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ORIGINAL

TRACES OF SPORT IN THE GAMES OF BRUEGHEL (16TH CENTURY) AND RODRIGO CARO (17TH CENTURY)

TRAZAS DEL DEPORTE EN LOS JUEGOS DE BRUEGHEL (S. XVI) Y RODRIGO CARO (S. XVII)

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ABSTRACT

The aim of this study was to establish the extent to which the ethnomotor features of sport were incorporated into games of the 16th and 17th centuries within two European contexts. Motor praxeology concepts were applied and a comparative study of 117 games contained in the works of Bruegel (Belgium, 1560) and Rodrigo Caro (Spain, 1626) was conducted. Four ethnomotor dimensions of the internal logic (13 categories) and the external or institutional

logic (8 categories) of modern sport were analysed: codification (presence or absence of rules); motor confrontation (type of motor interaction); counting (presence or absence of a final score); and materiality (preparation of playing field and equipment). The results show a pattern of change towards the ethnomotor features of modern sport, with a higher presence of: comprehensive rules (codification); symmetrical matches without bodily aggression (control of motor confrontation); final score (counting); and use of specific areas and objects (materiality).

KEYWORDS: ethnology, communication, traditional game, sport.

RESUMEN

El objetivo de este trabajo consistió en desvelar en dos contextos europeos en qué medida se incorporan rasgos etnomotores del deporte en los juegos de los siglos XVI y XVII. Se aplican los fundamentos de la praxiología motriz y se realiza un estudio comparado de 117 juegos recogidos en la obra de Brueghel (Bélgica, 1560) y Rodrigo Caro (España, 1626). Se analizan cuatro dimensiones etnomotrices de la lógica interna (13 categorías) y la lógica externa o institucional (8 categorías) del deporte moderno: codificación (presencia o ausencia de reglas); enfrentamiento motor (tipo de interacción motriz); contabilidad (existencia o ausencia de marcador final); materialidad (acondicionamiento del terreno y objetos de juego). Los resultados muestran un patrón de cambio hacia rasgos etnomotores del deporte moderno, con mayor presencia de: exhaustividad de reglas (codificación); duelos simétricos sin agresividad corporal (control del enfrentamiento motor); marcador final (contabilidad); uso de zonas y objetos específicos (materialidad).

PALABRAS CLAVE: Etnología, comunicación, juego tradicional, deporte.

INTRODUCTION

In any historical period, social groups have played games reflecting customs and ways of acting, which are particular to the pace of local life. They are social manifestations representing a playful heritage, which bear witness to their people's way of being. Rules are the codification of the features of the local tradition (Lavega and Navarro, 2015). The internal characteristics of games are imbued with a localist culture, so the same game in each region and at each historical moment is likely to incorporate different rules and conditions of play depending on the influences it receives from its environment.

In this process of the historical and cultural transformation of games, some motor practices became sports (Elias and Dunning, 1992). However, it is difficult to draw the line between games and sport objectively, and contributions have come from different approaches (White, 2006; Elias and Dunning, 1992, Huizinga, 1938; Parlebas, 1981; Trapero, 1971). To understand this

phenomenon, it has been practical to describe the different stages of development of ludomotor manifestations. To interpret the specific process of the transformation of games and sport, Blanchard and Cheska (1986) followed a cultural and historical neo-evolutionary model describing five levels for social groups and societies. Hernandez Navarro, Castro and Jimenez (2007) interpreted the sportification process (Parlebas, 2001) of games and traditional games and added new levels to the previous classification.

Examining the phenomenon in depth requires the addition of an insight into the activity itself in order to identify what is driving the change, i.e., the historical and cultural process needs to be linked to the systemic structural changes of games (Parlebas, 1988, p. 106). Consequently, we posed the following questions: How would it be possible to do a comparison of games in relatively close periods and cultures? (Braudel, 1968; González Alcantud, 1993, Revel, 2006); Did some European territories share a pattern of change in their games?; Would it be possible to identify traces of sport by comparing the distinguishing features of European games from different eras? The answers to these questions can be given objectively if we take into account the criteria established by motor praxeology to differentiate a game from a sport.

According to Parlebas (1981), sport corresponds to a motor situation of codified and institutionalised motor confrontation, while traditional games are not governed by an institution that organises and regulates a competition. A subtle clarification is required for a traditional game that takes place at a particular time of year (e.g., a festivity), for which regulations about how to play it are published. This is a mimetic recreational activity that playfully represents a distinctive aspect of local culture (Elias and Dunning, 1992). A good example is the *juego de cañas* (game of reeds) in the period between the 16th and 17th centuries, as described by Bernardo Vargas (1600), which re-enacted – within a festive context – aspects of the social, military and religious order of the time. This author shows detailed rules of the game for the interaction between participants, the use of space, as well as other organisational and aesthetic aspects (*Libro de ejercicios de la gineta* [Book of riding exercises], pp. 208-210).

