the most notorious names. Transposition of Semiotics to the field of Physical Education is recent, but it has yielded fruitful work in terms of research on body practices and teachers’ intervention as language (BETTI; GOMES-DA-SILVA, GOMES-DA-SILVA, 2013). An example is body communication as teachers’ knowledge, ability to mediate the learning situation, whether it is by understanding the semiotic activity to better intervene in the classroom or by training coordination of players’ actions (ANTÉRIO; GOMES-

DA-SILVA, 2013).

In this research, we chose French semiology, specifically the (post) structuralism of Roland Barthes (1915-1980), because he keeps the passion of non-assertive language, maintains a critical stance toward capitalist society, and is open in interpretation of signs. Barthes (1988, p. 27) supports semiology as “[...] a number of operations along which it is possible to wave the sign as a painted veil or even as fiction”. He thus maintains a dubious method of writing as continuous re-signification, close to literature, body experience, the desire of the neutral, the uncertain, the affective awareness of what is experienced. That is why language, for Barthes, is both a social practice present in visual narratives (photography, film, magazine, etc.) and scripture, fruition, present in body insinuations (fights, faces, gestures, clothes, poetry, novels, etc.). Semiology, thus, is a language on languages, a way to reflect on signs, discovering relations of externality between one language and another.

From this perspective, we will analyze goalball, aware of the world of signs, from action coordinates to the ambience of silence, of benevolence, of provocations and vigorous responses. The aim is to make “scripture” about the communicative form of that impressive game, which produces a language of marks: without vision, the routes and motor tasks are kept at the court, through the courts’ marks and the direction of the ball’ sound. We are interested in the game’s situation in its processes of signifying players’ gestures in communication with teammates, opponents and the environment (ball, court, referees, fans). Finally, we consider those gestures as signifiers referring to internal and socio-cultural signifieds involved in the game. Or we would simply say that players’ movements will be described as a text, as a web of elements that express certain content, thus creating signification effects.

## 2 MATERIAL AND METHODS

This study is descriptive because it involves analysis of direct and intensive observations in a natural environment, and it is qualitative for attempting to “[...] understand the meaning of the experience for participants and how elements combine to form a whole” (THOMAS; NELSON, 2002, p. 323). It received contribution from all participants in the North-Northeast Regional Goalball Championship held in João Pessoa, PB.

The population of this study included four male and female teams. The sample was the male category with 22 players, corresponding to 100% of the athletes. Six matches in the championship were observed. The delimitation of the sample was intentional, using purposeful selection of subjects.

The instruments and procedures used for data collection were: (1) Training – during one year, we acquired knowledge of the rules by attending a course for referees’ and for technical and tactical training on goalball; (2) Pilot Study – three months before the start of the championship, a pilot study was conducted to improve the research; (3) Participants’ consent – at a technical congress, we obtained permission for the study from referees, coaches and athletes, according to the permission granted by the director of the competition and the vice-president of CBDC – the Brazilian Confederation of Sports for the Blind, by signing the term of informed consent (IC); (4) Interview – in the athletes’ accommodation, after the first day of competition,

each team individually provided information regarding the questionnaire in order to characterize them as: a) teams: ADEVIRN – Rio Grande do Norte Association of the Blind; APACE – Paraíba Association of the Blind; APEC – Pernambuco Association of the Blind, and APADEVI – Paraíba Association of the Visually Impaired; b) sex: 100% male; c) Age: 28.59 years; d) marital status: single (82%) and married (18%); e) educational level: incomplete primary education (18%); complete primary education (9%); incomplete secondary education (32%); complete secondary education (23%); incomplete higher education (14%) and complete higher education (5%); f) classification of the degree of vision loss, according to IBSA: B1 (totally blind – 68%); B2 (low vision with a visual acuity of up to 2/60 – 27%) and B3 (low vision with a visual acuity of up to 6/60 – 5%); g) time practicing goalball: 3.45 years; h) training time: days/week (3.77) and hours/days (1.88); i) participation in championships: Northeastern (3.37); Brazilian (1.52); Parapan-American (0.25) and World Championship (0.27). (5) direct observation – to interpret moves we recorded observations highlighting the most prominent (repeated) move of all to be considered in the final game; (6) footage – The final game was recorded by a professional with a Panasonic M9000 VHS camera. The first half was recorded from sagittal angle and at high level, and the second half was recorded from frontal angle and at middle level; (7) image edition – we edited images on DVD and selected the outstanding move.

