

# A Brief Taxonomic Consideration of Sports

Samuel Powell

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I watched my third-ever game of soccer last night. I think it's interesting how soccer is the most continuous game (that I'm aware of, perhaps other than rugby which I know even less about), in that play is not stopped except in the case of a penalty (or out-of-bounds, or injury, etc.) Also, likely connected, is the fact that possession is somewhat loosely defined. Since you can't really (or it's not pragmatically useful to) physically 'hold onto' the ball, possession is about controlling the paths of travel of the ball, the passing lanes. Then the strategy that goes on between the goals is about positioning players so that there is a useful path for the ball to travel to the goal, which can and does involve repositioning and traveling backwards to reset positioning.

This is in sharp contrast to American football in which play is stopped frequently, possession is generally well-defined, and the play is less dynamic (in the sense of fewer changes of possession and frequent breaks in play). Advancing across the field is therefore measured and involves well-planned plays designed to advance methodically.

Ultimate is kind of an intermediate case, where possession is well-defined but play is dynamic (not regularly stopped). I think this allows for more structured play, where there are a number of known routes or plays that work or are expected situationally.

This suggests a few taxonomic categories: whether a sport is dynamic or punctuated and whether possession is directional or local. A dynamic sport will generally have simpler plays or strategies and more improvisation, while a punctuated sport will generally involve more complex strategies and plays and less improvisation, due to the ability to determine plays and strategies before continuation. A sport with directional possession will generally be concerned with creating pathways toward the score and taking more time to set up lanes toward progress, while local possession will likely lead to shorter-term planning and more directed attacks.

A third possible taxonomic category is whether defense and offence are distinct (in terms of separation in time, strategy, or even players). American football has high role distinction, while soccer and Ultimate have lower levels of role distinction. Soccer's role distinction is largely in position and players, while Ultimate's is primarily in strategy. Table tennis is an example of a sport with nearly no role distinction, though its taxonomy is probably not well covered by the taxonomic categories listed here. This taxonomic category is at least highly correlated with, if not consequential to the dynamism of the sport.