It is difficult to know what changes were taking place in this period unless we take an internal and contextualised view of the game, because localism and globalisation are two phenomena that come together in traditional games. Motor praxeology (Parlebas, 1981, 1988, 2001) allows us to analyse and compare games from different cultural contexts if we take an ethnomotor perspective that links the distinctive features of the internal structure of the games (internal logic or pattern of organisation, Parlebas, 1981, p. 131) to the cultural characteristics of such motor practices (external logic or context). From this perspective, one game may be different from another, yet they can share distinctive features of their internal logic and/or external logic, thus enabling them to be compared.

Europe is sensitive to its cultural heritage, of which games have been a shared part since ancient times. The European Traditional Sports and Games Association, in the Verona Declaration (2015), postulates the cultural diversity

and common dissemination of games, and underscores their contribution to the memory of civilisations. Indeed, as social and cultural events, games are real showcases, depositories of the cultural trends that accompany them.

This study helps us understand the process of change that occurred in games and whether, in the period studied, it indicated a trend implying that they moved closer to the characteristics of the internal logic of sport as we know it today (maximum codification, match structure and motor confrontation symmetry; control of violence or intensity in the participants' motor interaction; counting the result by identifying criteria of success or defeat); and also its external logic (specialisation and standardisation of objects and the playing field) (Parlebas , 1981, 2001).

A way of analysing the phenomenon of cultural change in games is to base it on the study of playful trends. Parlebas (2003) highlights that ethnomotor perspective, which considers the study of games in relation to local culture and enables a comparison to be made in different historical periods (Parlebas, 2001, p. 453) without losing sight of their cultural consequences, which, in the case of the shift from games to sport, signifies a cultural 'break' for this author. From the historical perspective, Europe has been a more or less diverse and more or less homogeneous cultural territory, but in the field of play, there are still some shortcomings when it comes to revealing and therefore knowing what aspects characterise playful culture in certain periods.

Parlebas (2003) describes a moderate trend towards sportification by comparing the games described by Brueghel (1560) in Belgium and by Stella (1637) in France. It is a well-known fact that this was a long process that culminated hundreds of years later with the historical and cultural circumstances that resulted in some games becoming sports.

In this study, which follows the same guidelines as Parlebas's study (2003), we provide a comparative description of the internal logic of the games studied in Belgium (1560) and Spain (1626), and of some features of their external logic or context. This ethnomotor approach has enabled the data to be organised in such a way as to see if there were traces of sportification between the two periods and locations. The objective observation comes from the analysis of two ethnographic sources that take games as the point of reference and present them in two different ways: through painting, in the picture *Children's Games* by Brueghel (1560), and through a narrative text, in the work *Días geniales o lúdicos* [Festive days] by Rodrigo Caro (1626). In both sources, the condition of the rule and the context of the games is described, so that both looking at and reading a scene enable a motor action to be described in a contextualised way. The fact that many of these games are known in different European locations completes the procedure. Furthermore, in those years, there was a considerable dissemination of games, which was connected with classical Greek and Roman cultures (Friedlander, 1967; Mandell, 1986; Osborne, 2004).

Thus, the aim of this study was to reveal the extent to which the distinctive ethnomotor features of sport were present in the games identified in the works by Brueghel (1560) and Rodrigo Caro (1626), each within a specific geographical and historical context of Europe. This aim was operationalised through four dimensions:

- a) Codification, relating to the presence of rules in playful practices and the level of institutionalisation.
- b) Motor confrontation, corresponding to the type of motor interaction (symmetrical matches) representative of sport.
- c) Counting, relating to the presence of criteria identifying the participants' victory or defeat.
- d) Materiality, corresponding to the characteristics of objects and the preparation of playing fields.

Addressing each of these dimensions will allow us to check the trend found in the ethnomotor features of sport by Parlebas (2003), who compared the games described by Stella (1657) in France and by Brueghel (1560) in Belgium.

METHOD

This study builds on the findings of two previous studies. The first is Parlebas's comparison (2003) of the ethnomotor features of the games described by Brueghel (1560) and by Stella (1637); the second refers to the ethnomotor perspective provided by Lavega and Navarro (2015) and Navarro and Lavega (2017) when studying Rodrigo Caro's games (1626). The works by Stella and Rodrigo Caro are contemporaneous, which brings consistency and originality to this study by introducing a new comparison between Brueghel and Rodrigo Caro.