For data analysis, the game was studied as a semiotic system, therefore operating transactions between the move's material and mental sides or how the motor gesture and the physiognomic expression are added of social appropriation. Barthes's semiological adventure was immense and his *Oeuvres Complètes* have 5,500 pages (MOTA, 2011). His semiology has at least three methodologies that the author himself identifies (BARTHES, 2001: 6-18.): the first phase – politics or semioclasty, “the fundamental method of ideological criticism” (Mitologias, 1957/1987); the second phase – scientific, “classification activity”, structuralist system (Elementos de semiologia, 1965/1992). Finally, the third phase – aesthetic or post-structural fruition – more oriented to “pleasure in the Life's Text's significant” (Lição, 1978/1988).

Here we decided to adopt the second Barthesian model (BARTHES, 1992) – that of a symptomatology more related to science, with an operational protocol from which narratives are analyzed. That method is not heuristic, not aimed at deciphering or subduing the sign, but to describing signifiers at two levels (Expression and Content) with their two strata (Form and Substance). Therefore, we used the four classes to describe the communicative character of goalball: Form and Substance of Expression; Substance and Form of Content.

The sensitive manifestation of the game, that is, what we can capture through perception – signifiers – is called the game's Expression Level. And the signifieds, which relate to the meaning or the psychic representation produced by moves, which are meaningful units, are called the game's Content Level. Those levels are described by two elements: Form and Substance. Form is what can be comprehensively, simply and consistently described by observing the game without resorting to another assumption, and Substance regards the game's aspects, the unifying character of the chain of moves. Without that power of cohesion of the Substance, the chain of movements would be an incomprehensible gathering. Clearly, it is the grouping of the two Levels that gives us the game's significance. The “Form/Substance” subdivision was employed by us in an original way to understand the sport, because it helped us to handle all the signic production given in goalball's body communication.



### 3 RESULTS AND DISCUSSION

At this point, we analyze goalball's educational potential based on the process of signification given in the semiological levels and strata of the High ball (penalty) at the championship's final match between APACE and ADEVIRN, which ended in a 7-7 tie.

#### 3.1 *Goalball's expressive level*

To analyze goalball as a semiological system, specifically the High ball, we captured its structuring at the Expressive Level in its two classes. The Substance of Expression (set of minimum significant units) expresses the Form of Expression (it groups those units in syntagmatic and paradigmatic relations – extensive enchainment of the unit's actions and mental association).

##### 3.1.1 *Substance of the Game's Expression*

The game is 0-0. Players have their eyes covered with bandages and are blindfolded, wearing uniforms, numbered shirts, pants, elbow pads, knee pads, jockstraps and shoes. APACE is the defender right now. The three defenders occupy their respective positions: right wing, center and left wing, using touch of hands to find the high-relief guiding lines.

The left wing and the center similarly perform “high expectation”: head up; torso leaning forward; upper limbs with full extension of elbows; forearms supinated and supported on thighs. Crouching position, legs bent and laterally apart at shoulder width, with soles resting on the ground. The right wing is in “low expectation”: head bent sideways with dominant ear facing the right side; torso leaning forward, parallel to the ground; elbows bent; shoulder abduction, pronated forearms with extension of wrists; palms touching the ground; total knee extension and abduction of thighs, with soles on the ground.

After the ball was thrown by ADEVIRN, APACE defends their goal. Through hearing, defenders orient themselves to identify the trajectory of the ball and thus react quickly to defend it.

