

Sports Proxemic

F. García Marcos¹, P. García Mateo²

¹(Department, of Filology/ University of Almería, Spain)

²(Department of Education, University of Almería, Spain)

ABSTRACT: *This article aims to verify the possibility of delimiting a semiotic field, applied to physical activity and sports. In order to partially verify this hypothesis, the field of proxemics, one of the nuclear semiotic branches, has been proposed as a field of work. The results confirmed the initial hypothesis, allowing to verify the performance of all proxemic components within sport. In this way, progress is being made in the configuration of a semiotic model of sport which, in the future, will have to be developed in the same direction.*

KEYWORDS –Semiotics, sport, proxemics

I. Introduction

Proxemics has been the habitual and classic partner of kinesthetic, within the semiotic approach to non-verbal communication. It deals, in synthesis, with the spatial distribution -static or dynamic- that flows between the participants of a communicative event. The inclusion of a dynamic component ultimately brings together two dimensions: the strictly spatial, on the one hand, and, on the other, the temporal, insofar as the spatial components are modified in the course of a temporal segment.

It was E. T. Hall [1] who was in charge of terminologically coining this field of scientific concerns, with the explicit intention of dealing with the analysis of spatial delimitation by human beings. Hall started from a universal of behavior, the sense of territoriality, which he considered determinant to explain part of human interaction, especially with regard to their communication systems, in the first instance, but also with regard to their behavior in general. The human proxemic, in any case, is intensely conditioned by the context. Culture acts on it, first of all, but it is also determined by age, by socially established roles, by interpersonal relations and, ultimately, by the particular idiosyncrasy of each individual.

The proxemic organization has no special restrictions, ranging from any kind of daily interaction to the urban organization of a habitat. In any of these assumptions, it is articulated around two large groups of elements, the space between the participants and the components of the proxemic scenario. In relation to the first, Hall himself proposes a qualitative graduation that delimits that vast and indeterminate physical and anthropological space, subdivided each of its sections into two internal components. In this way he establishes four large proxemic domains which, moreover, have followed the subsequent bibliography quite strictly:

- *Intimate distance*, less than 40 cm, subdivided into proximate (up to 15 cm) and extended (between 15 and 40 cm). It delimits the most personal territory of each individual, to which only people with whom a strong personal bond is maintained have access. It is the place of love relationships, but also of other physical contacts, especially those that denote trust between those involved (holding hands, hugging, etc.).
- *Personal distance*, which on this occasion ranges from 45 to 125 cm, divided again into next (45 to

75 cm) and extended (75 to 125 cm). It is a space reserved for relationships in which there is some kind of common affinity, with socially established roles beforehand (partners, neighbors, etc.). They share experiences, but without entering into the realm of intimacy. The so-called arm distance imaginatively separates the two sub-levels included in this epigraph. Everything that can be touched with the outstretched arm would fall within the nearby personal domain, while that which exceeds it would correspond to the outstretched.

- *Social distance*, with a radius that goes from 120 to 360 cm, also with two internal spaces, the next (from 120 to 210 cm) and the extended (from 210 to 360 cm). It happens among people with whom only superficial knowledge is maintained, not based on a fluid interpersonal relationship, although it admits variable degrees of habituality. The next variant includes issues that necessarily require a certain degree of relationship (a business transaction, for example). The extended one is more typical of more open social activity (a discotheque, a bar).
- *Public distance*, beyond 360 cm, as in the previous cases, with the consequent variants close (from 360 to 750 cm) and extended (above 750 cm). Within them are recorded interactions that do not require a relationship not prescribed or defined between those who occupy them. The prototypical examples are the airports.

These spaces are considered in a trend-setting way, given that each individual has his or her own way of approaching their different types of habitat, within more general guidelines shared with other members of the same community. In any case, in addition to the quantitative spatial demarcation, Hall establishes a second typology, depending on the type of elements that make up the proxemic space:

- *Fixed elements*, which include all those that make up a space, either by delimiting it within its environment (external elements) or by signalling its distribution (internal elements). They are neither universal nor permanent. Each culture mints its own typology of configuration of these proxemic components that, in any case, change with time and the environment.
- *Semi-fixed elements* enable interactions through their use. They allow people to influence interaction with others thanks to the help of the environment. In turn, this class splits into two large new groups, sociopetal spaces [2] and sociofugal spaces [3] [4][2]. The former is open, thus favoring interactions (squares, parks, etc.) The latter, on the other hand, favor intimacy, even a certain isolation, between individuals (libraries, hospitals, etc.).
- *Dynamic elements* measure the influence of both kinds of elements in interpersonal relations, so that the variation of one of them -within a given situation- conditions the type of interaction developed.

It should be remembered, in any case, that any of these spatial elements, from the point of view of semiosis, is of interest insofar as it presupposes a process of coding that leads to another process of decoding by those who inhabit them, transit them or, in short, use them. Without both processes - coding and decoding - all these elements constitute merely a physical environment, nothing more. Suppose an individual who has never had the slightest contact with croquet suddenly enters a field where this sport is practiced. Naturally, you will only see a series of sticks, lines and hoops fixed to the ground, without understanding the sport that can develop there, its rules or its elements.

From the outset, proxemics was particularly attentive to the semiotic dimension inherent in its theoretical foundation, a perspective that has remained constant over the years [5] [6]. In fact, the cultural and anthropological studies in which Hall and his first disciples unfold do not hesitate to examine the interaction recorded between the environment and human communication, a line that will naturally remain open until today [7] [8].

A strong conditioning of the culture of origin was immediately evident, which establishes and marks its physical distances in order to interact. Even within the same culture and society, Hall's studies [1] [9] showed that physical distances transcribed other social distances, between individuals of different classes. Of course,

this led to the immediate establishment of the proxemic among the non-verbal components of semiotics, within which it has ended up being a consolidated and inexcusable reference.