Methodologically, and taking into account the historical and cultural context, the comparison between Brueghel and Rodrigo Caro's games means considering two distant territories, Belgium and Spain, which pertained to the political and European idea forged in times of Charles V. These territories shared cultural similarities and differences arising from the organisation of the same political and administrative unit; regarding games, it is possible to assume that there was some dissemination even though they had their own local cultural personality. Comparing that reality enabled us to do two things: to observe the similarities in games from both reference contexts, and to confirm whether the trend of traditional games becoming traces of sport, as found in the study by Parlebas (2003), also occurred in the two distant European territories studied here.

The reference sources analysed correspond to two ethnographic works; one relating to iconic images of games (Brueghel, 1560) and the other to

historiographical narratives of playful activities (Rodrigo Caro, 1626). These two works are homogeneous in terms of their accuracy and ethnographic value for describing the games of their respective historical moments. Both show a set of games in a synchronic scene; Brueghel sets it in a Renaissance city and Rodrigo Caro describes his playful world, as known by him and enunciated by his characters. Both works require a figurative and narrative description to be conveyed. From a general viewpoint, the two sources are not compendiums of two comprehensive ethnographic documents of their time, but instead they are representative of two playful moments and two highly valuable corpora about games.

The picture *Children's Games* (Brueghel, 1560), painted in Antwerp, is an innovative and pioneering work that gives a degree of importance and dignity to children's games that was habitually rejected. It is a work that includes children's and adults' games to the same extent (Lavega and Navarro, 2015). Until that time, paintings essentially reflected biblical scenes and religious subjects (Parlebas, 2003), in which the descriptive value of games was lost. In this case, game scenes are depicted within a context of everyday life. When looking at this painting, it seems that the games played by the characters share considerable amounts of playful dissemination with games of the Spanish territories of the time. *Días geniales o lúdicos* [Festive days] by Rodrigo Caro (1626) is a very complete work that describes a very diverse set of games (Lavega and Navarro, 2015). It is the first specific work on games in Spain. Unlike other works that incorporate games tangentially or anecdotally (prohibitions, festivities, etc.), it describes them exhaustively and also takes an interest in how they are played.

The corpus studied corresponds to 117 games in two historic periods (58 games in Brueghel's work from 1560 and 59 games in Rodrigo Caro's work from 1626) and in two different territories (Belgium and Spain), whose playful cultural proximity will be determined by a diachronic evaluation.

We performed a comparative analysis of the distinctive ethnomotor features of the games. This comparative approach solves the problem of the sources, in such a way that reference to the description of the games is made in two valid ways; one that uses images depicting an entire scene that is framed in everyday life (Brueghel, 1560), and another that uses a concise and explicit narrative (Caro, 1626). Rodrigo Caro's work is an exception in the ethnographic world, but it also has its limits; what Brueghel expresses in the image is missing in Rodrigo Caro's work, and what the latter describes narratively is missing in Brueghel's painting.

For Brisset (1999), from an anthropological viewpoint, images have the value of representing absence. They reflect a staging of existence and thus acquire its manifest meaning; however, they have the limitation of not being able to reflect its symbolic meaning. The image freezes a more or less shared motor action shared with other players, thereby allowing us to capture the internal and external logic that is often followed by similarity with other documented games.

Meanwhile, the narrative precisely expresses the description of games because the purpose of the narrator is to be understood; in the case of Rodrigo Caro, the author strives to get his characters to recall whether the games were played in the same way or if they associated them with their classical Greek or Roman origin. Nevertheless, in comparative works, images or narrative descriptions are both valid sources of expression with a contextual recognition of the logic of game situations.

The search for homogeneity in games is difficult to establish, but a structural view of a systemic nature enables this ethnomotor approach to games from different regions and periods, even when taking into account potential cultural differences (Parlebas, 2003).

Based on motor praxeology (Parlebas, 1981), four ethnomotor dimensions are compared in this analysis. These dimensions are present in the internal and institutional logic of modern sport: codification (presence or absence of rules in each identified motor practice); motor confrontation (type of motor interaction, i.e., whether the interaction was related to a match or to other structures); violence in the confrontation (type of contact between participants); counting (presence or absence of a score in games; criteria for identifying victory and defeat); materiality (preparing a playing field, playing on an even surface, etc. when referring to playing areas; presence or absence of objects when referring to objects; provenance of objects) (see Table 1).

