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Capturing complex processes of human performance

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Propositions (Stellingen behorend bij het proefschrift)

Capturing Complex Processes of Human Performance:
Insights from the Domain of Sports — *Ruud den Hartigh*

1. When studying human performance processes a complex dynamical systems approach should be applied, because individual and environmental factors continuously interact and change over time (*this thesis*).
2. When soccer players notice that a particular player ‘sprints’, they do not necessarily see that the player actually ‘chooses position’ (*this thesis*).
3. Variability in rowing performance reveals information about the complexity of the motor organization and the effectiveness of the athlete’s behavior (*this thesis*).
4. Sport performance is not determined by a central controller such as the brain, but by interacting component processes *across* brain, body, and environment (*this thesis*).
5. Because most studies take snap-shot measures of performance-related processes, researchers often fail to notice patterns of change (*this thesis*).
6. The development of psychological momentum in a sports match depends on the performance history, both within that match, as well as across matches (*this thesis*).
7. There is no common road to excellent performance, because it emerges out of idiosyncratic networks of continuously interacting personal and environmental variables (*this thesis*).
8. Si toutes les parties de l’univers sont solidaires dans une certaine mesure, un phénomène quelconque ne sera pas l’effet d’une cause unique, mais la résultante de causes infiniment nombreuses ; il est, dit-on souvent, la conséquence de l’état de l’univers un instant auparavant (*Henri Poincaré*).
9. Als je aan alle [32] spelers in het ABN AMRO World Tennis Tournament vraagt hoe zij hun carrière hebben opgebouwd, krijg je waarschijnlijk 32 verschillende antwoorden (*Richard Krajicek*).
10. If you want to have a killer-forehand, dress like you have a killer-forehand.