

**Video reviewing**

# Introductions

# Why video review?

When taking part in a sport, especially one as physically and emotionally intense as fencing, there is little room for calm and clear reflection during the activity itself. Tiredness and emotion cloud our judgement and intense focus reduces our capacity to think with any real overview or perspective. To analyse our performance as we go, we must rely on the feeling of our technique, and from our narrow, often clouded focus try to determine the effectiveness of our tactical decisions. There are hundreds of cues and messages that we miss due to time and energy constraints. In short, there is a huge amount to learn from our performances which it is difficult or impossible to access in the heat of battle.

We will separate these learnings into four areas, and discuss why they are important and how to approach them using video review, one at a time. Those areas are: Technique, Tactics, Reflection, General Overview.

# Technique

Learning technique is a long and arduous process. It takes many hours of deliberate practice and countless repetitions. Most people, once they have learnt the basics of fencing can recognise good technique when they see it in other people but it can still take a long time for them to be able to replicate that same good technique. Part of the reason for this is that they rarely if ever get a chance to see themselves performing that technique, so they only have the feeling in their own body, and the corrections of their coach during lessons, from which to assess themselves.

It is probably no more than 10-20% of a fencer’s training that is done under a coach’s supervision, with immediate and direct feedback. That leaves the remaining 80-90% where they must rely on the feeling in their own body to judge their technique. For more experienced fencers it is possible to evaluate the resulting effect of specific actions to help make those judgements, but in young or less experienced fencers, there are too many contributing factors to the effectiveness of actions.

Dance schools have mirrored walls which immediately gives the students ‘double’ the amount information from which to improve their technique, from without as well as within. This undoubtedly serves to improve technique at a faster rate.

It’s possible to use mirrors in fencing but obviously not during fights, where it is being tested the most. For that reason, video review can be used as fencing’s version of the mirror.

# Tactics

Using video footage to check a fencers’ tactical awareness and decision making during a fight is a way of speeding up their understanding and development.

Considering the negative effect on cognitive function of fatigue and stress, it is clear that fencers are often not processing information perfectly during fights. Sometimes the mind is so clouded that the fencer is not able to think rationally at all and, when asked later on, are not able to recall what they were thinking or indeed even describe what actually happened in the fight. In terms of optimal development it should not be acceptable to just leave these experiences be. Wherever possible fencers should record and watch their fights, looking critically at how they got hits, why they received them, changes in tactics from their opponent, noticing any patterns in movement or actions from both sides, and making notes of any of this they think they can learn from. From this position, back home, without the fatigue and emotion, a fencer will be able to notice a huge amount about the fight and their own performance that they could not get by reflection alone.

# Reflection

Purely, the act of reflecting on a performance is a fantastically important tool for development. Thinking about a match once the emotions have worn off can lead to useful takeaway pointers for how to do things better or differently the next time. A fencer can reflect on their own effort and attitude, about specific behaviours that were good or not, and decide which they want to take with them and what they want to leave behind. Especially in the case of a disappointing performance, reflecting on it in this way can allow the fencer to process it and put it behind them, now better prepared to move on to the next match. The classic format for reflecting on any performance is with three questions; What went well? What didn’t go so well? What do I want to do better/differently next time?

# General Overview

In fact, the combination of reflection and tactical/technical review is a potent one for getting a clear overview of the strengths and weaknesses of a fencer. This is best done with the involvement of a trainer who asks questions and helps the fencer identify relevant aspects of the performance. From this process the trainer can get a sense of both what the fencer was feeling and how that translated into action during the fight. It then becomes easy to see if a fencer struggles with a particular mental aspect of the game (e.g. over-nervousness, lack of confidence), a physical aspect (e.g. losing balance, cardiovascular fitness) or has some technical or tactical aspects that they must work on.

The power of this method is that the fencer can see just as clearly where they need to improve, which leads to a high level of buy-in from them for making the necessary changes. Gone are the days of the trainer simply telling a fencing where they are lacking, with video analysis the fencer can be in the lead to making those observations and decisions themselves.

## How to work with it

**Technique**

Video reviewing for technique correction is a useful tool for all levels of fencer. Perhaps the most overlooked is using it with novice and intermediate fencers. Even complete beginners could benefit greatly from the extra visual feedback.

