

An Alternative Sports Metaphor for Understanding Teamwork as Complex: Soccer

Abstract

As critiques of and dislike for organizational teamwork increase, alternatives must be sought for both pedagogy and practice. Competitive sports metaphors are often used in management practice and teaching; unfortunately, these tend to reflect distinctly American values of zero-sum competition, cybernetic, error-correcting efficiency, individualistic success, therefore de-emphasizing what (American) organizational teamwork needs most: creativity, innovation, genuine autonomy and inventiveness. This is precisely what makes both the pedagogy and practice ineffective.

This essay proposes the game of soccer as an alternative metaphor and heuristic device. I contend that both organizational teamwork and soccer are quantum phenomena. Specifically, I demonstrate how soccer teamwork is nonlinear, holonic, emergent and engaged, and articulate those concepts with extant, conventional understandings of teamwork in organizations.

My hope for the essay is that the soccer metaphor will inspire a more complex understanding of organizational teamwork as a collaborative (rather than cooperative or coordinated) activity.

Want Better Teamwork? Watch More Soccer!

*We need to ground the reality of “we” in a new conceptual structure.
Danah Zohar, The Quantum Self*

In the past few years, both the principle and practice of “teamwork” has come under increased scrutiny as one of those organizational practices that in wide variety of ways, has not lived up to its expectation for organizational effectiveness. While there has been some success for project teams – designed for a specific purpose and then no longer necessary – other kinds of teamwork, such as that needed by management and executive decision-making teams, seems much more difficult to achieve.

It’s hard to find workplaces that exemplify teamwork. Susan Heathfield contends, for example, that “We have miles to go before valuing teams and teamwork will be the norm.”

In America, our institutions such as schools, our family structures, and our pastimes emphasize winning, being the best, and coming out on top. Workers are rarely raised in environments that emphasize true teamwork and collaboration.

As we typically understand teamwork, it is not a natural process. Our prototypes for teamwork are derived primarily from collectives of individually talented individuals who manage to coordinate their individual talents for large sums of money. “Team” is the name given to these groups of individually talented people.

Second, we may not be disposed to teamwork. Chris Argyris’s famous thesis about Model I and Model II governing assumptions suggests that we are almost anthropologically predisposed to compete for zero-sum outcomes (Model I) rather than collaborate for positive sum outcomes (Model II). We do, according to Argyris, have an idea of what teamwork is, in the sense of genuine collaboration, but we seldom activate that idea.

Third, as conventionally practiced in organizational and business contexts, teamwork is a managed, “performed” process; it has goals, roles, expectations, objectives, reporting procedures and cybernetic mechanisms to insure efficient progress along a stipulated path toward goal accomplishment. This makes it simply coordinated or cooperative activity, rather than collaborative activity.

In a nutshell, these three reasons would account for its failure.

Genuine teamwork requires a level of participation and collaboration not usually requisite to specific project accomplishment. Importantly, it is this “next level” of knowledge, skill and ability that distinguishes genuine collaborative teamwork from simply cooperative or coordinated activity. Unfortunately, we only have a vague idea of what this next level is or entails.

The concepts most often used to capture or frame – teach and understand - this next level, seem almost magical, celestial, or otherwise unreal, unattainable, or out of our control: *synergy*, *jazz*, *improvisation*, or *flow*. While enchanting, in graduate management classes or training seminars I conduct, there is usually no one who can articulate how, for example, “synergy” means anything more than “*everyone working together*,” or how it is different from cooperative activity or coordinated activity. “Yes, the whole is greater than the sum of the parts, *but what does that mean?*”

My professor-ish frustration with this subsides when I take a minute to reflect on the rationale. Not many practicing executives, managers, team leaders and MBA’s are afforded a deep conceptual understanding of genuine teamwork; many have not been exposed to alternative pedagogies or heuristic devices that would drive an applied understanding of genuine teamwork or collaboration.

