



TP #1

Technical pamphlets

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THE PUTTING

TECHNICAL AND ART

Introduction

This document is intended as a means for deepening the complex "art" of putting, so as to be able to represent, without too many pretensions to absolute truth, a starting point for reflection on the laws that govern something so seemingly simple, yet so complex, and involves purely technical aspects, aspects of sensitivity, cognitive and psychological aspects.

To these aspects it should not be forgotten also the physical aspect, this term physics, ie the general laws that govern the system player - putter - ball -green.

We still want to anticipate that what the reader will find writing to be understood as an element of its growth in the understanding of the phenomena involved in putting so explain why certain behaviours and effects of the ball and why a good technique is the basis from which develop a good game on the green : technique, therefore, not technicality.

Even formulas, that the reader will find in documents, may be overlooked peacefully by those who wish, but they are spelled with the intention to make it apparent that some common beliefs and convictions are in reality or wrong or inaccurate, and the clarification of these carry the reader to a higher awareness of what is a key element in putting or nullifying, minimally or not at all irrelevant.

The reasons why few golfers devote their time to perfecting the putting are various well-known to most people, and for this reason it is not worth listing them, with the exception of one, so to speak, that is the original sin of the golfer, at least in Italy.

When approaching the game of golf is almost systematically initiated the neophyte to the practice range where he received a 7 or 8 iron, it does not matter which, and tests their ability to hit a ball on a small support.

At the first decent shot, the neophyte receives a feeling so pleasant that the game is done : spend most of the time to hit the ball with force to send her away, as players who practice at his side or friend.

In short, all the efforts are devoted exclusively to the long game that will apparently be even more difficult and will require all the physical and technical efforts, in addition to time, at its disposal to improve the game in the sector that represents 80% to 50% of total shots in function of the level of play that gradually acquire.

Instead, in that sector where, from an athletic standpoint is required much less, but much more than that from the standpoint of cognitive and mental health, the player do not spend any effort and interest, if not a few minutes before the competition.

The thing is really strange, because putting is in fact the sector of game that requires less physicality, initially well understood, and less training, meaning by this that on the putting green gets a neophyte, in relative terms, certainly better game results than on the long game.



The putting

We follow this example, set on a course to 72 with a 0 handicap player.

Let us look at this aspect, though perhaps simplistic.

18 holes par 72	holes of the course	Tee shot with the driver	Tee Shot with irons	Shots with a woods	Approch to the green	putts
par 3	4	0	4	0	0	8
par 4	10	10	0	0	10	20
par 5	4	4	0	4	4	8
Total shots	18	14	4	4	14	36

It follows that 26 of 72 strokes are putts, ie 50%, and this is clear to all.

However, we think to a player HCP 28 and grant him 36 putts per round: 36 out of 100 shots, however, remain on the green. And then, a sector that accounts for 36% of the overall game we do not want to devote at least 36% of the total time to workout?

It happens then a strange phenomenon: most golfers believe that the long game is essential to complete the hole in the number of regular shots, namely that increases the probability of making par, this vision is to say that the putting, in economy of the play, is less important, or at least represents a blow more easy to perform, however, on which the golfer is satisfied by a putt missed by inches.

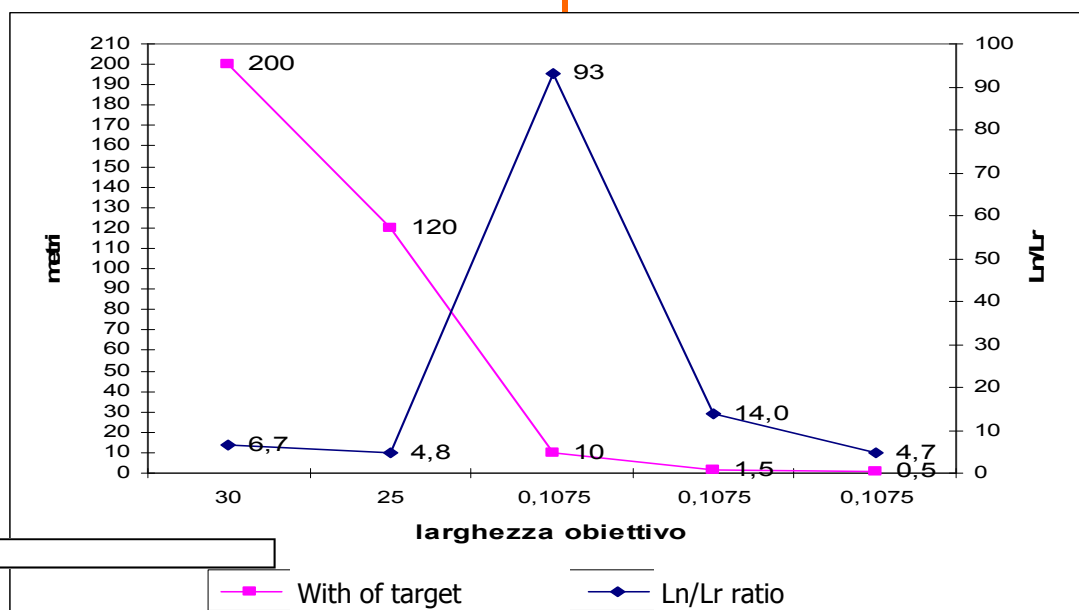
We want to say, you should not expect to sink the first putt from long distance, the second a little more than a meter you must hole and if it does not come into play the bad luck or the imperfections of the green.