Only that its thematic radius of action was potentially wider, as it did not take too long to become manifest [10]. From the delimitation of the typology of spaces, the proxemic keeps a close link with architecture and urbanism [11][12], in addition to the precursor work of Osmond [3]). In the film industry it is very useful, both for regulating the disposition of the characters and for measuring the distance and focus of the cameras [13] [14]. The analysis of these elements within the film structure has usually been carried out on the basis of Hall's parameters. His connection with the theory of information and with communication found an enormous value in the figure of A. Moles, in collaboration with B. Valencien and E. Rohmer [15] [16]. More recently they have been applied in the field of computer science, especially when trying to palliate the physical distance between which, in principle, virtual communication develops. In this way, a distinction is made between physical distance and perceived proximity [17]. In principle, there would be a positive trend towards individuals with whom physical interaction has been maintained [18] [19] [20]. However, this effect can be artificially reproduced, so that through virtual communication an equivalent connection to the spatial one is visualized and internalized [21] [22] [23].

II. Proxemic and sport

Sport has also known the extension of the thematic tasks of proxemics, often - but not systematically - in combination with kinesthetic. It is a reasonably well-founded attempt to account for the possible influence of the non-verbal component as a whole within physical and sporting activity.

At least quantitatively, its main focus of interest revolved around its profitability in the preparation of coaches [24][25][26], physical education teachers or even trainers in general [27] [28] [29] [30] [31]. In any case, proxemic skills are determining factors for developing creativity in sporting activity [32]. Some physical and/or sporting practices have been studied in relatively greater detail, such as basketball [33], fitness [34] [35] and especially volleyball [36] [37]. Di Palma and Molisso [38] approached a more particular assumption, that of the application of sports therapies, which included a proxemic component, for the treatment of autism. Meanwhile, Vallejo [39] stopped in the proxemic displayed around the sport, more specifically among the fans of football teams in Ecuador.

The pertinence of proxemics in the sports field, in any case, referred to three issues of greater conceptual and thematic radius. On the one hand, authors such as Barker [40] consider it to be an essential skill for group management, with no restrictions in terms of type or scope. Along these lines is Bosque-Jiménez [41], contemplating what it calls "proxemic competition", in its case, specifically aimed at physical activity professionals. Only that same competence would be no less useful in the organization of an army troop, a philharmonic orchestra or an ice hockey team. On the other hand, proxemics is not lacking in designs on communication in sport, both when it comes to intervening in the improvement of its management, and when analyzing the reality of sport. Thus, it has been advised to control proxemics, as one of the main praxis of sports psychology [42]. Even Sullivan and Feltz [43] developed an effective scale of the communicability of sports practice, based on an empirical sample taken with 681 athletes, recognizing that there was very little precision and concreteness on the subject of sports communication. In a subsequent study, Sullivan [44] confirmed the existence of marked differences between men and women. Later, in Sullivan and Short[45], he made an application proposal to try to alleviate these limitations. Szczerbak, Parzelski and Poczwardowski[46] for their part, used proxemics as a criterion to discriminate sports practices in which different types of physical contact were established, in addition to dance. Finally, as with kinesthetic, and generally in line with it, their participation in observational and praxiological methodologies has been demanded [47] [48].

In all these investigations, however, the proxemic has been present as one more ingredient -episodic at times- of the communication that surrounds the sport activity, sometimes even subsumed is after psychological concerns

of first reference. Nevertheless, it contains sufficient elements to propose monographic approaches, within the semiotic standards on this kind of research. The practice of sport amply complies with the alternation of spatial and chronological dimensions mentioned above. An American football team can draw a disposition of its players before starting a play (static dimension), which as soon as this begins to develop necessarily varies the drawing (dynamic dimension). In this way, it can be said that he is interested not only in the spatial distribution among the participants of a communicative event, but also in how it evolves during its development, understanding that these modifications are inherent to the dynamics of communication itself.

A first approach, following the standards of proxemic analysis, confirms practically all the parameters proposed by semiotics. The majority of sports practices oscillate between the personal and social distances of the Hall typology. However, there are nuances. In wrestling sports, the distance is intimate. While collective sports develop between the extended personal distance, the one that runs beyond the level of the arm.

However, the dynamics of some sports continually modify these parameters, and this is probably the root of their enormous proxemic potential. Footballers prefer to develop between an extended personal distance, although in one corner they are in the next, if not directly in the intimate. In rugby, defenders, three-quarters or even wings can maintain a relatively personal distance. But the front packets, especially in a melee situation, are clearly in intimate domains according to Hall's typology.

It is obvious that it is not only a question of space, but other qualitative elements intervene, which end up being associated -although not in a systematic way- with space. A *melé* is not an intimate relationship, or at least it is not in the same way as others, no matter how susceptible it may be to be framed in that spatial segment.

On the other hand, sport is plagued with fixed proxemic elements, in its two dimensions. On the one hand, it has external elements, which are used to delimit both the playgrounds and the stadiums as a whole. On the other hand, within them, the regulations establish fixed internal spaces, specifying the areas, etc., carrying out a demarcation task that is essential for the development of the sports activity.

As a whole, stadiums and sports complexes are fixed spaces, or semi-fixed sociopetal spaces, from the moment they allow interaction between their participants. In any case, in the case of sports there can be no radically dynamic space because they introduce a variability that would violate the rules of the game by which it is governed. The location of a hockey goal cannot be modified when the opponent comes. In general, they are loaded with a high connotative value in the semiosis of the communities in which they are registered.

The sporting world and environment provide multiple examples related to all of this. Stadiums, tracks, circuits, swimming pools or sports palaces, sports facilities in general, are often emblematic buildings in their respective urban environments, without also discriminating either dimension, specialty or environment. The regatta wharf in Kiel, where the nautical competitions were held during the Munich'72 Olympics, the Stadion WojskaPolskiego in Warsaw, the mythical Eden Park in Auckland or the Olympic Stadium in Terrassa, the venue for field hockey during Barcelona'92, among many other similar cases, have in common the fact that they testify to the extent to which sport is strongly integrated into their social fabric. They are not only places for the practice of physical activity and sport, where their competitions take place. They contribute something more to the urban landscape, where they act as a social and identity reference, sometimes even referring to specific moments in their historical events. In Terrassa the Olympic Stadium symbolizes the new times, beyond sport, becoming the last link (for the moment) in the chronology of its urbanism. First the Romanesque churches of Sant Pere (5th to 8th centuries) and then the Torre del Palau, the only rest of the castle that must have occupied the current center of the city in the 11th century, condense the medieval past of the city. El Vapor Aymerich, AmatiJover, an old textile complex designed by the architect LluísMuncunilliParellada and built between 1907 and 1908, the current headquarters of the Science and Technology Museum of Catalonia, was the result of the stage of industrialisation and machinism, so closely linked to the textile industry, saint and sign of the city's

economic activity until the 1970s. The *EstadiOlimpic* not only maintains the memory of an event of the magnitude of an Olympiad, but also provides a built look towards the future of a city that tries to orient itself by other parameters towards modernity, precisely after the drastic fall of textiles, with the consequent need to reinvent itself.