The categories are defined in accordance with praxeological criteria. For the 'codification' dimension, they are 'sports game' (confrontational motor situation of a traditional nature, with rules yet without being institutionalised) and 'quasi game' (informal, free, non-confrontational motor situation without rules). For the 'confrontation' dimension, they are 'match in general' (confrontational situation between two opponents whose interests are conflicting), 'match between symmetrical individuals' (confrontational situation on equal terms of strength and symmetry of roles between two opponents whose interests are conflicting), 'match between dissymmetrical individuals' (confrontational situation on unequal terms of strength or means between two opponents whose interests are conflicting), 'match between symmetrical teams' (confrontational situation on equal terms of numbers and roles between two teams whose interests are conflicting), 'match between dissymmetrical teams' (confrontational situation on unequal terms of numbers or roles between two teams whose interests are conflicting), 'by simple contact' (weak contact, without aggression), 'using an object' (contact made using an object), and 'by body-to-body contact' (little or no distance between opponents in a motor confrontation). For the 'counting' dimension, they are 'games with counting' (games that count the successes or failures derived from playing the game), 'games without counting' (games that do not count the successes or failures, which simply employ role changes to organise the consequences derived from motor interactions). For the 'materiality' dimension, they are 'without objects' (absence of objects in the game), 'with objects' (presence of objects in the game), 'pre-existing, designed for this type of game' (specific objects for this game), 'taken from the environment' (objects from nature or the habitat surrounding the players),

'traced out, prepared' (space set out for the game), 'not traced out, not prepared' (space not set out for the game), 'flat, even surface' (completely flat surface), 'uneven surface' (rough or bumpy surface), 'outdoor space' (open-air space), 'indoor space' (enclosed space).

RESULTS AND DISCUSSION

The aim of this work was to compare, from an ethnomotor perspective, the games of Brueghel (1560) and Rodrigo Caro (1626) in two European territories (Belgium and Spain) connected by their political and cultural circumstances in order to check the trend of traces of sport found by Parlebas (2003).

Revealing the ethnomotor features characterising European playful culture is a scientific challenge that has yet to be completed. We are fully aware of the events that opened the stage of modern sport through facts and historical interpretations and through sociological analysis, but a view from an ethnomotor perspective of the same games is missing.

Addressing remote studies is a very difficult task because there needs to be sufficient and homogeneous samples of games. Furthermore, there needs to be a model that makes a comparison feasible in different periods of time. In this case, praxeology has shown itself capable of identifying common patterns of the internal structure of games and sports. The problem that time periods pose for studying games can be solved by applying a comparative method to such patterns.

The shift from games to sports was latent before the 19th century but, to better examine it, the ethnomotor, internal logic and contextual (external logic) features in games need to be identified to reveal a mainstreaming thereof.

The ethnomotor characterisation of sport led us to analyse the distinctive features of Brueghel's and Rodrigo Caro's games in accordance with four dimensions: three relating to the internal logic: a) codification (presence of rules); b) counting of playing time; c) domestication of motor confrontation (match structure and control of violence in the interactions); and one relating to the external logic or context: d) materiality (standardisation of objects and playing areas).

Table 1. Traces of ethnomotor features of sport in Brueghel's and Rodrigo Caro's games.

Ethnomotor features: Categories, subcategories	Brueghel (1560) N = 58	Rodrigo Caro (1626) N = 59
INTERNAL LOGIC: CODIFICATION LEVEL		
Sports games	18 (31%)	52 (80.32%)
Quasi games	40 (69%)	13 (19.68%)
INTERNAL LOGIC: MOTOR CONFRONTATION (Match)		
Matches in general	11 (33%)	13 (36.11%)
Matches between symmetrical individuals	5 (15.15%)	7 (19.44%)
Matches between dissymmetrical individuals	3 (9.09%)	1 (2.78%)
Matches between symmetrical teams	1 (3.03%)	4 (11.11%)
Matches between dissymmetrical teams	2 (6.06%)	1 (2.78%)
INTERNAL LOGIC: MOTOR CONFRONTATION (Violence)		
By simple contact	4 (16.67%)	16 (47.14%)
Using an object	9 (37.5%)	3 (10.71%)
By body-to-body contact	4 (16.67%)	6 (21.43%)
By a heavy blow on a bodily target	7 (29.17%)	3 (10.71%)
INTERNAL LOGIC: COUNTING		
Games with counting	14 (25%)	30 (51.85%)
Games without counting	44 (76%)	29 (49.15%)
EXTERNAL LOGIC: MATERIALITY (Objects)		
Without objects	22 (38%)	17 (28.81%)
With objects	36 (62%)	83 (71.19%)
Pre-existing, designed for this type of game	12 (21%)	23 (38.98%)
Taken from the environment	23 (40%)	14 (31.11%)
EXTERNAL LOGIC: MATERIALITY (Playing field)		
Traced out, prepared	2 (3%)	19 (13.56%)
Not traced out, not prepared	56 (97%)	40 (86.44%)
Flat, even surface	48 (83%)	57 (96.61%)
Uneven surface	10 (17%)	2 (3.39%)
Outdoor space	55 (95%)	44 (74.58%)
Indoor space	3 (5%)	15 (25.42%)

The analysis of these dimensions shows four traces of modern sports that have a higher presence in the ethnomotor features of Rodrigo Caro's games than in those of Brueghel's. These traces indicate a change of latent elements, without necessarily describing a concept of linear evolution; as we know, the historical and cultural circumstances would later give rise to the phenomenon of sport.

