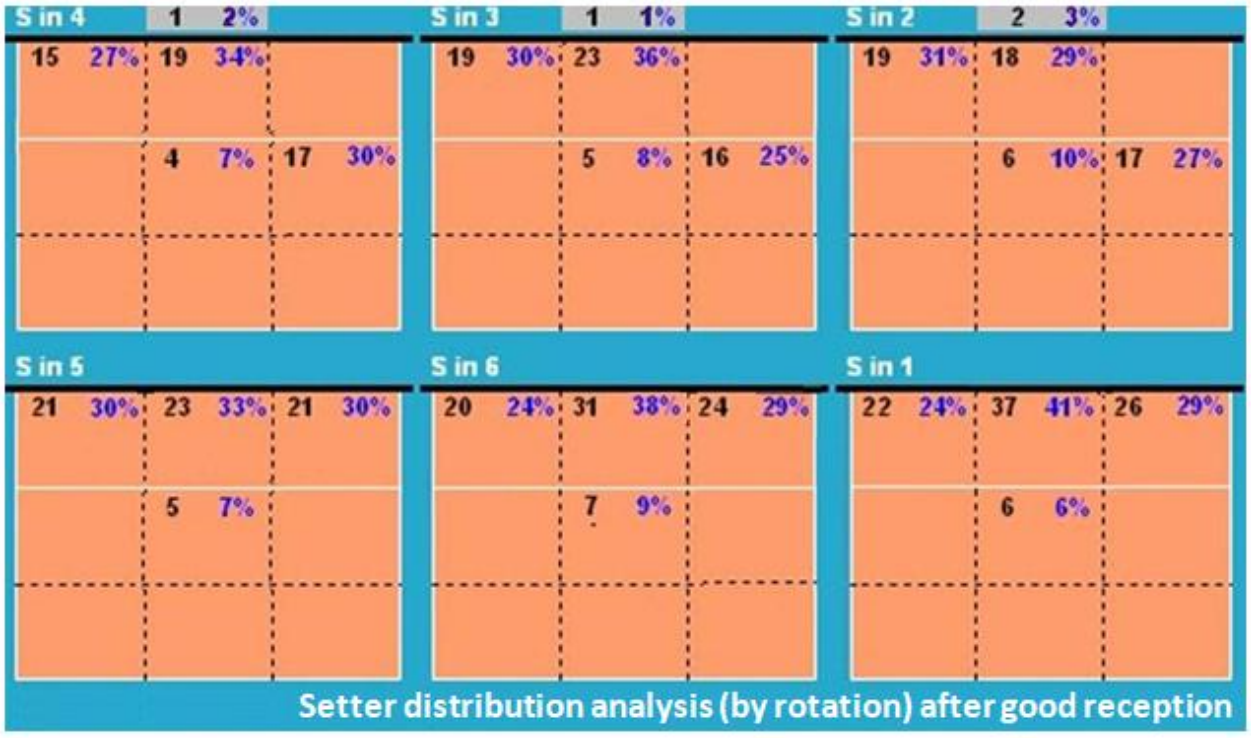
SETTER ANALYSIS

In volleyball, the passing distribution is an important subject of analysis.

In modern high-level volleyball, where teams have specialized software, each coach using all the available data, tries to "read" the game of the opposing setter and recognize a tactical reception/attack model. The purpose of this process is to create a competitive block/defense model for his own team.

This "tactical model" involves the measurable values produced by the available data. The data include the following: the quality of the reception, the type of pass (fast, high, etc.), the position of the pass and be organized by rotation/score/set e.t.c.

DataVolley is a global and common software that produces a report (for passing distribution) as below:



This report gives us an example of the setting distribution by rotation after a good reception (blue digits) and concerns the Brazilian setter Marcelo Elgarten from a previous sports season. The player was selected because he was an excellent passer, combined with the fact that he is no longer active. Consequently, the analysis has only historical value.

The conclusion is that the setting distribution in all rotations is balanced. This information is nevertheless poor, and of course the only model that can be derived from it, is that the particular passer after a good reception passes to all players equally, including the player in position 6 too.