The interior of the sports facilities introduces a different dimension of static proxemics. On the one hand, it distributes the space and the roles of the participants in this sporting -but also communicative- act, in which not only the sportsmen intervene, with these being its main protagonists. They are left with the marks of the playing fields, both those delimited by the bottom and side lines, as well as those that indicate specific lanes of their development. The square of reception of the serve in tennis, the rectangle of the penalty area in hockey on skates, the lines that indicate a volleyball court, the marks of the streets in the athletics races, the place of the triple in basketball, the goal lines in several team sports, or the rehearsal in rugby; all of them are static proxemic elements, determining for the development of the competition. So much so that they inform about the scope of success or error, the success or failure of a given set. When a player sends a remainder beyond the opponent's baseline, he already knows that he has lost the point (at least). In that sense, they establish the parameters between which the competition has to run and, in the same sense that other parts of the regulation, they contribute a knowledge necessary for the development of the game.

But, in addition, the sports buildings contain another component of static proxemics, on this occasion destined to locate the spectators who, as has been advanced a moment ago, also form part of sport as a social praxis. In fact, elite sport today cannot be conceived without an evident, supposed or presentiment receptor gaze, which has ended up becoming an indispensable component for its diffusion as a great mass spectacle. Competition requires spectators, who occupy their physical seats in the stadiums and pavilions, or who perform the same function through the screens of the electronic devices. Thanks to the existence of that gaze, or even those gazes, physical activity disembarks in mass society, with everything that this entails, from media attention to income derived from advertising.

In any case, there is more proxemic activity inside the venues, given that it is possible to find semi-fixed activities, although very heterogeneous according to the participants of a sporting event. Spectators express and transmit emotions, animate, protest, celebrate successes, ultimately judge what they are contemplating, always from the prism of their adhesion to one or another team. With sportsmen and women, the casuistry becomes even more diversified, to the point of developing extreme and opposing assumptions. Sometimes communication is forbidden in the whole activity, as happens in the striking cases of tennis or golf. In others, in most team sports, on the other hand, it is essential that its members maintain fluid communication, which allows them to articulate their actions more efficiently, both in the defensive facet, as during the attack phases.

It is also true that, as on so many other occasions within the semiotic domain, its components appear in coordination with other semantic elements. The demarcated lines of the stadiums and pavilions, for example, introduce proxemic factors, informing about the delimitation of the game space, its areas, the zones of special relevance or the points from which to apply the sanctions (the line of free throws, the penalty point). They only do so in combination with chromatic elements, as will be discussed later. The lines cannot be of any color, there are flags that mark the corners, etc. In reality, sports semiosis, like general semiosis, constitutes an amalgam of elements and meanings, in continuous dynamicity, also in continuous interaction and complementarity.

Of course, all of this is framed between explicit cultural guidelines in most of the occasions, although not always and systematically

III. Suspended sports proxemic

In certain circumstances, and only at specific times, the regulation of certain sports proscribes

proxemics. Once these conditions have passed - a moment and a circumstance - the dynamic activity is resumed, both in the strictly communicative and in the broader spectrum of its contextualization. In this sense, we speak here of suspended proxemics, or frozen if you prefer, insofar as they have a prescribed, momentary and finalist character. Athletic sprinters must be still in their starting blocks, like swimmers in the podium. It is an element of concentration, in order to speed up to the maximum their potentialities and energies. But it also contains a regulatory imposition to ensure that all competitors start at the same time. Whoever anticipates in the starting blocks during an athletics event incurs in a fault - warning - whose repetition can cause disqualification. Communicatively, it is a moment that transmits the maximum climax, prior to the immediate tension at the actual start of the competition. It is not an isolated case. In the free kick of basketball, the players waiting for a possible rebound must remain static in their position, until the ball does not leave the hand of the pitcher. From the anticipated invasion of the rebound zone, from the violation of the suspended proxemic rule, the repetition is followed in case of failure. Soccer goalkeepers can perform different kinesthetic movements (moving arms, jumping, etc.), but do not apply proxemic movements, and must remain on the goal line. The rugby team that receives a transformation attempt remains behind the rehearsal line until the opponent kicks the oval. In field hockey, the team receiving a penalty corner is confined to the baseline, without being able to initiate any movement until the opponent hits the ball. Motorsports pilots cannot move their machines until the traffic light is green. Then, during the course of the race they must respect the trajectories of the rivals, under penalty of receiving a sanction. The imaginary offside lines delimit the space behind the ball within which an attacker cannot be placed in sports such as football or rugby. When he does so, he commits a foul.

Proxemic prescriptions can even affect the development of the game. A basketball team has eight seconds to cross into the opposing field of play. From that moment on, if he crosses the dividing line towards his own hoop, he incurs "backfield", losing possession of the ball. In total, it can transit up to a maximum of 24 seconds, before throwing the hoop rival. A failure in the reception of the rugby oval, when it falls forward, is considered a proxemic invasion beyond the offside line, which is technically referred to as an *avant*, sanctioned with a penalty kick. In rugby it is only allowed to move the oval forward with the foot, never with the hand.