On a par 4 from the tee play the driver to 200 meters (Ln): the landing area of the ball is 30 meters (Lr), then the ratio Ln / Lr is 6,6.

Now we imagine that to reach the center of the green remains 120 meters (Ln), green long and wide 25 meters (Lr), then the ratio will be 4,8. This shot is followed with the ball that stops 10 metres from the hole: the relationship with Ln/Lr in this case (0.108 m is the diameter of the hole) is 93, with the ball 1.5 meters Ln/Lr is equal to 14 and finally to 50 cm from the hole Lr/Ln is equal to 4.7.

The following graph illustrates how varied the ratio Ln/Lr based on the distance and size of the target, which will be the fairway for the first 2 shots, the green and the hole.

Graph 1





The putting

It is understandable how much the ratio L_n/L_r is in favor of the shots off the tee and from the fairway and only for a half-meter putt the value of the ratio (4,7) becomes comparable to that of the second shot to the green (4,8) .

It is obvious that in the long game involved other aspects that make it too simplistic model just proposed, however, based on the elements that intervene on the green, slopes , and cut into the grass, inhomogeneities and imperfections, there is an undeniable element of consistency between the size and distance of the target, as in any sport where there is a target (archery, basketball, bowling, clay pigeon shooting, etc) .

In addition, let's consider this: if the ball off the tee, or with the second shot, lands in a position that allows you to play to the green or to the green, the only choice that lies ahead is to make a lay up, a shot to put the ball in the fairway and continue the game, so a shot, usually short, which adds to the previous. Does not look exactly the same thing, ie a lay up, when you are wrong roughly the first putt on the green and you have to recover with a tentative shot to limit the damage (read 3 putt) ?

With this section if you wanted to enter the arguments that follow, you should discontinue treatment and send it back over, facing, therefore, other aspects that make putting so singular and specific.

But before closing the paragraph we want to report what René Descartes wrote in the first half of 1600 in his " Discourse on Method " , and it is better to write his entire thought.

The evidence : "The first was never to take anything for it, except what I had clearly recognized as such or, carefully avoid the rush and prejudice, and they do not understand in my opinion nothing more than what was presented to my mind so clearly and distinctly as to exclude all possibility of doubt. "

Analysis : "The second, to divide each of the difficulties under examination into as many parts as possible, and as much as necessary to the proper solution . "

The summary : "The third, to conduct my thoughts in such an order that, beginning with objects simple and easy to learn, I could go up a little at a time, and how to steps, to the knowledge of more complex objects, assigning in thought a certain order even to those

objects which in their nature are not in a relation of antecedence and consequence. "

The enumeration (control analysis) and auditing (control synthesis) : " And last, to do anyway enumerations so complete, summaries and so general, you can be sure you have not overlooked anything. "

From this point begins our discussion .

Why study the putt

We have often heard said that the putt is something "personal" so as to show any significant training.

Very few amateurs spend their time on the putting -green, much less adequate time for a good workout, even less for the understanding of what they do and even fewer are interested in understanding the phenomenon.

We will just remember not to use your wrists, not to watch the ball (some teachers argue that this is completely irrelevant, but we do not believe so) to be upbeat, to hit the ball square, to make a pendulum motion ... but no one tells us why and what are the effects resulting from following or not following these "prescriptions" .

We believe that paying attention and commitment on the putt, as in every other activity, it should also give effort "to the study and application", in fact, for any kind of initiative is necessary to study the subject and once the principles that regulate is understood, to apply them.

For this reason , to have consciousness and cognition of what is happening on the putting, we should study the phenomena that govern the putt and then apply them and critically observe and make an correct judgment about the results, in other words the study and analysis of the causes and effects.

The putting

The terminology

Often, in the exposition of a concept, we neglect, especially if scientific or applied research or empirical, the use of correct terminology, using a lexicon ambiguous and incorrect for what we are describing. The use of a correct lexical form makes everything adequately defined and eliminates the possibility of misunderstanding and confusion.