Codification of ludomotor practices

Regarding the traces of sport identified, the presence of sports games was higher in Rodrigo Caro's games (80.32%) than they were in Brueghel's (19.68%); the role of quasi games (corresponding to motor practices without

rules) was therefore less important (Parlebas, 1981, 2001) (Figure 1). The difference is much bigger than the one found by Parlebas (2003). This finding means that the ludomotor culture is associated with certain practices with some degree of codification, in which care is taken to establish conditions that players must follow, thereby leaving an impression on the codification. Thus, the limits within which the players are allowed to intervene are regulated. This condition is necessary to enable future competitions to be organised according to strict, formal codification, as happens in today's sport

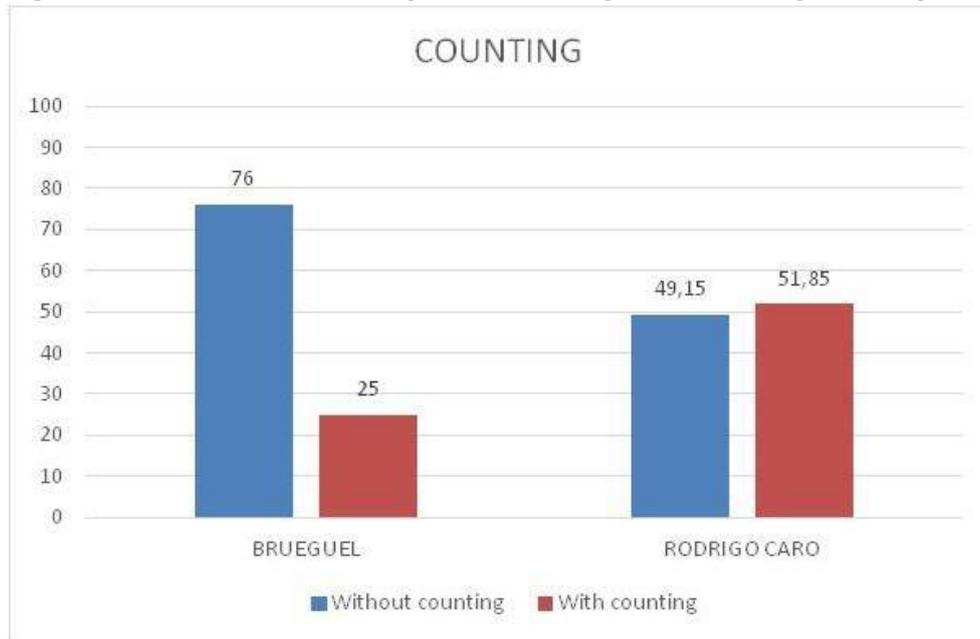
Figure 1. Presence of the codification feature in Brueghel's and Rodrigo Caro's games



Counting of playing time

A process of change towards counting was identified in favour of Rodrigo Caro (51.85% of games), with a slightly bigger difference than the one found by Parlebas (2003) (41% of Stella's games). Thus, a codification of the results obtained by players means they are recorded as valued achievements. This trend points to one of the features of modern sport, i.e., to have maximum control over playing "time" by codifying the counting of time and regulating how to conclude the motor confrontation (Figure 2). Modern sport applauds the use of a chronometer, and the participants' successes are meticulously recorded (Blanchard and Cheska, 1986), which leads to the glorification of the winners' prowess. However, ending a game by limiting playing time was non-existent in Brueghel's and Rodrigo Caro's games. That is, time is a subsidiary element of their completion, which takes on a codifying meaning.

Figure 2. Presence of the counting feature in Brueghel's and Rodrigo Caro's games



Presence of the match structure in motor confrontation

Matches between players or teams is not the main interactive structure in the games of Brueghel (33%), Rodrigo Caro (36.11%) or Stella (42%, studied by Parlebas, 2003). Other types of original motor communication networks, in which participants could even switch their relationship during the game (e.g., one against all, all against all, building coalitions, etc.), were taking centre stage at that time in those territories. However, a slight trend was distinguished – and confirmed in later periods – towards a model of motor relations offering equality (symmetry) and stability (without switching relationships during the game) (Figure 3). These features of today's sport facilitate the spectacle because they enable spectators to identify easily with the confronted players or teams (match), which can be compared by the successes (e.g., points or goals) the players secure by always remaining on the same side under the same conditions (symmetrical and stable network).