In fact, *contra* recent defenses of management education (see *BizEd*, Sept/Oct 2007), what B-schoolers have been very much exposed to instead are foundational principles of individual success, zero-sum interdependence, task-focused efficiency, a cybernetic understanding of team development, and the fiduciary gain that results from doing this well within a fragmented, competitive world view. Individualism, competition, control (error-correction), efficiency and economics are in fact the driving metaphors of business and management, in practice and pedagogy. Most companies and cultures still struggle with ways of awarding collective recognition for collective accomplishments. Little wonder that “teamwork” in the celestial, or quantum, sense of synergy or flow, remains merely a neat, ideal, unattainable concept, and that coordination or cooperation often suffices.

Consequently, most if not all the prescriptive advice for improving teamwork – decentralize control and authority, trust each other, have shared vision, appreciate differences, learn continually, support others – requires a mindset wholly foreign to conventional thinking. Certainly a decade or two of more new-agey ideas has made recent B-schoolers a little more malleable. But there is little evidence that much has changed in organizational practice. And alternative mindsets aren’t simply inserted as new software – they must be learned.

So the question becomes one of how to cultivate an alternative understanding of teamwork such that collaboration becomes more realistic or at least more realizable. Different or new ways of thinking about things are often aided by metaphor.

An Alternative Metaphor

Competitive metaphors from sports are used often in management and organization theory and education, as well as office and business practice. Intriguingly, one sport that is rarely if ever used is soccer. That’s probably because Americans understand soccer about as much as they understand teamwork: as I will contend in the paper, this is due, in turn, to the fact that both are quantum phenomena.

In my decade plus of coaching, studying and observing the game of soccer, I have derived some interesting lessons about playing together that help cultivate an alternative understanding of teamwork from those furnished by American football, baseball or even basketball. More pointedly, I have concluded that soccer is a more effective metaphor for the pedagogy and practice of teamwork in organizations.*

Soccer is Nonlinear

First and foremost, there is something nonlinear or noncybernetic about soccer that distinguishes it from most sports Americans are familiar with. Scientifically speaking, a nonlinear system is one whose outcomes cannot be predicted from initial conditions along a straight or stable trajectory. Soccer allows a very wide latitude of acceptable play, and is not necessarily error-correcting. It is dynamic in the sense of continuous play (stoppage only for serious injury or to award penalties) on the field, rather than turn-taking. It never seems to visibly, obviously progress, in the way a 3 minute 16 point run would change a basketball game, or a three-run homer would change a baseball game, or a couple of consecutive deep route completions would alter a football game. In soccer, the ball can go from one side of the field to another in a single play, and sometimes backward (see: the drop), in a single play. In basketball, by contrast, a the ball cannot go back to the other side of the mid-court line; a third-baseman would never think about throwing the ball into left field to effect a force play at second; and in American football, if we are going backward, we have a long day ahead of us. And that is only on offense – there are also eleven defenders to contend with, each with their own set of skills, moves and tricks, whose job it is to take the ball from you.

In this sense, we might also say soccer is “chaordic”: it is as much chaos as it is order. It is “orderly, in that each team intends to try to do something in a designed way. Certainly every team seeks to move the ball down the field (efficiently) with the intent of a accomplishing a goal. But it is chaotic in that all players know there are hundreds of things that interfere with that objective; that is, the nature of the game as played is that it while it might be predictable in theory or principle, it is unpredictable in practice. Thus, the intent of moving down the field to score a goal might better be understood as *collaborating to create the conditions to finish a play* (score). And again, the game is inherently dynamic as it is constantly moving, hence changing.

