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THE ESSENCE AND IMPORTANCE OF SENSE OF TIMING IN FENCING

The sense of tempo is the most essential of the speed abilities. It is one of the most valuable assets, and virtually nothing can compensate the lack of it. But a sense of tempo can compensate for inadequate physical speed to a considerable extent.

Istvan Lukovich

Key words: fencing, tactics in fencing, the value of sense of timing.

ABSTRACT

In many branches of sport there are some similar traits, tasks, abilities etc. And yet there are many differences. Some branches of sport feature many closed (intrinsic) sensory-motor skills and the most important one is perfect execution of different movements (e.g. gymnastics, figure skating etc.). In other branches of sport there is only one closed motor skill and the task is to achieve best results “*citius, altius, fortius*” (field and track events, weight lifting, swimming etc.). In these sports there is no direct fight against an opponent. In fencing (and other combat sport and team games) there is direct fight against an opponent and thus the role of tactics becomes immensely significant. In fencing the energy abilities, coordination, motor skills (execution of fencing actions) serve as a base for tactics. In fencing the correct and fast execution of movement is not enough. A fencer during a bout must know, when and how to apply a given action. The fencer must choose the appropriate action in the most suitable situation. And this is why a very important aspect of tactics is the sense of timing (sense of surprise). It is connected with the choice of situation to successfully employ an appropriate action (distance, opponent’s movements, his intentions, accuracy of perception, fast and proper reaction etc.). The timing or fencer’s sense of surprise means perceiving, based on lightning-speed assessment of the situation, the opportunity to score a hit (convenient distance, opponent’s careless movement, opponent’s signs of inattention, opponent’s hesitation etc.) and taking full advantage of it.

TACTICAL SKILLS IN FENCING

The tactical preparation of a fencer is the main part of his development as a competitor. That is the most difficult part of his training but also the most practical one.

Vitali Arkadiev

The following could be considered among the most important aims of a tactical fight, and one the most salient aspects in fencing:

1. Very generally, one may say that the main purpose of a fencing action is to forestall, or be ahead, of the opponent. In epee, this is literal. One has to forestall the opponent in time. A hit,

to be valid, has to take place a fraction of a second earlier. In sabre and foil, forestalling takes a more subtle form. A sabreur or foilist, when counter-attacking, must either close the line of the opponent's attack or be ahead by a period of fencing time. In offensive actions, he fights to be ahead in gaining the right of way: he must be first to initiate the attack (not only in his own but, above all, in the referee's opinion). The conception of forestalling or keeping ahead of the opponent is expressed, not only by the mere speed of movement, but also, and perhaps above all, by the necessity for more selective and acute perception, and by the necessity for faster transformation of information (to understand, at once, what one sees, feels, and hears). To put the idea colloquially, the fencer has to be a thought ahead of his opponent.

2. A factor of immense tactical importance is surprise – the ability to act in a way unpredicted by the opponent. The more skilful the fencer is in exploiting the element of surprise, the less his opponent will be able to anticipate the time, speed, type, and intention of the action employed.
3. A very important feature and aim of tactical combat is the ability to gain the appropriate distance in a situation most inconvenient for the opponent. For example, if, after maneuvering, one gains lunging distance at a moment when the opponent is concentrated and waiting for an attack, it is not sufficient. It is far more valuable to gain the distance when the opponent is temporarily off balance, not concentrated, or expecting something quite different. Generally speaking, one may state that practically all fencing actions, and the footwork accompanying them, aim, in a way, at gaining “nearness” while preserving combat initiative.
4. Of equal importance in tactics is recognition and understanding of the opponent's actions and intentions – at the same time, misleading him by concealing one's own ones (confusion of display).
5. In their application, tactics are connected with technique and other factors of training and fights. This point will be discussed below.
6. The main tasks of tactical fencing activities are:
 - a) to avoid being hit,
 - b) to prepare an action, and
 - c) to score a hit.

These tasks are given here in a logical time sequence, but in practice they are intermingled.

Purposeful and efficient application of technical-tactical and tactical capabilities on the strip depends upon the specific energy and coordination abilities, technical skills and degree of psychological preparedness (optimum level of arousal and motivation; speed and efficacy of perception; high level, range, divisibility and direction of attention).