In the case of **beginners and novices** the method would be simply to record short exercises or single actions for the fencer to check immediately and feed forward into the subsequent exercise. The video can be accompanied by a comment or two about the action but it is not essential. If the fencer has seen a good example of the action, they should be able to correct themselves.

*Frequency*: During lessons or individual exercises, on a weekly to monthly basis.

 For **intermediate fencers**, the method above is also valid, but now there is also benefit from recording full fights (5 hits maximum). The fencer has a clearer idea of the kind of fencing they are aiming for, and how their technique differs from that. This kind of review can be done by the fencer alone, but ideally both fencers who were involved in the fight would sit and review the footage together. This brings in a level of reflection and collaboratory development that is invaluable to a young athlete. Of course a trainer could also be a part of this type of review, but given the usual time constraints most trainers are not able to be involved to this degree.

 *Frequency*: Considering that a review of a 5-hit fight takes not much longer than the fight itself (3-5 mins), this is an exercise that can be done on a weekly basis.

For **competitive fencers** the method above can and should be used, though perhaps on a less regular basis. For this group though, competition performance review becomes much more important. This level of fencer should have a decent standard of technique, and so it is interesting and highly beneficial to analyse it when under most stress, i.e. in competition. Reviewing competition performance can be done by the fencer alone, and they should watch all their fights when they have the opportunity, but where possible a trainer led review should also take place.

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| It is important to take notes of the key points in any review. This will give the fencer an important reminder of what they should be working on, but also will provide a record to check progress against. Each subsequent review should also consider the highlighted points from the previous ones. Has the fencer moved forward on these points or do they still need attention? |

To add to the learning for the fencer, it can be great to stop a video after a relevant action and first ask the fencer what happened there. Depending on their experience it can be difficult for them to recognise the fault, but they should be pushed to at least describe the action/phrase. Then you can ask them why *they* think the action worked or didn’t work. Through this kind of questioning they can usually come to the desired understanding without being given any of the ‘answers’.

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| Classic issues to look out for when considering technique during video analysis:* Balanced En Guard position/body position when moving/going for the hit
* Size of steps whilst attacking
* Wide arm movements that take the point too far from the target
* Wide parries, and unable to return point to target for riposte
* Rhythm of attacking. Is it one speed or is there a change of Rhythm?
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The tendency is to focus on actions that are not successful, since that is where it seems the fencer has something to learn but it is important to highlight both the good and the bad techniques. Reinforcing what is good about certain successful actions is often just as important to a fencers’ development as learning from their faults.

*The other aspects of reviewing; tactical, reflection and overview, refer in the most part to competition performances, and should ideally be led by a trainer or an experienced fencer. Elite level fencers could certainly help each other with reviews, to alleviate some of the workload from the trainers.*

**Tactics**

When analysing the tactics of a fight, the main thing to be looking out for is patterns in the action. Each action on its own, whether successful or not, is not enough to get feedback from, tactically speaking. But two or three of the same type of action becomes a part of the tactical gameplay. These actions do not necessarily need to be all in a row in order to be meaningful.

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| Take the example of a fencer being hit 3 times throughout a 15-hit fight directly from when the referee says ‘Alle’. This is evidence that the fencer has a dangerous habit of starting a phrase without a plan for the first moment. By pointing this out, the fencer can then see clearly how important it is to have a plan before the fight is re-started.  |

Once a tactical issue has been highlighted the fencer must consider how they can work on this aspect. Often just becoming aware is a powerful first step. But they must keep these learnings in mind, both in training and in competition so that they actually make progress. Keeping the notes from reviews accessible is a good way to keep them in focus during training. In the case of the example above the fencer may need to remind themselves before every fight that they need a plan, and continue to do so for a long time until it is fully automated.

Other examples of tactical issues that often come up are:

* Choice of actions at the beginning of fights- especially in poule matches
* Increased clarity over your own best fencing style/tactics
* Improve understanding of how to respond against a variety of fencing styles
* Recognising the change in an opponents’ game-plan, and responding in good time
* Understanding of when to put pressure on the opponent and when to sit back

**Reflection**

It is a very good idea, at the beginning of a review, or before watching individual matches, to ask a fencer to reflect on their performance. They should think and talk about what actually happened in the fight, what they did well, what didn’t go so well and any other comments or thoughts around it.

Helpful questions to elicit reflection and insight are:

* Talk me through the competition/fight
* What was going through your head at that point?
* How did you feel immediately before you started?
* How did you feel when/after…(specific incident or moment)
* Describe how you reacted?
* What do you think now about how you reacted?
* How would you have liked to react if you could go back?