But the important point is that its randomness or chaos is accepted and featured at least as much as the ordered part. Every misstep is not seen as deviation or correctable error; off-target passes are necessary and acceptable risks; missed shots and missed tackles are part of the game. There are very wide parameters for *effective* play and development, yet few rules for *correct* play. There are constants, such as “positions” or “areas” for which players are responsible (wing, midfielder, forward, sweeper, etc), and there are more or less standardized “runs” or executions that are tactically fundamental; also, certainly there are scripts at certain times (marking for set pieces like free kicks and corners). But the vast majority of the game is played within these very wide parameters. It is complex and creative – in fact once you are about sixteen years old and are assumed to have mastered the technical skills to play the game, most of your

development is about creativity – about the multiplicity of choices you can make with what you can do.

Teamwork Lessons from Nonlinearity

1. Control Less

As we know from other sports, the player with the ball controls the field. The American football quarterback, as well as the point guard in basketball, “controls” how the play will develop; in baseball, the pitcher “controls” the batter. However, and excepting extremely rare circumstances (C. Ronaldo, for instance) in soccer, *the player with the ball is the slowest player in the field*. The player with the ball “controls” the field but only for a very short time, because carrying (dribbling with your feet) – technical speed – is very much slower than non-technical speed (unencumbered running). Hence, the carrying player attracts defenders very quickly who will in all likelihood, take the ball off their foot. So the **only** way the team progresses down the field, is by passing the ball to someone else.

2. The Drop

Often, if a carrying player realizes his or her productivity with the ball is stymied somehow you will see them kick the ball backward – in the opposite direction of their goal, to a field teammate or even all the way back to the goalkeeper. To the linear thinker, this seems counterintuitive and even dangerous as far as play development goes; however, to go “backward” is not a loss – it is to gain the advantage of more time, better field vision, for better execution of the next pass. It is an understanding of immediate personal unsuccess as an **opportunity** for someone else to do something for team or holistic success.

By contrast, how often has your team “dropped” or gone slower – taken the time to reexamine unchallenged assumptions in their conclusions, ask unasked questions, or challenge the goal and path that the project leader assumes to be correct? How often have you passed off a task that you wanted to do, but someone else was better qualified for? In conventional understandings of teamwork, aren’t these characteristics of weakness, inefficiency or being “in trouble”?

Nonlinearity counters conventional and ineffective understandings of team leadership and control. The most common advice offered in hundreds of books and documents is that team leaders “control” the team. Allegedly, this is accomplished via clear communication of a clear singular vision, designing and sticking to deliberate plans, setting specific expectations, clarifying roles and procedures, and dozens of other prescriptive adages.

The consequence of such actions is to implicitly invite – and I imagine invoke sanctions for - unmet expectations, blurred role activity, procedural deviations, etc. In other words, the more prescriptive emphasis on specific leadership behaviors and control

functions, the more opportunity for error-correction. In fact, look at any of those hundreds of documents and these will be nearly identical to the reasons given for team failure. The evidence is that the top leaders seldom create the teams they want other groups in the company to be. The top, after all, is a place you typically get to through competition and self-reliance, or at best, by building tight networks of power and affiliation.

Consequently, in some sense can we not say that teams fail or are ineffective **because** they are (over)controlled, and (over)managed, rather than undercontrolled or unmanaged?

In a way, yes. Georgia Institute of Technology's John Vallas found that top-down, expertise-driven error correction actually limited a firm's ability to improvise and lowered morale; that a logic of standardization was pitted against a logic of participation, and, intriguingly that:

. . . successful implementation of [team participation] may depend of the ability of corporate executives to demonstrate the very capacity for flexibility they demand of their employees.

John Allpress, National Player Development Coach of the Football Association in London, confirms this by recognizing that there are differences in error-correction. Certainly, there is good reason to spend a great deal of time honing skills and role expertise by correcting mistakes. But that alone leads to rigidity and staleness, an uninspired predictability of role performance, and most importantly, *a hesitation to experiment*. Crucially:

Experimenting develops flexibility *and the ability to be unpredictable*, the perception to see tiny differences [in possibilities for play] . . . Experimenting helps develop creativity, innovation and inventiveness – hallmarks of the best and most effective footballers. (Allpress, 2006, p. 7)

With just a little extrapolation, what is the hallmark of an effective team member, or team leader for that matter? It could be their precision, their sharp expertise, their clear communication, their eager adherence to their role. But I think it could also be the creativity and inventiveness, the unpredictability, which only a quantum mindset could appreciate. And this is a mindset that is rarely if ever cultivated.

