

## Visualization of American Football Rules

American football is a very complex sport with several possible ball movements, actions, gestures and rules. This complexity makes it difficult to understand for an ignorant spectator. And if a person cannot understand what is going on out on the field, he gets bored soon or forms the opinion that the actions on the field are just a big fight without any plan.

To help ignorant spectators, for example foreign students who come from countries where American Football is not very popular, understand the game, visual explanations could be a useful aid. They have to understand the special 'language' used in this sport, and just by sharing a "common sign repertory" as Hanno Ehses states in his article "A semiotic approach to communication design," they will be able to follow and understand the happenings on the field.

Hanno H. J. Ehses, "A semiotic approach to communication design", The Canadian Journal of Research in Semiotics (Vol. IV, No. 3, Spring 1977)

An analysis I made of an American football game helped me to understand the complex actions and to decide which parts I have to explain to an ignorant spectator, so that he will understand basically what is going on out on the field:

### 1. Explaining the aim of an American football game.

The spectator has to understand what the whole game is about, namely the winning of yards and finally reach of the opponent's end zone.

### 2. Explaining the football field, the measurements, signs and end zones.

He has to understand that all measurements are taken in yards, that the field is measured from the middle line to both sides in decreasing 10-yard steps, that each side has an end zone, where the scores are achieved and what function have the goal-posts at both ends of the field.

### 3. Presenting the two units on the field (Offense and Defense) and officials.

This explanation is necessary to understand why teams change on the field and which unit is in possession of the ball.

### 4. Describing the basic acts in an American football game:

#### a. Start of a game or play by kick-off.

To understand why the units are lining up in a certain way and kick the ball towards the opponent at the beginning of the game and after each score.

#### b. First down

To understand why the others spectators are cheering also when no points are scored, and why a team is in possession of the ball for a certain time and why it is changing to the other team.

#### c. Possible ball movements (pass and run)

To understand in what ways the ball can be advanced or played.

#### d. Score-possibilities

By what kind of actions a team can score points

#### e. Foul, Penalty and frequent gestures of the referee (incomplete pass, touchdown/extra point)

To understand what the yellow flag signifies that the officials throw on the field and what its consequences are – namely the loss of yards. This helps to understand why the line of scrimmage is sometimes moved backwards.

These explanations should be visualised and published as a little leaflet, that could be handed out on the campus before a game or directly at the entrance to the stadium. This way, the ignorant spectator would have a little help on hand in the stadium while he is watching the game.

The design of the leaflet has to fulfil different functions as Hanno Ehse points out in his article:

#### **Informing function**

It has to explain the actions that are necessary to for an ignorant spectator of an American football game, to understand the games object and basic actions on the field.

#### **Aesthetic function**

The design has to fit in the series of Azteca- and UDLA-publications. Therefore it has to use the university colours orange and green, the Aztecas typography New Helvetica, the Azteca and UDLA-logotype.

#### **Economical function**

The leaflet has to be producible in a not too expensive way.

#### **Technical function**

Edward Tufte states in his book “Visual explanations”, that good design should take into account how, when, and where the information is used. The leaflet should be handed out at the entrance of the stadium or some days before a game as an advertising to get members of the UDLA population to the game and to support the UDLA-team. Therefore the format has to be small enough to make it portable and storable in a trouser pocket, but big enough to depict the explanations in a good readable and clear manner. Therefore I chose the format of a passport (143 x 100 mm).

According to Edward Tufte’s visualisation theories, I developed a first prototype of a booklet, visualising and explaining the rules of American Football. See Appendix E.

Edward Tufte, *Visual Explanations*, (Connecticut: Graphics Press) 2002 and *Envisioning Information*, (Connecticut: Graphics Press) 1994