The ability to conduct a bout and use proper tactics is closely connected with the fencer's psychological state, his power of concentration, and self control. Undue nervousness, over-excitation, lack of confidence, overestimation of the opponent's strength, apathy, insufficient warming up, prevalence of inhibitory processes – all these factors may hamper the fencer in conducting a tactical bout, realisation of tactical solutions, and display of his technical abilities. Conversely, self-control, adequate level of arousal, consciousness of his own experience, and technical and tactical capabilities, positively influence the psychological state of the fencer, increasing his calm, assurance, dexterity and courage in action.

Every young fencer experiences a great deal of difficulty when it comes to his first free bout with an opponent. His fencing master has taught him certain movements and also indicated when and how to use them in a bout. However, when on his own in a bout, facing an active opponent, he does not know which movements he can use and when.

After many encounters, both in training and competition, with a real opponent, he learns, step by step, to apply his fencing actions in a bout. Slowly, he develops the ability to evaluate his opponent and to choose the most appropriate action in a given tactical situation.

The selection of the right stroke is probably the most basic tactical ability of a fencer. This is connected closely with timing, “feeling of surprise”, and acuity of perception.

Fencing tactics are described, briefly, as using all fencing actions, both preparatory and ultimate ones, in such a way as to avoid being hit, score hits against one's opponent and thus ensure victory.

Tactics could be defined in a simplified manner as applying technique in a bout. We could say, a little more precisely, that tactics are a fencer's application of all his technical and tactical

knowledge, motor qualities, and psychological preparedness for the purpose of winning a bout or achieving the best score, taking into consideration the strength, technique, fencing style and tactics of his opponent.

Tactical capabilities are closely connected with technique and other factors of training as I have described in other articles and books [5, 6]. The significance of timing – “feeling of surprise” – is described in many of my books and articles. In this article, I would only like to emphasise the most important features of tactics and discuss a very important factor of tactics: sense of timing (sense of surprise).

SENSE OF SURPRISE (SCelta DI TEMPO, L'À PROPOS)

L'À propos est la faculté qui nous permet de choisir le moment le plus favorable à l'exécution d'une action d'escrime.

(A sense of surprise is the ability which allows us to choose the moment most favourable for the execution of a fencing action.)

Paul Battesti and Louis Prost

In tactics, a very important role is played by the sense of surprise – often called the choice of time (scelta di tempo, l'À propos). Every fencer – even one who has just begun to do loose play – has been told, and realises from experience, how important it is to choose the right time for attacking his opponent. Of course, we realise that the expression “choice of time” or “timing” is inadequate. There are also questions of distance, tactical situation, and taking the opponent by surprise – all of which make a very complicated phenomenon nearly as difficult to describe as the conception of time or space.

It was noticed long ago that certain situations were more conducive to scoring a hit. This has been called, in English, “timing” or “choice of time”, in Italian, “scelta di tempo”, in French, “l'À propos”. The expression used by Polish fencers, “zaskoczenie” (literal translation: “surprise”) or “wyczucie zaskoczenia” (“sense of surprise”), better depicts the situation than an expression which only considers the element of time.

The expression “tempo” (literally, “time” in Italian) originates from the 16th-century Italian rapier play. When a fencer made a movement to cut

to head, and his opponent executed a very fast cut to flank, it was called “tempo” (stop-hit). If one attempted to execute a stop-hit – “tempo” – and his opponent counteracted it by a stop-hit with opposition, it was called “tempo contra tempo” – the origin of contemporary counter-time, understood as an action against a counter-attack. In later years, the expression “tempo” lost its meaning as stop-hit, and began to be used to describe a sense of surprise (and stop-hit in opposition was called “colpo di tempo” – time-hit). Since then, the expression, “to attack in good tempo,” has come to mean to attack, taking one's opponent by surprise. It is not a very fortunate description as everything we do occurs in time, and the success of an attack depends on lightning-like speed assessment of the situation and surprising the opponent by an immediate action.

The well-known fencing masters, Paul Battesti and Louis Prost, simply call it the ability to choose the moment most favourable for the execution of a fencing action [2].