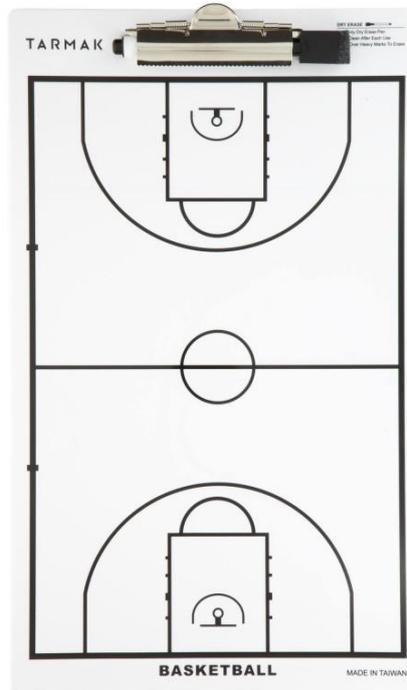
At other times the proxemic suspension is due to the idiosyncrasy of some sports, which require moments of singular concentration. No explicit rule prevents a pitcher, or a batter, from moving constantly during a baseball game. Nor are they prescribed in the receivers within racket sports (tennis, ping-pong, badminton, paddle) or in general when a serve is received (volleyball). Only not keeping the right position, in the right place and with the right concentration would give a definite advantage to the opponent. In this case the proxemic is suspended by the own suitability of the game.

IV. Tactical proxemics

However, the most obvious proxemic element of sporting activity lies in the tactical disposition of athletes, especially in collective sports. In fact, very illustrative metaphors are commonly used in this regard. The coaches have "drawings" on the courts or playing fields; that is, they proceed to organize their respective teams spatially. Part of their success, and that of their game directors on the pitch, lies in the ability to "read" the matches; in other words, in possessing the ability to interpret the disposition of the opposing team and the more predictable movements that will develop during the match. Such is the emphasis given to these questions that among the working tools of many coaches is the indispensable hand board. They reflect the proxemic movements of the team as the match develops, for which in sports such as basketball, handball, volleyball or, among others, roller hockey is provided what is known as "time out", pauses in which players receive specific instructions from their coaches. The blackboards are the support that activates an internal communication circuit with very pronounced characteristics: concrete instructions, accelerated communication, extremely clear concepts, preparation of punctual plays, correction (or confirmation when things go well) and, above all and mainly, motivation.

At the same time, it highlights before the public the intensity of this work on the part of the technicians,

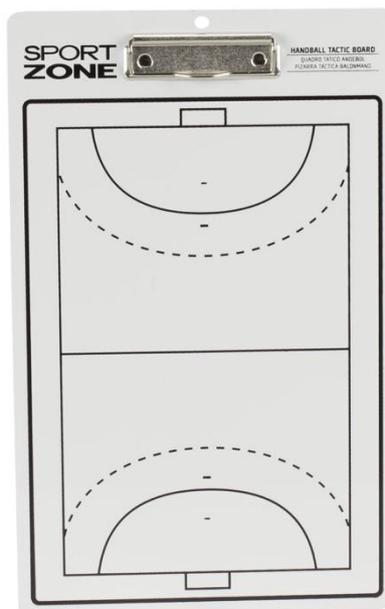
identified in these sports with an apparent greater capacity to innovate and propose solutions.



Picture 1

Basketball board.

Source: https://www.decathlon.es/pizarra-de-entrenador-basket-id_8407150.html



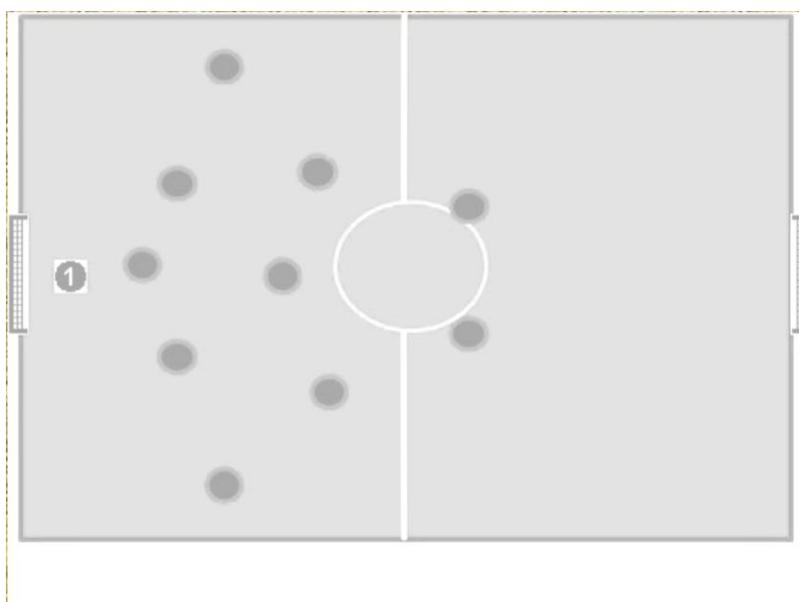
Picture 2

Handball board

Source: <https://www.sportzone.es/tienda-deportes-online/mas-deportes/>

Naturally, one of the qualities recognised in the coaches of these sports lies precisely in their outstanding ability to use the board, managing the arsenal of tactical resources of a discipline, choosing the most appropriate for each situation, being able to communicate it to their players and for them to really put it into practice.

The proxemic disposition is in itself a fact, a solid source of information. A football team¹ that starts with a 5 (defenders)-3 (midfielder)-2 (strikers) exposes the more than foreseeable intention of locking itself in its field and looking for some successful counterattack.



Picture 3

Football. Example of 5-3-2 configuration

Source: <http://entrenarfutbol.com>;

Other tactical arrangements, of course, point to different starting intentions. Pelé's famous 4-2-4 win over Brazil in the 1960s was in itself a testament to the team's enormous talent and attacking power. It was, of course, a declaration of intent that, moreover, corresponded to the game dynamics that this eminently attacking team practiced on a regular basis.