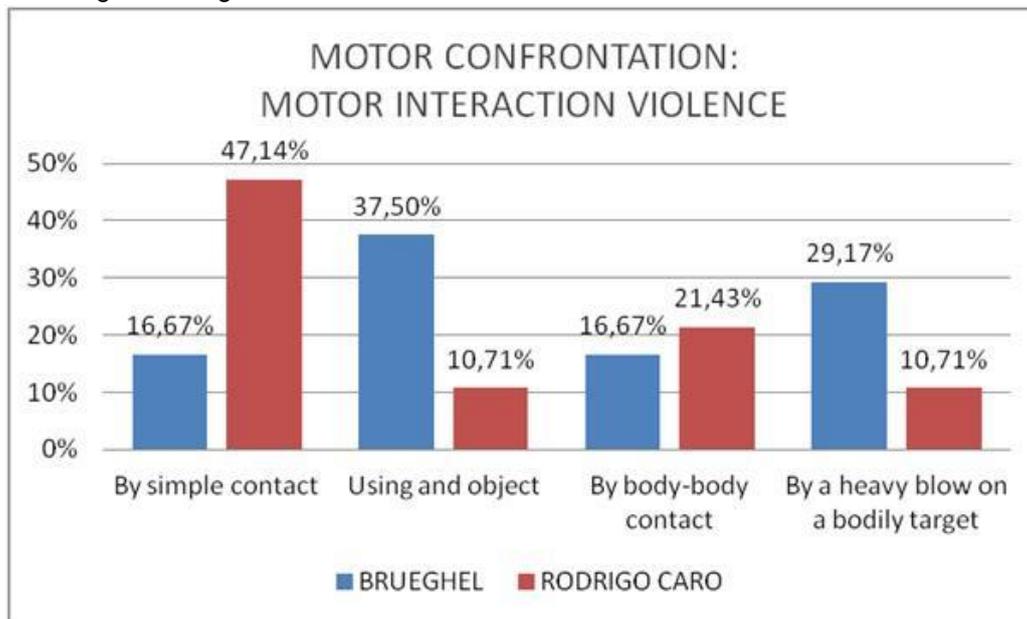
Figure 3. Presence of the symmetrical match feature (motor confrontation) in Brueghel's and Rodrigo Caro's games



Domestication of motor interaction violence

The intensity of the type of motor interaction contained in the internal logic of games allows us to analyse violence or aggression in playful relationships. A greater process of control of that violence was observed in Rodrigo Caro's games than in Brueghel's because more games were identified under the 'by simple contact' or 'by body-to-body contact' categories. Furthermore, in Rodrigo Caro's games, there were fewer under the 'by a heavy blow on a bodily target' category, i.e., where striking an opponent's body hard with an instrument was the objective (Figure 4). That tendency towards a civilising process (Elias and Dunning, 1992) involved regulating the level of aggression and coarseness of relations in order to foster the virtuosity of a domesticated motor intervention. Thus, later on, modern sport came to symbolise the supervision of rules by the figure of the referee, who would ensure that any unauthorised bodily contact would be sanctioned and even lead to penalties, thereby shifting the responsibility of the players.

Figure 4. Presence of the violence feature in motor confrontation in Brueghel's and Rodrigo Caro's games