This serves two purposes; it gives them a chance to learn from their own introspection and then highlight what stood out for them about the performance, giving valuable information about how they think/feel when they compete. And then it serves as a useful check, to see how closely their recollection of the performance matches the reality of it (from watching the video). It is quite amazing (mostly to the fencer themself) how often and the extent to which a fencer’s memory of a fight or phrase does not match the reality of it.

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| A classic example of the benefit of ‘reflection + video review’ is how a fencer responds to a perceived bad referee call.It is easy to tell on video, from the resulting tantrum, when a fencer is outraged about the injustice of a referees’ decision. They often remember and talk about those decisions after the match is over and in review. It is also often obvious how an outraged reaction to a referee call affects that fencer negatively for the subsequent hits.It is my personal experience that about 70% of the times that a fencer reacts badly to a referee call, it is in fact the fencer that has got it wrong, not the referee. Of course we understand that the emotional involvement means that fencers have a clear bias of perspective, but being able to show this bias at face value can be another powerful lesson. If a fencer is faced with the reality that their judgement at these moments is wrong more often than right, then what could possibly be the benefit of reacting strongly, and potentially undermining their performance for the next few hits as well? |

In this example, a fencer can then reflect on how they would want to behave if this situation arises again in the future (which in this case it certainly will, and probably every time they enter a competition). Is it worth risking the anger of the referee and their own psychological balance considering the fact that they are most likely wrong anyway?

The power of emotion at key moments in competitive fights mean that this kind of rationality can be an incredibly hard task for many fencers, but when they are confronted with continued evidence of the effects of these types of reaction, it can improve dramatically.

Generally speaking, reflection that is not technical or tactical can happen around any form of body language and behaviour, attitude or mindset during competition. Even without the use of video, reviewing purely based on the fencers’ reflection is beneficial. It can lead to insights into a wide array of issues that need focus, which leads us on to the final section..

**Overview**

This section is not really a part of reviewing, like the other three sections, but rather what results from them.

When you do a review with a fencer, getting them to reflect and then together mining the fight footage for any valuable feedback, it gives a rich insight into how a fencer performs, what they do well and what they need to work more on or need extra help with.

There are many aspects that affect performance that may only come to light through this kind of formal, conversational reflection and review. These are things such as:

* Optimising routines or preparation leading up to and immediately before the competition.
* Specific thoughts or concerns/worries that affect individual fencers.
* Interpersonal dynamics (how a fencer relates/communicates with their coach or teammates)
* Concerns outside of fencing/sport that are weighing on their mind
* Unhelpful, underlying assumptions or expectations
* Irrational beliefs

The coaching method of posing questions until the fencer come up with the insights themselves is a brilliant way of having the fencer guide their own development. Follow up each insight with the question: ‘How can you improve on that before the next competition?’ Or perhaps: ‘What are you going to do to make sure this is not a problem next time?’ They can generally figure out what needs to happen to improve without help from a coach.

The goal to communicate here is almost always to improve on each highlighted point by just 10% by the time of the next review (i.e. for the next competition). Some things can be improved 100% overnight, e.g. remember to bring a water bottle and towel to the piste. But most technical, tactical and psychological issues take time to improve, so the 10% goal makes the clear point that you are not asking for miracle cures, but rather just steady improvement.

As Sean Fitzpatrick (Captain of New Zealand Rugby team) said, ‘Success is modest improvement consistently done.’

**Conclusion**

What you will find using the methods above is that your fencer (and you as the coach) will gain a clear overview or map, illustrating what affects their performance, both positively and negatively. The more detailed this map becomes, the more chance they have of strengthening the positives and avoiding/developing the negatives. The process by which they can effect these changes, as with anything, is through deliberate training, with the review procedure acting as the catalyst.

The power of this approach comes from the fencers’ integral involvement in discovering the specific issues. *They* are the ones who often come to conclusions about what they need to improve and how they can do it, and the feedback on their efforts comes clearly and almost unavoidably with each subsequent review. If a certain fault persists without improvement it is often blindingly obvious, and that provides enhanced incentive to the fencer to renew their efforts. Every competitive fencer wants to improve their level, and when presented with the hard evidence of what is needed to do so, that is usually all the fencer needs to do what is necessary.