Kazimierz Laskowski, the director of the military school of fencing in Warsaw before World War Two, stated that “tempo, or surprise, is the moment of taking unawares an opponent who, in that particular situation, is hit most easily by an unexpected action” [9].

Janos Kevey described his conception of timing as follows: “By the expression tempo, we mean the moment which is the most favourable for the beginning and execution of a fencing action. In such a moment the opponent is helpless and incapable of performing a defensive movement.” [7].

The Hungarian author of a well-known textbook on sabre fencing, Zoltan Ozoray Schenker, wrote that “A fencer must catch the moment when his opponent is totally or partially incapable of action,” and “such favourable moments occur when the opponent executes badly thought-out or purposeless blade movements or footwork, when his attention is distracted and his readiness for action is diminished. Such moments occur also when the opponent is, for example, preoccupied with planning the bout, or is distressed by its unsuccessful course.” [10].

Raoul Clery stated, “L'a propos ... c'est l'art de profiler des inattentions ou des fautes adverses a l'instant precis ou elles se produissent.” (Sense of timing is the art of taking advantage of the

opponent's inattention or mistakes at the precise moment when they occur) [4].

Professor Leon Bertrand, in his *Cut and Thrust*, describes timing in slightly more detail, and in combination with other elements. He advises that, in construction of attacks the fencer should employ three essentials: "what the Italians call 'scelta di tempo' – choice of time, judgment of distance and speed. They are three further lodges in the main stratum. The first is by far the most important of the three. Assuming the possession of the highest technique, the sabreur stands or falls by the presence or lack of this vital sense. Choice of time means the selection of the psychological moment to launch the offensive, it means executing the movement when your opponent is unprepared or least expects it. That is choice of time in its broadest significance. The final definition of 'scelta di tempo' is the seizing of the precise fraction of a second to move at the slightest sign of mental irresolution on the part of your rival. He may be keyed up to the highest pitch of concentration yet that fractional measure of time must come when, by some movement or thought, that concentration wavers. This lapse must be reflected by some sign, infinitesimal perhaps, but it is your 'cue', your signal, and on this golden opportunity you must act immediately. If we could imagine a highly sensitive machine registering a graph of your adversary's mental concentration, we should visualise an undulating line and we should attack with every downward turn of the pen, with the recording of each depression." [3].

Generally it is accepted that when a fencer catches his opponent by surprise, when the opponent is off balance and not fully concentrated, that fencer has chosen the right "tempo". Everybody knows that it is extremely difficult to sustain the highest concentration of attention for a very long time, and invariably lapses of attention occur in a bout: a fencer, concentrating on his own attack, may forget about his defence; a competitor, manoeuvring on the strip, may expose himself dangerously to his opponent's action; a fencer, executing blade movements, may open certain lines of his target – such and similar situations may be taken advantage of for surprise action. The ability to recognise and instantly take advantage of such situations is usually inborn, but it may be further developed by special exercises, and constitutes a fencer's "sixth sense."

When describing the clever seizing of an opportunity to score a hit, the majority of definitions (see above) commonly use the expressions "moment" and "time." Even the names given to the "sixth sense" of a fencer by various fencing schools are closely connected with the conception of time. **And yet it is very obvious that this is not a question of mere time.** The opportune application of an action in a bout, taking the opponent unawares, is closely connected with many factors of the tactical situation, such as distance, movements of the two fencers, the opponent's state of attention, etc.

"Timing" or a fencer's "sense of surprise" may be, perhaps, a little more exactly described as perceiving, based on lightning-speed assessment of the situation, the opportunity to score a hit (convenient distance, careless movements by the opponent, signs of the opponent's inattention or that he is preparing to launch an attack, etc.) and taking immediate advantage of it.

A fencer may take advantage of potentially suitable situations or he may, himself, create situations suitable to his purpose by the use of carefully chosen and executed preparatory actions.

My definition suggested above, like all attempts at simple definitions of complicated phenomena, is inadequate. In order to better understand "scelta di tempo" – so complex and difficult to define and yet so important in fencing – we have to discuss it more fully, on the basis of personal experience as a competitor and coach, observations of many tournaments, reflections, and literature (I have been and still am involved in fencing for more than seventy years).