By placing in concrete cases we must be clear about the meanings of the terms we use to describe, even to ourselves during training, the improvements achieved or weaknesses of the putt.

So let's start, remembering that for us the experiment is the putt and the measurement is the hole.

1) *Precision* : ability to perform a series of shots from the same point at the same hole on the same line of sight with balls that stop as close as possible to each other ; (fig. 1)

2) *Accuracy* : ability to perform a series of shots from the same spot at the same hole with the same distance in the vicinity of hole; (fig. 2)

3) *Repeatability* (note 1 and 2) : ability to perform a series of shots from the same point and towards the same hole on the same line and/or at the same distance in the vicinity of the hole (by the same player, and with the same equipment)

The following figures illustrate clearly the definitions.

Figure 1 precision

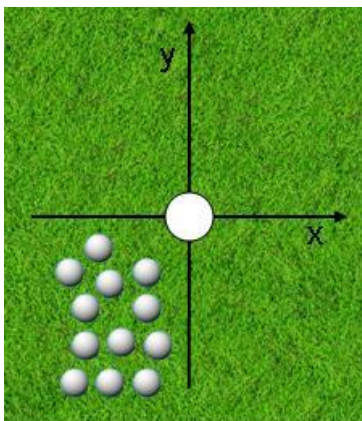


Figure 2 accuracy

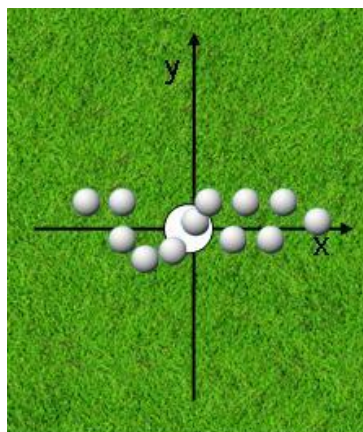
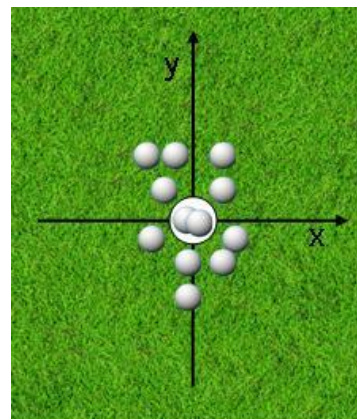


Figure 3 precision and accuracy



No one is unaware, and may appear trivial, that the precision is essential to hole the ball, which allows to direct the ball towards the hole and all close to each other, and the accuracy ensure that the ball reaches the hole, but does not exceed by too much: a precise shot may be too short or exceed the hole without getting an accurate shot can reach the correct distance, but being too far right or left of the hole.

The repeatability, to increase the number of balls holed, alone it is not sufficient if dissociated with the precision and accuracy, as the shot can be highly repeatable in the same error.

Now, if the ball was launched from a ramp (type stimpmeter) we would argue that defined a line and a distance, leaving the ball rolling, we can achieve the ideal conditions of precision, accuracy and repeatability, but unfortunately the ball is move the putter head that is attached to the shaft, which is operated by a human being.

Note 1 : The repeatability is related to the precision and the accuracy

Note 2: not to be confused with reproducibility that, unlike the repeatability, provides for the involvement of different players with the same putter or putter with different topic that does not concern us at the moment

The putting

In short, the faulty part of the system are we?

We will be defective, but we have the ability to learn by observing and studying phenomena, so that, from the understanding of the latter, it derives control .

And here it is appropriate to introduce the concepts of effectively and efficiently.

Effective: a system, or part of it, which leads to the desired result .

Efficient: a system, or part of it, which leads to the desired result with the least consumption of energy and resources .

It is clear that, while the effectiveness implies contain the precision, accuracy and repeatability, efficiency implies also the manner and conditions in which we reach the desired result.

From this set of definitions it follows, and it must be concluded, that effective use the term to indicate the best result of the putt and the efficient way in which we get this result mile.

Journals and texts, including technical, there are terms such as consistency, inconsistency , uncertainty and other adjectives, but now it is good to use these terms refer to the "qualitative character " of the putt as a whole made up of subject-object (player-putter-ball) and do not describe a result that can be "quantitatively measured" only in relation to the outcome of the shot.

In conclusion we can say that "precise , accurate , repeatable, effective, efficient " refer to the final outcome of stroke, ie as it has the ball relative to the hole, while the other terms are descriptive of the lexically putt without objectivise the result obtained compared to the hole we can therefore state: consistent and accurate, consistent and effective, uncertain but accurate ... etc. .

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