¹ There is plenty of information, directly on the net already, about tactics and types of systems in football. Among many others, <http://entrenarfutbol.com>; <http://josemariarodriguezentrenador.blogspot.com/p/sistemas-de-juego>, <https://steemit.com/futbol/@jhoanmanuel/tipos-de-formaciones-en-el-futbol>

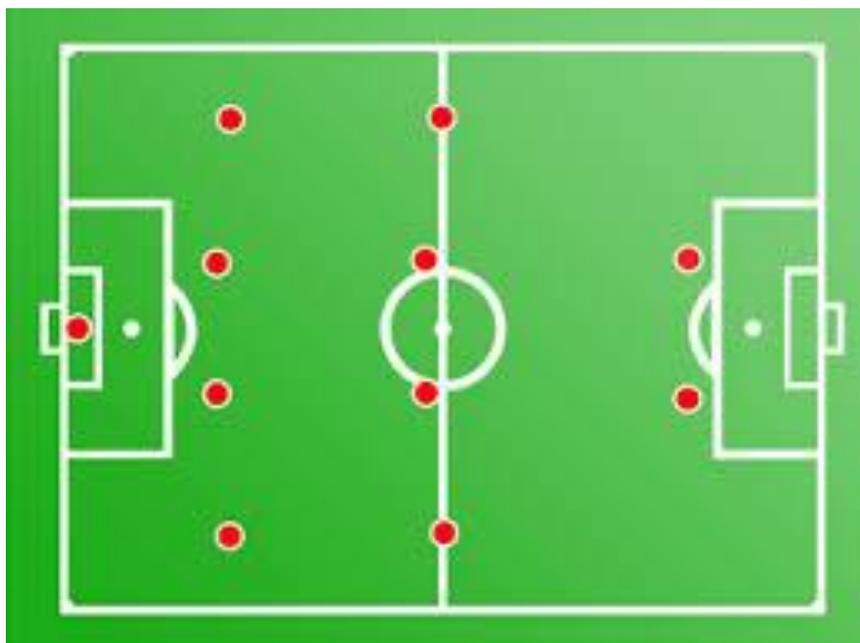


Picture 4

Football: 4-2-4 tactical distribution

Source: <https://steemit.com/futbol/@jhoanmanuel/tipos-de-formaciones-en-el-futbol>

With the 4-4-2, or 4-3-3 formations the theory indicates that, in principle, it is intended to achieve a better balance between all the lines with dominance of the center of the field, allowing a more regular occupation of the field and, because of this, a more effective use of all potential resources of a team.



Picture 5

Football. 4-4-2 tactical distribution

Source: Fuente: <https://steemit.com/futbol/@jhoanmanuel/tipos-de-formaciones-en-el-futbol>



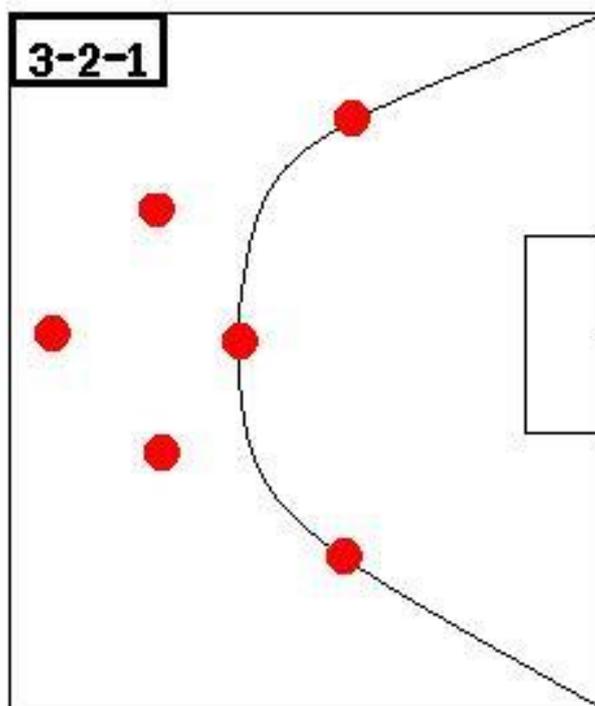
Picture 6

4-3-3 disposition

Source: Fuente: <https://steemit.com/futbol/@jhoanmanuel/tipos-de-formaciones-en-el-futbol>

Football, of course, is not an isolated case, but rather, on the contrary, any minimal approximation to other collective sports gives more or less analogous results. In handball, a 3-2-1 defense applies the agility of the defenders to attack the passing lines of the opponents, which forces them to distance themselves from the goal. At the same time, this proxemic disposition entails a wide and deep spatial distribution of the defenders, from

the 6-metre line to the minimum 9-metre line. Consequently, the attacking team will know the intentions of their opponents as soon as they see their proxemic disposition, so they must adapt their attacking behavior, attention to passing movements, select fast players in the displacements and look for the imbalance of that scheme. In this sense, the tactical proxemic provides information with immediate impact on the behavior of players and coaches, as well as on the development of the game in the immediate term.



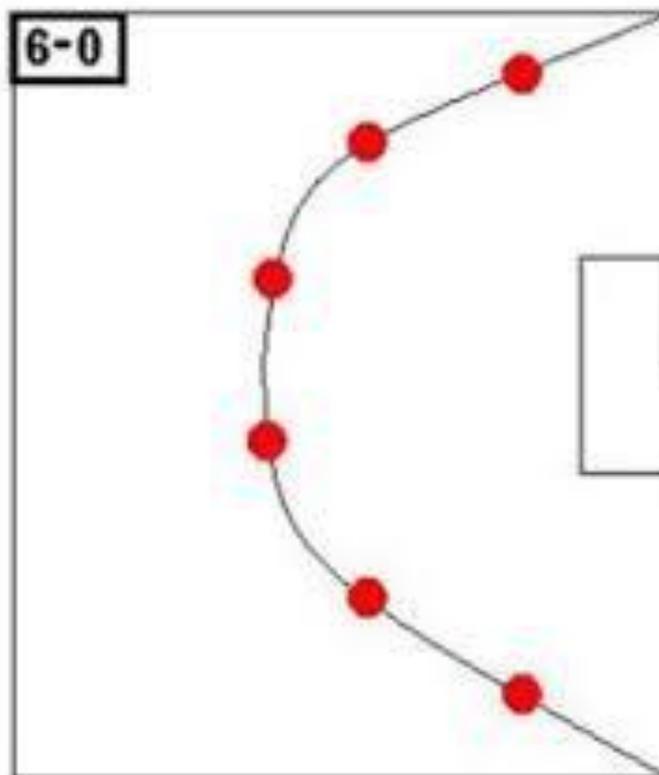
Picture 7

Handball: Defense 3-2-1

Source: <http://sistem-handball.blogspot.com/2009/11/handball.html>,

Other distributions of the proxemic defensive handball have different spatial and tactical repercussions. A 6-0 layout places all defenders on the 6-metre line, with punctual exits to the throwers, which in principle stabilises the inner defence. In exchange, it allows greater approximation of the attackers and the possibility that they strike against the defenders, if they are not attentive in the exits to the attackers that correspond to them².