The right choice of time, using the expression in the accepted English (as I know no better expression in English), means, in a very broad sense: to surprise, to attack the opponent unawares, to make a surprise action, to take by surprise, etc.

Professor Tadeusz Kotarbiński, one of the creators of praxeology, in his general theory of conflict, when discussing surprise, states that "We may assume that taking the opponent unaware derives its technical value from anticipation and from misleading the opponent or, at least, from taking advantage of the opponent's mistakes or lack of knowledge," [8] (the last one meaning lack of information or inadequate appreciation of the situation).

Let us now analyse this particular element in a fencing bout. Since a tactical intention (task, resolution, solution) can only succeed when it is executed in the right time (Greek, “kairos”; French, “l’à propos; Russian, “moment”) and is adequate to a given situation, it is obvious that it is very important to:

- a) be able to seize the opportunity to launch an attack or any other action;
- b) display psychological resistance in view of the opponent’s sudden attack.

Every manifestation of “sense of surprise” (“timing”, “sense of tempo”), understood as an opportunity to score a hit, involves two aspects:

1. A situation – a complex of conditions – providing possibilities of receiving a hit (being caught unawares, being taken by surprise, being attacked when one least expects it). This might be called “negative timing” or “negative surprise”.
2. A situation favourable to scoring a hit (catching the opponent by surprise, catching the opponent unawares). This might be called “positive timing” or “positive surprise”.

Neither positive nor negative timing occurs separately. In a fight they occur as two aspects of the same situation, comprising both external and psychological factors. What is “positive” for one fencer is “negative” for his opponent and vice versa.

Full and successful application of the right timing (“positive surprise”; taking the opponent unawares) – i.e., scoring a hit – may happen only with the occurrence of an adequate complex of various factors such as attention, distance, speed, accurate and fast perception, quick decision, appropriate choice of action, optimum level of arousal, optimum level of motivation, appropriate choice of action and its efficacious execution, etc.

The sense for “fencing surprise” is inborn but, under the influence of training, it improves in that:

- a) the ability to recognise and take advantage of appropriate situations increases with practice and experience;
- b) resistance to the opponent’s surprise actions is also increased.

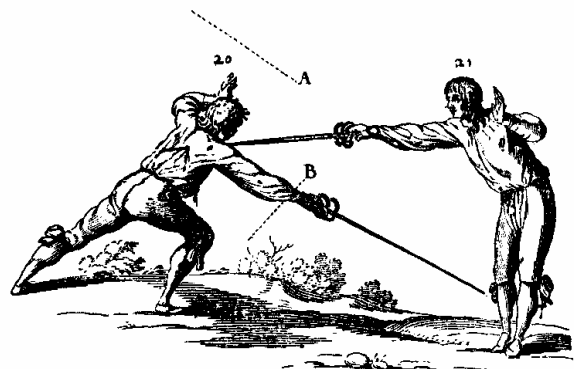


Figure 1. A fencer may take his opponent by surprise not only by applying an offensive action but also by defending himself against a counterattack. The picture presents a typical “colpo di tempo” (stop-hit). Picture from “Treaty on Fencing” by Francesco Alfieri, Padova 1640.

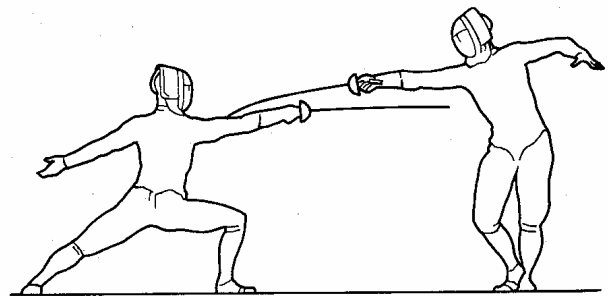


Figure 2. Contemporary epee fencing. On opponent’s attack the fencer counterattacks with a stop-hit with evasion of his right leg showing a good sense of timing

“Negative surprise” often leads to a temporary loss of technique, both in standard of execution and repertoire of strokes. A high degree of various fencing skills, proper automation and variety of sensory-motor skills (motor habit patterns) as well as ease of application of technique, are fundamental factors in increasing a fencer’s psychological and technical resistance to “negative surprise”. By developing, in the course of training, technical prowess, technical-tactical abilities, specific fitness and co-ordination, accuracy of perception, speed of reaction and movements, one at the same time shapes his “sense of fencing surprise”, i.e. choice of time.