Players position themselves in sync, defending diagonally. The sound of the ball that was passed by the opposing team serves as a guide. The wings are positioned on their own line and slide laterally by the court trying to close the goal. The right wing covers the sideline, lying and fixing his arms into the court. The center defends more to the middle, leaving the remains of spaces to the left wing who will defend from the middle. In the final phase of the movement, players defend in the lateral position; straight torso, contracted abdomen; arms extended above their heads, with pronated forearms; head turned to the back of arms; legs extended, the one on top slightly abducted and slightly to the front of the lower one; and foot in eversion.

An error in spatial orientation was observed by the main referee positioned ahead of the demarcation line of the attack area. He is half-kneeling, with his eye focused on the place where the ball touches the ground for the first time after leaving the hand of the thrower. ADEVIRN's left wing threw the ball beyond the limits of the permitted area, in a penalty, marked by a blow of the whistle and the referee's saying “high ball”, then the game is stopped.

After the penalty is established, the left wing – the sole responsible for this defense – displaces himself, touches the post and takes position. The game would be restarted by the line

referee by returning the ball to APACE. However, before that, the left wing himself went to the ball, retrieved it to be delivered under maximum silence to the athlete that will throw the penalty.

APACE's players take advantage of the situation to change positions. The center and the right wing stand on the left of the defense area. The penalty thrower, the right wing, shows up to receive the ball, returns to the middle court groping the upper post, when he is touched by the left wing and makes a gesture of supination of his forearms, asking his partner for the ball. The right wing then moves to the right end, and with a gesture of his extended right arm and his forearm pronated and elevated above his head, with his pinky, his ring finger and his thumb bent and facing each other, with only his index and middle fingers extended and laterally spaced, performs circumduction of his fist.

The main referee, after checking the positions of each team and the absolute silence in court, authorizes the penalty through a whistle signal and the command "play". APACE's right wing touches the post and recognizes all the space to make the throw – he knows he will have six meters in front of him and 10 seconds to try to score.

Throwing Technique: he leaves the right wing in a diagonal preparatory run to the center of the defense area and, when he reaches the last three meters from the throw, he takes three steps at the throwing area three steps with a 360° rotation: left leg, right leg, left leg. In the first step, the ball is held with one hand at the fit between wrist flexion and forearm. The dominant arm performs full elbow extension, and through a swing backwards, it gathers the necessary strength in an attempt to score a goal. His torso rotates from the left side to the right side, greatly bending forward. The throw ends with the right leg abducted behind the left one, extended and with the foot in plantar flexion.

ADEVIRN's left wing is positioned on the center line of the team area, performing the position of "low expectation", gearing up to mark and block. However, the ball had been thrown with such force that even hitting his thighs, the goal could not be prevented because it took a new path (parable), covering the defender, hindering the decisive interception and hitting the goal's net.

At this point, the line referees signal the goal. That is is when the referee on the ADEVIRN side gives two whistle blows and says "goal". The fans, who heard it, scream, get agitated and make fun of the opposing team. After a few seconds, they go back into silence, and the referee at the APACE side looks up with his eyes on the referees' table, checking the score, then says "APACE goal, one-zero".

APACE athletes' facial looks are the same: wide smile. The center claps with great joy, motivating his team to stay ahead of the scoreboard. ADEVIRN's players have angry faces, low eyebrows, mouth ends down. The defender athlete, besides that expression, is upright and tense when he rises from the ground, turning sideways to the opposing team with his arms bent at 90 degrees leaning sideways to his torso and clenched fists.

### *3.1.2 Form of the Game's Expression*

During the very substantial description of the move, Form was already being outlined; it is impossible to separate it without losing its meaning. But here we decided to highlight the groupings of units of inter-individual relations: blindfolds, sports uniforms, court lines-rules-referees, defensive positions, maximum concentration in search of ball possession, tactile and

auditory orientation, body communication between teammates, attack with throwing techniques, decision making, reaction time, communication based on confrontation to opponents, fans, silences, penalties, run-spin-throw, smiles and tensions.

### 3.2 Goalball's content level

Let us see the structure at the Content Level in its two classes. Content Substance (associations of meaning) expresses Content Form (organization of meanings among themselves).