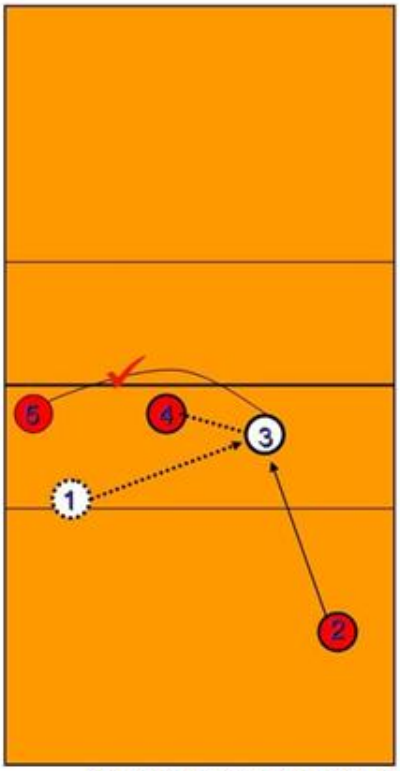
This analysis problem is common for analysis reports of high-level teams.

The coaches need the clearest model and to achieve this, more specialized data and criteria are necessary.

SportsEpilysis proposes the following analysis criteria that involves the sequence of all actions either selectively or all together, and DVepilysis/BaseEpilysis has an implemented solution in version PRO.

Setter Analysis Criteria

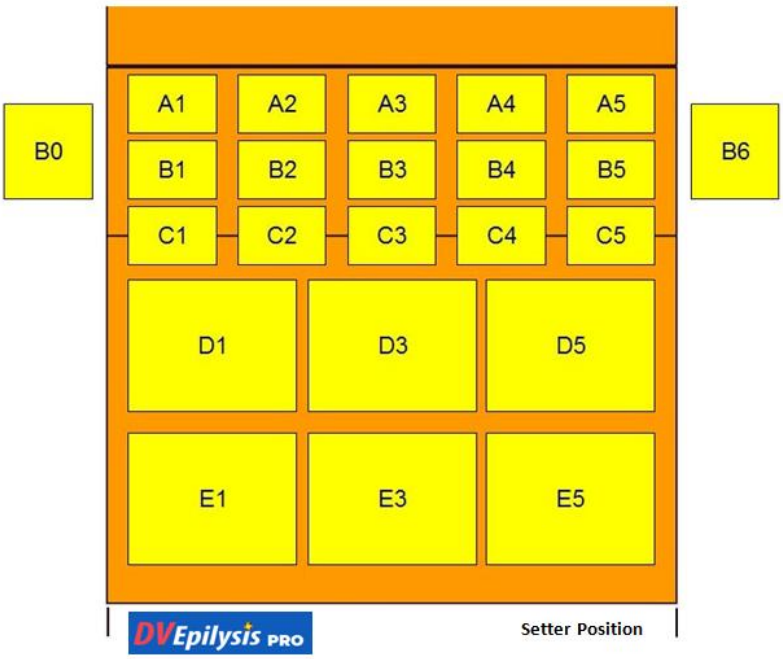
1. Rotation (setter start position)
2. Position of Passer (Position that ball starts its route)
3. Position of Setting (Position where setter accepts the ball)
4. Threat Position (call) of Middle Blocker (In front of, Far or Behind the setter)
5. Position of attack (Position that setter sets the ball)



Criteria for Setter Analysis

Criterion No 3 (position of Setting) needs more analysis since the classic approach is the division of the field into 9 squares, but this model produce poor information as shown above.

SportsEpilysis proposes the division of the court for setter analysis as follows:



The various squares represent the possible positions of the court, from where the setter can make a pass. To understand the scheme, it is mentioned that positions A3 and A4 (provided the height of the trajectory of the ball is satisfactory) are the positions of excellent reception (# in Datavolley notation), while positions A2, A5, B2, B3, B4 are the positions of good reception (+ in Datavolley's notation).

Returning to the analysis of Marcelo Elgarten the following report of DVEpilysis is an analysis of setter distribution based off the Criterion No3 (Position of setting) and especially the positions A2, A3, A4 (near the net). The reports contain all the attacks after a good reception (pass), in all rotations, with the threats of Middle Blocker (call) happening in front of the setter .

The transfer distribution for each attack zone is shown in bold digits:

Fig. 3.1 Setter in A4

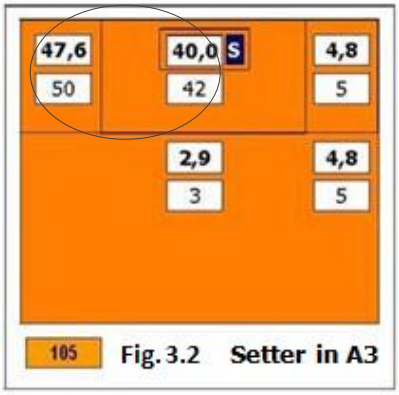


Fig. 3.2 Setter in A3

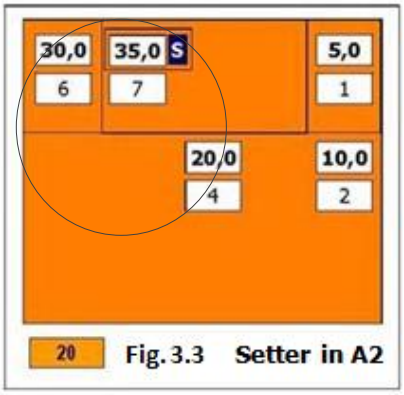


Fig. 3.3 Setter in A2

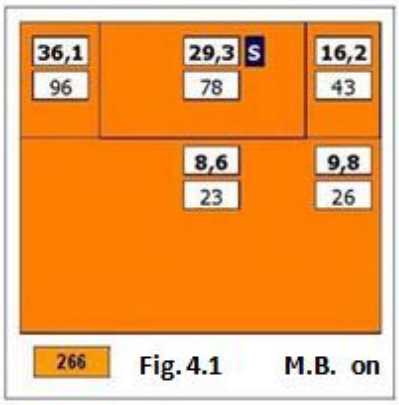
It is immediately clear that the tactical reception/attack model is completely recognized!
In fig. 3.1 (A4) the passer chooses the zones 3/2/1/6 close to him by about 80%.
In fig. 3.2 (A3) the passer chooses 90% of the zones 3/4/6 that are also close to him.
In fig. 3.3 (A2) the passer chooses 85% of the zones 3/4/6 that are also close to him.

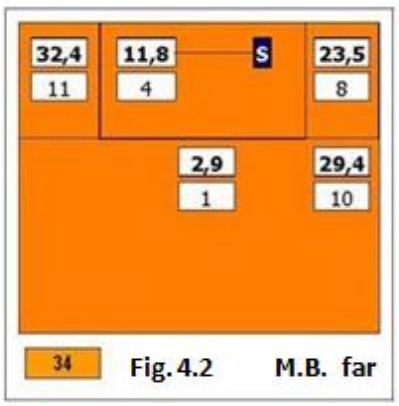
This is the first phase of the analysis, having used only one of the criteria and we are close to a reception/attack model much clearer than the previous one: **The setter selects 85% of the attackers closest to him.**

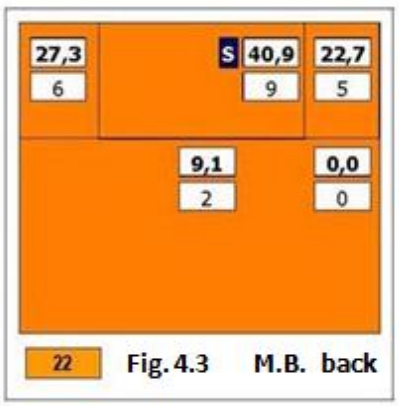
Of course it's obvious, that Marcelo Elgarten hadn't had any technical difficulty to make a long distance pass, but he prioritizes the fastest pass/attack.

Criterion no 3 (Position of setting) is very important and produces interesting results for attack directional analysis too. For example, the opposite player (diagonal) can receive a high setting from position B1/C1, from position E1 or even from position B6. Similarly, the attacker in position 4 can take a quick setting from A4 or from A3. Since the angles, distances, trajectories and approach to the net are different, directional analysis usually gives better quality results for the majority of attackers.

Moving on, the report below is an analysis of setter distribution based on Criterion No4 (Threat Position of Middle Blocker). The analysis tries to determine if and how the setter uses the Middle Blockers according to the position they perform their jump (In front of, Far or Behind the setter).







In fig. 4.2 for example the setter seems to use the MB who threats far and gives the ball to the attackers, while in fig. 4.3 the MB who threats from behind is the first choice.

Fig. 4.1 does not give us a clear model and needs further analysis with combinations of other criteria (for example the passer and central threat positions simultaneously).

For each passer, the analysis can be continued, involving different criteria from those mentioned above. It is clear that as long as the analysis continues with multiple criteria, the volume of the information produced is practically very large.

The coach must "filter" that information to finally formulate a complete attack model of the opposite team. Afterwards, he must formulate the right block/defense model for his own team and pass this information to the players.

The way of analysis proposed is not exclusively linked to the software of SportsEpilysis. The criteria can be integrated into any software with codes, such as Datavolley which has an open coding system for the user. It is the coach's responsibility to request that the statistician uses the required codes to represent all or a subset of the criteria of Setter Analysis.

In any case, better quality data means better quality analysis.