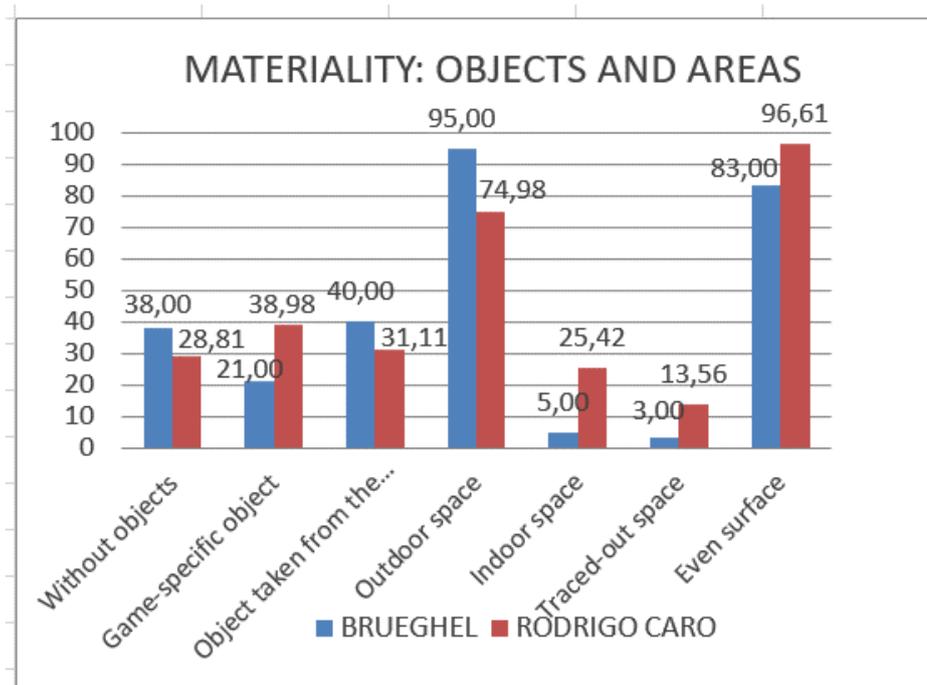


Towards the standardisation of objects and playing areas (materiality)

Unlike modern sport, traditional games do not require standardised objects that must meet precise conditions in terms of size, shape, material and technological manufacturing. The objects used in Brueghel's and Rodrigo Caro's games are abundant and varied. While some came from the natural environment (stones, fruit, sticks, animal bones, etc.) and the domestic environment (coins, hats, ribbons, horseshoes, bricks, rope, etc.), others were designed specifically for the game (bowls, spinning tops, balls, etc.). Some tendencies pointing to the process of sportification of ludomotor practices were observed. When comparing Rodrigo Caro's games to Brueghel's, we found a decrease in games without objects obtained from the environment (domestic or natural), and an increase in the presence of objects conceived for the game (Figure 5).

Brueghel's and Rodrigo Caro's playing area is neither a specialised, enclosed space, as in modern sport, nor a wild space created in the midst of nature; it is an outdoor space that is neither fully prepared nor improvised. The playing fields are mostly located outdoors, although in Rodrigo Caro's work, the number of games played on indoor surfaces increases (Figure 5). Regular spaces also predominate, with a greater percentage in Rodrigo Caro's games; this fact constitutes a key trace of today's sport, which would entail the construction of specific facilities for playing games and maintaining the same conditions. Such facilities would even become enclosed spaces, as is the case of the *trinquete* ball game, which was already played at that time.

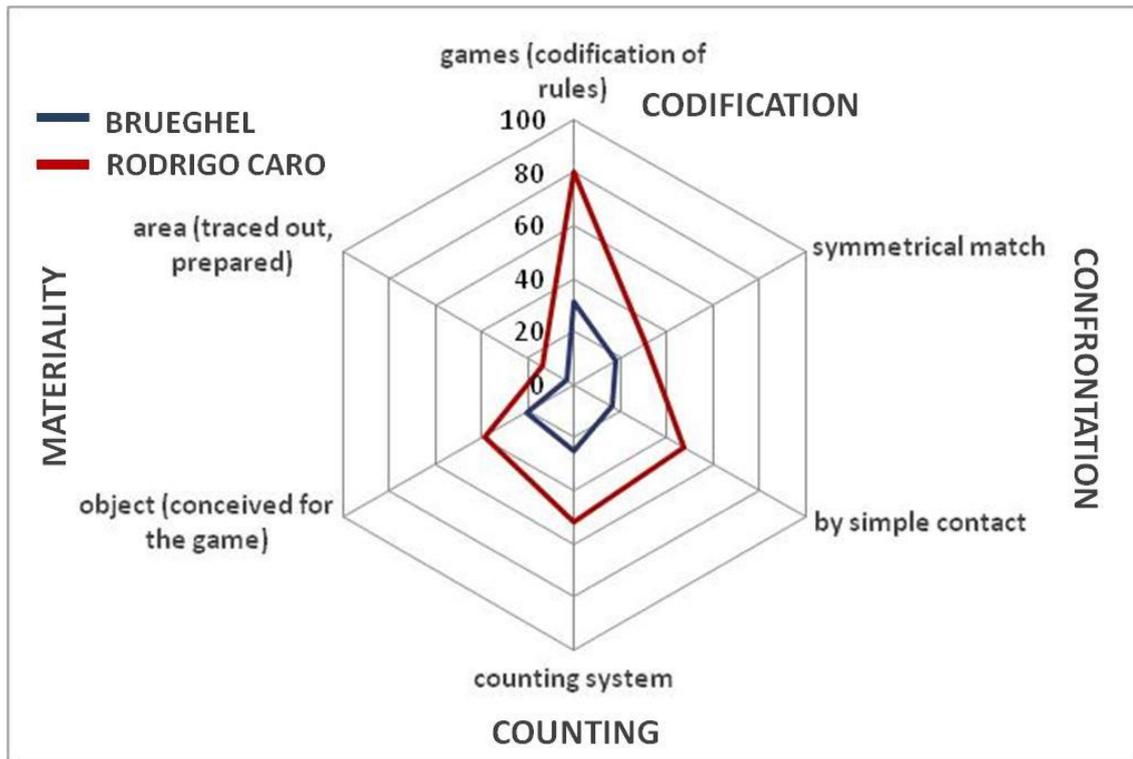
Figure 5. The materiality feature of sport in Brueghel's and Rodrigo Caro's games