#### 3.2.1 Game Content's Substance

Eyes covered with mandatory bandages and blindfolds. Players cannot even touch blindfolds during the game without the referee's permission. The purpose is to keep equality among people with varying degrees of vision impairment. "Lack of vision has a serious impact on navigation in complex environments and with irregular routes", said Mauerberg-DeCastro *et al.* (2004, p. 201). Or, as stated by Morato *et al.* (2011, p. 98), vision "[...] is the mediator of other sensory impressions and it acts as a stabilizer between the person and the outside world". But goalball insists: it is a non-vision game, all in the darkness, surrendering to the body's need for adaptation, for developing compensatory strategies in the orientation system.

The high relief lines, the referee's whistle blows and words, and the sound of bells on the ball are indications for another orientation system to develop. In this game, unlike so many others, players are deprived of their visual function. Tactile perception, hands groping lines and posts to guide themselves in the game are strategies for defense and attack. And so is auditory perception, head leaning for the ear to better evaluate distance, trajectory and speed of the ball that comes rolling on the floor. Then immediate action: lying diagonally forward, closing the goal. This game's demanding spatial orientation tasks make players incorporate a geometric representation of space. It is an index-based, tactile-auditory game, from which they develop the ability to coordinate actions with direction in the environment.

Body-hand and body-ear relationships in goalball mean obtaining spatial information. The skin channel of the hand is the boundary between the individual (goalball player) and the medium (game space). And the ear canal is responsible for detecting the speed of the ball and the position of the thrower. In a skin-audio system, active efforts to capture the environment perform a strategy to read the game, either in attack or in defense. This orientation system interprets the game environment's complex network of information, and the coherent response to the situation is chosen (MORATO *et al.*, 2011).

The sports uniform, including safety equipment and elbow, knee and genital protection, denotes high-contact, not among the opponents, but between players and the ground. Hence the real possibilities of accidents, including a provision for a "blood rule" (IBSA, 2013) when the game is stopped by the referee, who identifies a bleeding injury. It is a risky game that requires bravery from players when they throw themselves to the ground for defenses. The mission is combat: to prevent the goal with a maneuver by the body thrown to the ground.

This socio-cultural significance is supported by Substances of Expression (format of the court and game functioning) and by the purpose and context of the creation of the game. The original purpose was to restore the ability to concentrate and the physical qualities necessary for



the rehabilitation of soldiers who were blinded after the Second World War (ÇOLAK *et al.*, 2004). Goalball was not adapted from any other sport and when it was created, the philosophical ideals of war still persisted, so some elements of ritualized war can be found, whether in the concern with protective clothing or in the delimitation of game areas: neutral (there can be no invasion); attack (performing throws); and defense (goal protection). Or yet by the ball thrown with force, with the projectile function to overcome the opponent. Goalball is another striking example of the imaginary approach between the game and the intensive and energetic fight, announced by Huizinga (1996).

All game formation starts in defense, which requires maximum concentration and readiness for action. Opposing teams do not touch, but they face each other through the ball-projectile. There is continuous alternation in attack and defense roles: after attacking, the thrower immediately returns to take up a defensive position. And those who defended now become attackers, in a continuous reversion of the possession of the ball. Displacements in the areas involve changing functions: defense and attack.

Defense positions are communication between teammates. Three players must create a body barrier covering the whole goal. Initially in expectation, whether “high” (center and left wing) or “low” (right wing). After the opponent throw in the restricted attack area, defenders perform auditory discrimination, effective decision-making, rapid responses to intercept the ball and unanimously throw themselves to the ground. As a body unit, they make the defense area into a “personal space, in which invaders cannot penetrate” (CORRAZE, 1982, p. 122). This unit, where each body performs its function, is a power display: inability makes way for potential. The defense – in its readiness, perception of the sound signal, game reading and reaction time for the slide – shows players’ efficiency for, in ten seconds, intercepting, controlling the ball and attacking with a launching (SILVA *et al.*, 2010).

