17. Chronophotographic Gun opposition

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The Problem

Étienne-Jules Marey pioneered the use of time resolved photography to study physiology of humans and animals, and in particular their postures and locomotion.

Propose a quantitative study of important physiological functions or parameters that would require analysis of similarly taken videos.
Switzerland’s Problem Statement

With the help of both professional and amateur athletes we analysed the accuracy of their sport specific motion, in particular standing long jump.

This was used to spot areas, where specific training would lead to the greatest performance improvements.
### Addressing the problem

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Weaknesses

Theory

Practical

1 test
Not enough analysis in terms of momentum & kinematics
Points for discussion

Making improvements to armatures, retrying to get an improved result
Ability versus technique

Measuring relative to center of mass
Ability and technique—eg. Controled conditions, all great surfers had completely differed pop techniques.
First have to establish that technique is the optimum.

Smiling (Georgia) is culturally dependent, how you emote is dependent on where and who have brought you up.
• Was your investigation quantitative
• Define physiological function
• Is this conclusion relevant to all movements of this kind
• Other factors not considered;
  – Genetic difference (between flowers, people)
  – Movement of people is culturally, genetically, environmentally, psychologically and physiologically dependent.

conclusions rely on untested assumptions