When transferring the four dimensions of the ethnomotor features of sport to a figure incorporating the results, an unequivocal growth is observed in Rodrigo Caro's games compared to Brueghel's. The figure indicates that the bulk of the change comes from an increase in *codification* (presence of rules), in the domestication of *motor confrontation* coarseness (interaction by simple contact) and from *counting* (how to finish and establish victory or defeat). A transformation was also identified in the *materiality* of the games, i.e., in the greater use of specific objects (conceived for the game) as well as in the greater presence of even (prepared) playing areas.

Traces of sport may be more apparent in particular cases. The example we gave of the *trinquete* ball game, played in the European territories studied (Gillmeister, 1997), represents a paradigm of the sports model. In this game, the rules are exhaustive (*codification*), which in later times would become institutionalised (organised and controlled by institutions, as happens with federations). The *motor confrontation* corresponds to a symmetrical and stable match, without bodily contact in the relationships (absence or control of violence), with a final score (*counting*), and with the use of specific objects and facilities for each game (*materiality*).

Figure. 6. Four-dimension model indicating the patterns of change from games into sport



CONCLUSIONS

These four dimensions (codification, motor confrontation, counting and materiality) show the trend in the process of change from games into sport. Undoubtedly, the emergence of modern sport could not be explained solely by the internal structure of sport because, to understand the social facts, it is likewise necessary to understand a series of events of the social complexity. Similarly, a game or a sport cannot be interpreted without specifying which aspects would shape them as a social practice, and how.

In this set of data, a pattern is glimpsed in the interval between Brueghel and Rodrigo Caro, the distinctive features of which are: progress towards games with codified rules; a relationship that is increasingly tending towards sociomotor games centred on symmetrical team matches; a decrease in heavy blows on a bodily target, focusing instead on control by simple contact; a considerable increase in counting the achievements obtained during the game; objects conceived for the game, which become more specific; and the place of play, with the outdoor one being predominant. These are the traces through which the internal aspects of modern sport are channelled.

When comparing these results with the conclusions reached in the study by Parlebas (2003), we can see that certain traces of sport were already present in Spanish games at the beginning of the 17th century, and that some parts of Europe at least shared a close and common way of playing. Beyond

dissemination, this is what the contextualised analysis of games from the ethnomotor perspective has shown.

However, it is clear that studies of games have to be cautious with local cultural variables. Such caution has been exercised in the study presented here by combining the analysis of the internal logic (internal features of games) with the examination of certain features of the external logic (sociocultural context) of Brueghel's and Rodrigo Caro's games. Nevertheless, the presence of certain rules as well as their conditions and limits for organising actions are the keys to any operational approach, and both the internal and external logic act as dimensions that come together and give consistency to a praxeological theoretical framework, which we have followed.

The comparative analysis of an ethnomotor nature had considerable interpretative force for uncovering the representative traces of modern sport in the games of Rodrigo Caro (1626) and those of Brueghel (1560). This contribution has made it possible to verify the trends shown by Parlebas (2003) when comparing the games of Brueghel (1560) to those of Stella (1637).

All this enables games to be considered a social laboratory (Parlebas, 2003), in which the norms of a culture are reflected. After studying that culture within its social and historical context (synchronic view), it can be compared to another playful culture of other territories and times (diachronic view).

Limitations and future perspectives

Taking on the challenge of interpreting the traditional games of other times means accepting the constraints imposed by the reference sources, which often provide partial or incomplete information. Building knowledge from partial information requires a theory that gives coherence to an equally consistent method. This is a major limitation for the analysis of games, which we have dealt with by using a procedure based on the study of ethnomotor features provided by motor praxeology.

Despite the limitations, conducting this type of studies has encouraged us to pursue further ethnomotor research on games from different territories of Spain, Europe and other continents, as well as their possible comparison. As noted by González Alcantud (1992, p. 255), all this will help to recognise the components of the cultural *ludus*.

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