² About defensive systems in handball, <http://sistem-handball.blogspot.com/2009/11/handball.html>, <http://normhy.blogspot.com/p/v-behaviorurldefaultvml.html>, <http://handbol-ef.blogspot.com/2009/04/la-defensa.html>; <http://alfoncafyd.blogspot.com/2010/03/6-0-defensivo.html>; <https://es.slideshare.net/avs13/sistemas-de-juego-ofensivos-y-defensivos-presentation>; <https://sites.google.com/site/juegaabalonmano/df/tipos-de-defensa>; <https://es.slideshare.net/jorgebelda33/la-tctica-defensiva-en-balonmano>.



Picture 8

Handball. Defense 6-0

Source: <http://sistem-handball.blogspot.com/2009/11/handball.html>,

Sports proxemics are sometimes used to protect oneself from one's own weaknesses, or to try to limit the virtues of others. In FIBA basketball there is the option of applying defenses in the zone. Instead of using individual marks, which force each player to follow their opponent around the court³, the defenders are placed in a fixed position.

By means of the different classes of zone in basketball two big objectives can be covered. On the one hand, it is a means of strengthening one's own defensive rebound. This spatial arrangement makes it difficult to approach the opponent and therefore facilitates the collection of defensive rebounds. As a consequence of another, the opponent is forced to increase his throw at a distance, which can be problematic if he does not have good outside shooters.

³This is the only regulatory possibility allowed by the American NBA, unlike the international federation.



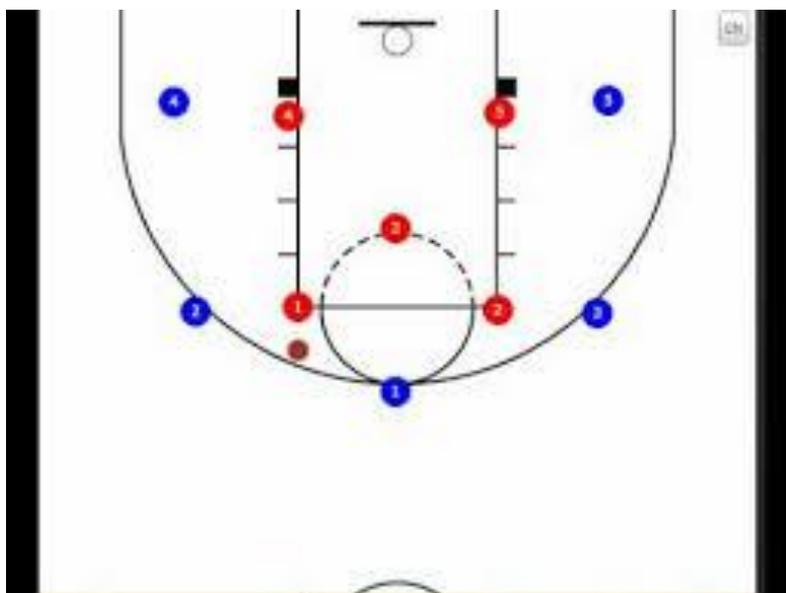
Picture 9

Basketball. Baloncesto. Zonal defense 2-3

Source: *Basket para todos*

(<https://basketparatodos.wordpress.com/2011/03/21/defensa-zonal-2-3-julio-lamas/>)

It's not the only possibility. There are other zonal alternatives to organize the defensive proxemics, depending on the own characteristics and the potential of the rivals.



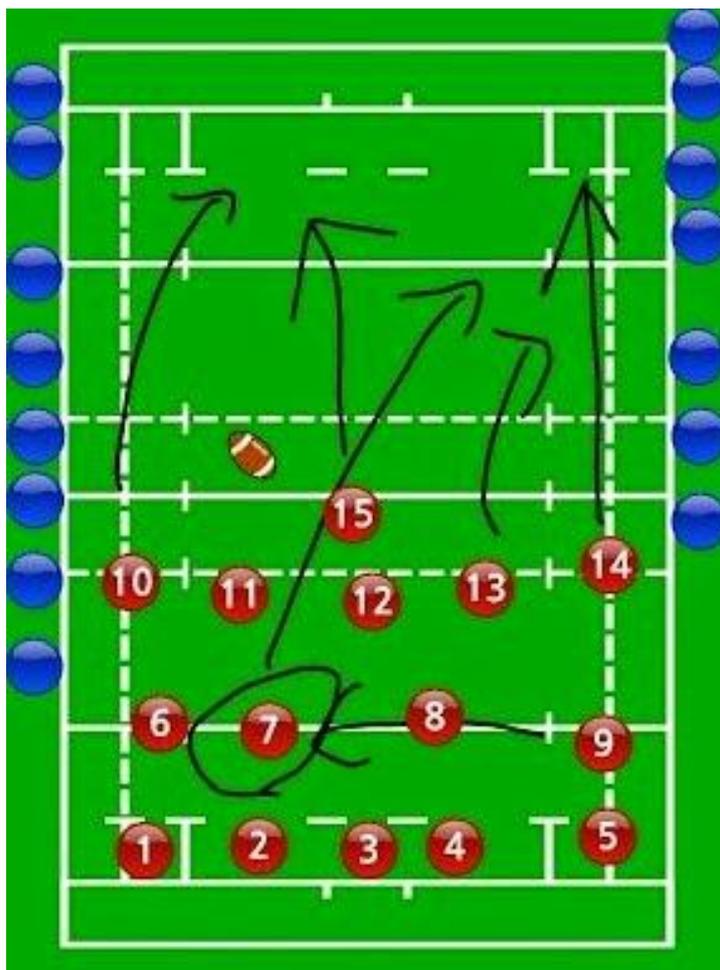
Picture 10

Basketball. Defensa 2-1-2

Source: Educación Física y Deportes

<https://educacionfisicaigna.blogspot.com/2015/11/los-tipos-de-defensas-en-baloncesto.html>