Motor skills for attack are the offensive of throw, invested of strength and social significance. Silence in this game is communication, attack tactics. It is used to trick the opposing team, omitting the sound of the ball in order not to denounce its position and prevent opponents from protecting themselves. Silence is to hide information to surprise opponents, hitting them in an unforeseen flank. This art of faking or hiding information to compromise opponents’ action is called counter-communication by Parlebas (2001). It was under this silence that the cooperation of pass, reception and launch of the ball took place with a spin effect.

The referee is sovereign, the only person in court who can see, representing the law and enforcing rules for maintaining conditions of equality between teams. It is the only one able to communicate directly with fans, requesting silence or paralyzing the game. With his whistle blows and words, he communicates the impartial.

In the communication of the penalty, the player returns alone to his position, in a sign of prostration, a gesture of low morale, feeling sorry for having caused damage to his team by his own actions. To redeem his mistake when he let the ball pass him by, he concentrates in preventing the goal, in a chance to regain his honor and nullify the opposing team’s advantage.

Fans’ communication is cyclical, sometimes with cries of euphoria, sometimes with absolute silence. In silence, they enjoy the successive moves as a spectacle, and they listen carefully to the referee’s narration. Enthusiasm for the attack is due to the magnitude of the launch: running with diagonal impulsion, acquiring propulsion by changing speed, concentrating the kinetic energy in a change of steps; 360° rotation, rotating with inclined torso; flexing wrist while holding the ball; swinging the extended throwing arm and finishing with the index and middle

fingers giving precise direction and strength. Fans' enchantment lies in realizing that "the blind have no visual perception, but they have their eyes [...] rooted in the corporality of sensitivity and motor function", said Bosi (cited by SANTOS, 2001, p. 6). After the goal is declared by the two line referees and the main referee, euphoria takes over the fans. And in a joyful expression, they boast in the face of opposing fans, momentarily overwhelmed.

Excessive expression of happiness is evident on the faces of the winning team: wide smile and clapping. In contrast, the losing team's expression is one of disappointment and tension. But their closed fists, according to Guiraud (1991, p. 34) are icons of "deep determination and threat". Therefore, the following steps in the game promise to be tense, as now the defense becomes attack.

### 3.2.2 *The game's Content Form*

Organizing the substance of these meanings (skin and auditory orientation system, fighting attitude and excessive communication), we come to the semantic mark of this game, the Form of its Content. We saw that the game has a timid start, by groping lines, then sharpness comes when listening to sounds and, finally, the player performs a ballet when throwing. That sequence is the language of the game; in communication with the game's environment, the player recovers the grace of "seeing" and increases his or her motility, from contact with the relief lines on the ground to the free flow movement with 360° rotation with throw. Research by Çolak *et al.* (2014) confirms: 13-15-year-old children with different degrees of blindness who practice goalball show significant improvement in terms of motor skills, compared with those who do not.

In goalball, the blind connect themselves to the ground as a possibility of a basis, of awareness of reality, of defensive attention for a communicative fluency of attack. Goalball is a horizontal game in which players project their bodies to all areas of the court, through Expectation positions and vigorous throws. That corporeal environment of the game, which, as we move into interaction with space and time, thus creating an existential atmosphere, we call corporality zone: "[...] ontological communicability coming from the fundamental impulse that drives life towards encounter and men towards the exchange of signs – the being's founding operation". (GOMES-DA-SILVA, 2011, p. 126).

According to Barthesian semiology (Barthes, 2001), in goalball, it is evident that this corporality zone is the semantics of contact. A language evidenced by movements in perceptual-motor interaction with the environment for defenses and attacks. The atmosphere created by movements in goalball is that of horizontal attention, built low to the ground, as opposed to verticalness so valued by other sports.

In LMA (Laban Movement Analysis) space as a movement factor is related to individuals' attention to their environment while moving, and may be focused on a point (direct focus) or several points at the same time (multifocus). Even though it highlights vision as primarily responsible for the attention to space or associating focus to the eyes, LMA refers to the body as a whole, since attention to space implies an inner attitude, a "look". In goalball, attention to space is expanded by thousands of points, "as if one's body had eyes in every pore and moved with all those simultaneous focuses" (FERNANDES, 2002, p. 108).