In an attempt to explore more deeply the phenomenon of “timing” let us try to classify it.

A competitor who “picks up” the initiative and begins a movement may create a situation in which he falls into “negative time” and receives a hit or, on the contrary, a fencer who initiates the development of a certain tactical situation creates for himself the advantage of “positive time”, and so scores a hit.

Manifestations of “fencing surprise” include situations in which:

- a) a competitor, usually when defending himself, takes advantage of a situation which has arisen, mostly on the opponent’s initiative;
- b) the situation giving rise to the “fencing surprise” is created by the fencer (mostly attacker), who imposes his movements and initiative.

We could further differentiate (only after the assessment of a given situation may its motor complement, in the form of a fencing action, follow) the ways in which a competitor perceives and assesses the tactical situation as:

- a) visual,
- b) tactile,
- c) kinesthetic, or
- d) auditory.

In assessing a situation, not only is one receptor involved, but several, to varying degrees (e.g., not only touch, but touch and sight and the kinesthetic sense; not only sight, but sight and hearing). For example, in the execution of a parry-riposte a very important role is played by tactile sensation, but under the control of sight; when timing the beginning of an attack to the movement of the opponent’s feet, not only sight, but also hearing the rhythm of steps plays a large part. Usually, however, one sense plays a dominant role in the perception of a particular situation.

Luigi Barabasetti – the famous Italian master at the turn of 20th century who trained hundreds of fencing masters and greatly influenced European fencing – differentiated between two kinds of sense of surprise: “physical tempo” and “psychological tempo”. Physical tempo means extremely fast assessment of the situation, based on watching the external situation (e.g., the opponent’s movements, distance, and his weapon movements). Psychological tempo, however, is based on noticing the signs that reflect the opponent’s state of mind – signs of: a temporary lowering of attention, hesitation, concentration on preparing an attack, etc. Barabasetti thought that psychological tempo was inborn and could not be changed, and that

physical tempo could be improved by various exercises [1]. In my opinion, “psychological tempo” – although very difficult to develop – may be, and very often is – like various kinds of motor responses – improved by carefully and intelligently chosen exercises. There are fencers who can practically “read” the opponent’s mind and assess his state of concentration. This considerably helps the fencer in taking the opponent by surprise.

The most important factors concerning “fencing surprise” can be summarised as follows:

1. In our discussion on “fencing surprise”, instead of time and moment, we have stressed the importance of a complex tactical situation, comprising many various factors (which, like all material phenomena, take place in time).
2. “Sense of surprise” is an integral part of any bout, and an essential factor influencing the result of the bout.
3. “Sense of surprise”, “sense of timing”, is inborn but should be cultivated in fencers, by perfecting technique, motor responses, and tactics altogether.
4. The conscious strengthening of a fencer’s resistance to unexpected and dangerous situations requires a high automation of movement, i.e. a very high degree of acquisition of sensory-motor skills. Thanks to this, a fencer need not concentrate his attention on how to execute a given movement or set of movements, but rather on which movement or set of movements to choose in a given situation.
5. The constant tempo and character of movements (rhythm, direction, amplitude, and speed) makes the correct assessment of the situation, and choice of counteraction, comparatively easy. Every change in rhythm, speed, strength, and amplitude of movements, interferes with the correct assessment of the tactical situation. This causes the decision to be either delayed or incorrect. The most important factor in taking an opponent by surprise is change of rhythm and speed. This is why – although it may sound paradoxical – a good reaction to a moving object is a sign of a fencer’s talent and good form.
6. The above is probably connected with various processes of inhibition and excitation in the brain cortex and requires further and detailed study by physiologists and psychologists.

I think that the following quotation by Michel Alaux will be appropriate as a form of conclusion to the above article: *Once a fencer has learned the mechanisms of basic fencing movements, the activity loses its primary, total physical requirements and becomes more of a mental exercise. Concentration, self-control, and a quick decision command muscles and reflexes for successful scoring.*

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