Of course, almost every team sport has its tactical proxemic with values similar or equivalent to the previous ones. Sometimes this means assigning fixed or semi-fixed positions to the athletes, as in the previous examples, although in others it is more a matter of anticipating the movements and possible displacements, already located within dynamic proxemic domains. It always, in any case, acts as a truly decisive component of match planning; and, naturally, it unfolds within the particular idiosyncrasy of each sport. In rugby it provides a very illustrative and paradigmatic case of dynamic proxemics, given that it foresees both the movements of the oval and the lines of penetration that can be opened when the game is played by hand.



Picture 11

Rugby. Tactical layout and penetration lines

Source: Notas de rugby

<http://tata-navarro.blogspot.com/>

The tactical movements of American football are considerably more complex. In fact, the technical side of the sport is made up of real teams that have specialists in virtually every phase of the game, under the overall coordination of a head coach. The development of the game forces to conjugate in a very exact and meticulous way, as much individual actions, as blockades and collective displacements in which the majority of the whole intervenes. In this way, a strong line of tension is created between the attacking and defensive packages, on the resolution of which the final fate of the moves depends.

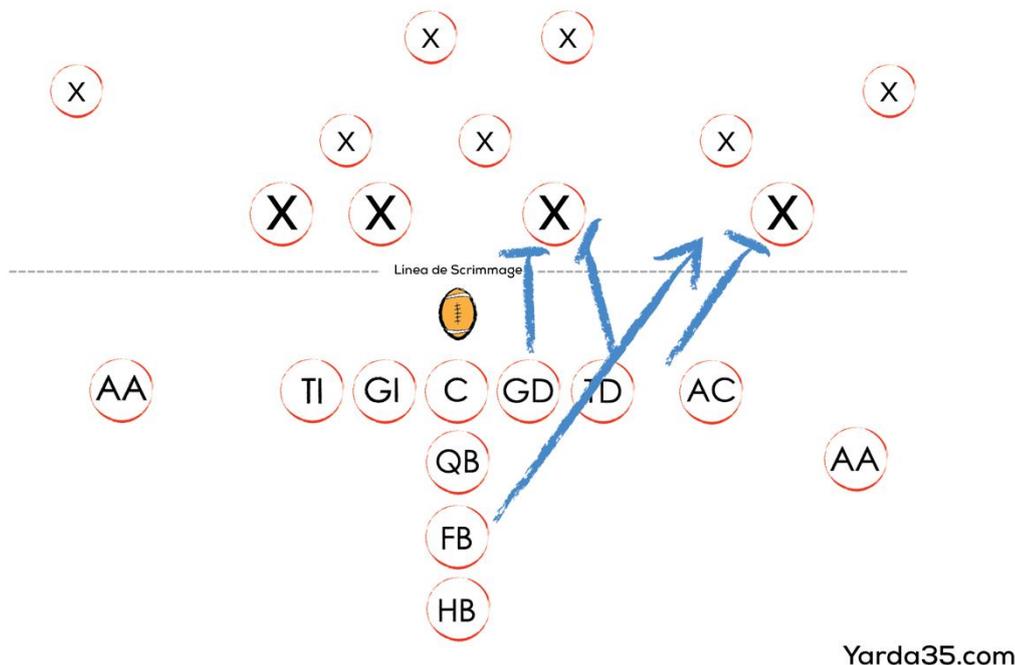


Gráfico 12

American football: Blocks and attack movements

Source: *Yarda 35*

<http://yarda35.com/futbol-americano-bloqueos-en-la-ofensiva-una-explicacion/>

All these proxemic provisions require intense internal communication between the athletes who put it into practice. Without it, without the warnings and indications of some companions on others, the adjustments that they intend simply do not take place. So, when it comes to training them, it is essential to automate the movements, but also the communicative routines that allow this coordination.

V. Strategic proxemics in sport

The development of the sport practice modifies the physical space that mediates between the rivals, creating diverse proxemic scenarios. In boxing, the distance marked with respect to the other fighter is decisive, a direct indication of the strategy proposed by each of them. Boxers with wingspan, especially with a powerful punch, prefer to maintain the physical separation with their rivals, waiting to find the final blow. Others, however, are more comfortable in the hand-to-hand, with resources not as evident, but potentially as effective as the previous ones. Combined wrestling sports complicate the proxemic landscape. Connor McGregor, world champion in several categories of the Ultimate Fighting Championship (UFC) and the Cage Warriors Fighting Championship⁴ (CWFC), has tended to prefer distance with his rivals. His hitting power gave him a clear advantage in such situations. On the contrary, his body to body, especially on the ground, was less decisive, so he preferred to avoid those scenarios. It is evident that the sport dynamics not only creates proxemic scenarios,

⁴ In particular, he combined featherweight and lightweight, being the first fighter to do so. Both UFC and CWFC are international fighting companies that bring together the best in their respective categories. The first is American, the second is British.

but also manages to control them for tactical purposes.

It goes without saying that the episodes of verbal violence associated with these - and other - sports are intended to deconcentrate the opponent and gain an advantage when it comes to handling strategic proxemics. McGregor himself has starred in several such well-known episodes. Before the October 7th, 2018 fight for the title of UFC with Khabib, McGregor resorted to all kinds of verbal provocations through various channels and in various media: in face-to-face conversation, on the networks, through the Internet. On that occasion, the strategy of semiotic violence had no effect on Khabib's strategic proxemics, who eventually won and retained the title. Valentino Rossi also never managed to decentralise Marc Márquez, despite the fact that his communicative strategies, not as virulent as McGregor's, did have the same background. But the counterexamples are abundant. Materazzi's offenses against Zidane during the final of the 2006 World Cup in Germany or Drazen Petrovic's persistent provocations to his rivals if they met the objective pursued. Outside of the media spotlights, this is an inelegant but nevertheless quite common resource.