The Corporality zone in goalball favors the understanding of the world for its tactile and auditory qualities, forming awareness of spatiality through the experiences of movements. That experience is of a body that "sees" through its remaining and keen senses, generating a new attitude

of personal and social interaction. Therefore, in wings' and centers' experience of goalball, whether defending or attacking, expressiveness is multifocal and vigorous. Launching, sliding across the floor or spinning, communication is established in the direction of "poetic corporality" (GOMES-DA-SILVA, 2011) – that communicative movement that creates an atmosphere of open attention to changing external and internal spaces, integrative of bodily sensations and emotional, cognitive and cultural expressions. Therefore, in this game there is learning of contact, whose way of being in the world is identification with one's own body experience, with emotional/cognitive integration in action and perceptual openness to communion with external reality.

#### 4. CONCLUSIONS

This is the semiotic task: to operate by classifying meanings. And so we did, when the gestures, initially of a pragmatic or functional origin in the game, gained significances. The actions of use, typical of sport, which, according to Barthes (1992), we could call "sign-function", went through a double movement: first, decomposition, classifying it into its function in the game (Expression Level), then by recurrent functionalization, penetrated of meaning: semantization (Content Level). That is, the function of penalty and throw at the goal gained a second instance: sign.

Behold the sign: "when playing goalball, the blind seem to see". It is in their body communication with the environment that a "look" is opened by synesthesia, by expansion of attention, accuracy in dynamic orientation. So the player comes to understand the world through the experience of the body in motion. This game provides existential relearning, in that it starts from the impediment to see and creates a playful space that enables guidance by other channels. The purpose is to make the educational potential of goalball clear to Physical Education teachers, to enrich their classes – whether or not it is for people with visual disabilities. Moreover, the intent is to bring out a new pedagogical approach so that movement situations are understood as language in their cultural, logical and motor meanings, as Soares, Gomes da-Silva and Ribas (2012) said.

It is important that the practice of goalball – even as a high performance sport for Paralympics, World Games, Parapan-American, Brazilian and regional games – is extended to people with normal vision. Students, by blindfolding their eyes and taking part in this game, discover a new way to communicate with the environment, expand their perceptual ability and experience another zone of corporality that was not possible before that, because they begin to organize their focus of attention to many points, realizing the whole environment, awakening a full body "look".

This requirement of attention to mobile and fixed references awakes alertness, optimizes the guidance function and creation of mind maps. The readiness of action, speed in decision-making and reaction time and competence of gestures allow an encounter with oneself, to the extent that students perceive themselves fully involved with the areas of the court, the sound of the ball, closing the goal, the body union with teammates, tactical silences and strong throws overwhelming opponents.

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## APPENDIX A: FIGURES



**Figure 1** – Playing court: arrangement of teams,



**Figure 2** – Referee's position referees, line referees, couches and substitutes



**Figure 3** – Defense expectation position]



**Figura 4** - Final defense position



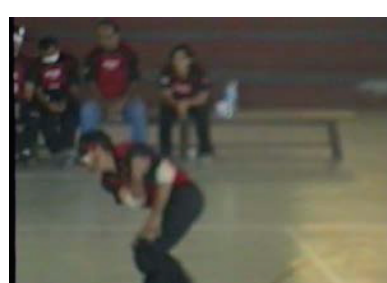
**Figure 5** – 1<sup>st</sup> step of throw with spin



**Figure 6** – 2<sup>nd</sup> step of throw with spin



**Figure 7** – 3<sup>rd</sup> step of throw with spin



**Figure 8** – Finalizing throw





Figure 9 – Defense position



Figure 10 – Partially blocking the ball



Figure 11 – Attempt to intercept after the ball



Figure 12 – The moment of the goal takes a parable trajectory



Figure 13 – Expression of distress



Figura 14 – Expression of happiness