Of course, team sports also have their versions of strategic proxemics. There are football teams with a direct game, which enhances the speed and the shot over the opponent's goal. In front of them, others prefer to dominate the possession of the ball and look for the time and place to attack the opponent. There are basketball coaches who prefer to exhaust the time available to each team to attack the opponent, looking for an advantageous pitch at the end of it. It is what is known as basket-control, as opposed to other styles of quick start after picking up rebound, prioritizing the entries and basket penetrations. Again, the casuistry is overwhelming, even within a single sport.

VI. Complicated temptations. Finalist proxemics. Proxemic sports.

In all of the above assumptions, the proxemic elements constituted demarcative (track marks) or organizational (tactical) values, when present. Implicitly, the suspended dimension implied the omission of those parameters. A Yugoslavian handball defence has the mission of preventing a goal from being scored. If in the end the defense fails, but the opposite sends the ball to the clouds, the objective remains fulfilled.

There is, however, a group of sports in which the proxemics advances a step further, making its components the object itself of the competition. What is measured, what is gained or lost, has to do with how bodies move and what they transmit, through space and time. In this sense, it could be said that there are proxemic sports, insofar as their mission is to overcome the performance in this matter of their rivals.

There are basically two large groups of proxemic sports. In the first place, there predominate those that could be considered as mixed proxemic sports, in which sports skills are conjugated with others linked to the mastery of rhythm and dance. Specialities such as rhythmic gymnastics, synchronized swimming, artistic skating, or even classical dressage would appear there. On the other hand, strict proxemic sports manage the mastery of the body in space for a period - usually very short - of time. This second group would include artistic gymnastics and trampoline and lever jumps in the pool, as well as figures in water skiing.

All of them, those of one type and those of another, have in common that their results depend on the evaluation that their proxemic skills obtain after the intervention of a jury. Of course, it is not an impressionistic or random evaluation, but is governed by considerably rigorous and, in any case, pertinently regulated guidelines. It is precisely these scoring criteria that are based on mastery of various proxemic aspects and the ability to convey varying degrees and types of communication to the public.

Rhythmic gymnastics ponders difficulty with execution. The first measures the complexity of jumps, balances and rotations performed by gymnasts, while the second measures the correction in the use of different

devices⁵, body technique and music. There are also corresponding penalties, all of them related to proxemic elements: exercises must always be performed in motion, they must end at the moment the music ends, non-rhythmic steps are prohibited or, among others, acting outside the tapestry is penalized.

Synchronized swimming⁶, on the other hand, evaluates kinesic and proxemic elements. The technical quality of the exercises performed is rated positively, as well as the synchronization with the music, the artistic component, in addition to the grace and delicacy of what has been done. In the opposite extreme, the penalties appear when touching the bottom of the pool, when leaning on its edges, when showing signs of fatigue or when not showing grace or smile. Obviously, these last components of the evaluation are clearly kinesic.

Figure skating also combines two grades. The first note comes from the level of difficulty observed during the execution of the program. The second weights the skating technique, the movements made to link the different elements, the general execution of the program, as well as the choreography and interpretation used. This means taking charge of a significant number of proxemic elements, such as sequences of steps and *angles* (sliding on a skate), pirouettes, elevations and spirals on a skate.

In classical dressage, riders develop proxemic skills that their horses perform at the pace, trot or gallop. Water skiers perform figures through two 20-second sections, at a speed ranging from 20 to 30 km/h. The quantity and quality of these elements causes an increase in the score and the victory of the race.

From then on, the border between the proxemic and mere spatiality is progressively diluted. It does so, probably setting its final limit, in sports such as artistic gymnastics, whose development is already completely outside of dance or rhythm. It is a question of developing other physical capacities -balance, strength, flexibility, control- in order to dominate the devices. The same thing happens in relation to jumps or water ski figures, all of them lacking components directly linked to the transmission of some kind of significance. This frontier can separate even more questionable domains. In fact, there are sports in which the domain of space has a finalist character, in addition to be their objective reference. The year begins in *Garmisch-Partenkirche* with a world-famous ski jumping competition. In this discipline of winter sports, in long jumps, triple jumps or high jumps in athletics, the sportsman has a spatial, physical objective: to jump more than his rivals, to go further, than he realizes in each of his attempts. It is not a question of evaluations, but of objective measurements. The farthest jump wins. The same is true for athletics -weight, discus, javaline, hammer-, as well as for all kinds of races: to cover the proposed distance in the shortest possible time. Only in none of these activities, no matter how relevant the spatial dimension may be, significantly relevant communicative processes emerge.

VII. Conclusion: From sports proxemics to general semiotics

It is likely that the proxemics will be able to make substantial contributions to the development of a specific methodology for the analysis of sports communication. Especially if it is combined with other components of the universe of semiosis that creates and envelops sport. Only, while this general model arrives, the truth is that it already points some suggestive notes in the other direction of this theoretical line, the one that goes from sport to the general theory of meanings.

The first and most evident is the asymmetry that can be registered between the physical and emotional dimensions of the proxemic distances, contrary to what has been suggested from Hall's classic formulation. At least occasionally, these spaces may be occupied by less theoretically predictable relationships, which are nevertheless consolidated as restricted social practices. Sport provides a quite illustrative example of the intimate (theoretical) distance between which the disciplines of struggle unfold. The determining factor, then,

⁵ This is hoop, rope, ribbon, mace, rod and ball.

⁶ That admits three variants: individual performances, in duos or in groups known as "combos".

does not seem to be only the factor +/- emotional or personal proximity, but the fact that for the mere exercise of some activities this type of distance is needed. Even when it comes to two activities as antipode as loving and hitting each other.

On the other hand, as has just become clear when discussing proxemic sports, we should avoid the propensity to automatically identify spatiality and proxemic. Not everything about space falls into a category that is semiotic; that is, the transmission of messages and the exchange of meanings.

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