As nonlinearity counters conventional advice regarding leadership and control, it also cultivates its opposite: decentralization, equity and empowerment. Everyone a leader or no one a leader. Both work, keeping in mind that leadership and followership are both interdependent and situational.

In terms of the former, in the 2006 World Cup, Argentina's Esteban Cambiasso scored. He was happy; the team celebrated. But what actually happened was that Cambiasso "finished" a play comprised of an almost unheard of *twenty-four passes* up, back and

across the field. Described by blogger Roger Cohen as *part ballet, part advanced mathematics, part instinct and part genius*, this is truly a pinnacle of team play. Could any of your team projects at work be described that way?

Now, certainly work teams in organizations celebrate upon projects well-done, and the feeling that comes from such accomplishment. But doesn't this usually mean that they haven't rained on someone else's parade, that their conclusions or plans were not unacceptable, politically or otherwise, to some else? Hardly the transcendent experience described above.

A second example supports the same point: Greece wins 2004 European Cup with a team of players virtually unknown to premiership soccer in Europe, let alone the rest of the world – no stars, no *prima donnas*. Much of Greece's effectiveness was attributable to flexible, non-rigid team play, facilitated, for example, by *defender* Katsouranis making offensive plays and runs, therefore blurring his stipulated role as a defender. By contrast, most of the literature about "why teams fail" cite precisely this blurring of roles and expectations as a reason.

Soccer is Holonic

Scientist Arthur Koestler coined the "holon" as the fundamental unit of the universe: everything is dyadic, simultaneously both whole and part, demonstrating both self-assertive tendencies and integrative tendencies. That is, tendencies for individual expression/prominence, as well as tendencies to be part of the larger whole.

Soccer exhibits this in its constant push-pull dynamic of movement, where a player or team is only rarely certain whether they are attacking or defending, and that could change in an instant. Moreover, such instances *emerge* from the play. More experienced coaches identify a certain phenomenon of the game as the "transition game" – where, for a minute, it is clear that one side has to quickly move from offense to defense. Those more experienced may disagree with this, but I view the entire game as a "transition" game – a constant, continual dynamic full of creative tension where anything can happen anywhere on the pitch (field). Indeed, soccer is a game where offensive skills are ALSO used at the defensive end of the field, and defensive skills are ALSO used at the offensive end of the field.

Teamwork Lessons from Holism

1. Technical AND Tactical Preparation

Know your role, be prepared and on top of your game (expertise and skills). But more important, work to understand how what you have fits into the scheme of the entire team, and how you can contribute it productively. One of my sons has expert footwork that would look stunning on a video. However, he usually does so much of it that he forgets he has teammates there to pass to. Better if he uses his skill to beat one defender to create space and then pass the ball off to someone in a better position to do something else with it.

2. Everyone Must see the Field . . .

(as well as the grass) and the possibilities. This means understanding the big picture. Here, we can draw from some of the conventional prescriptive wisdom about teamwork: team members should know why they are doing what they are doing, and what its outcome will be; correspondingly, project leaders must understand the management or executive rationale for the project. Intriguingly, in any given instant, soccer play may be understood as operating in what is scientifically called *phase space*: the mathematical space of all possibilities in a given situation, or the collection of all possible configurations. If everyone knows the big picture, or when everyone sees the field, there exist countless opportunities for collaboration that may be unseen and unpredictable from initial project conditions or direction.

3. Perform-Support-Perform-Support *ad infinitum*

One of the earliest tactical lessons a developing soccer player is exposed to is “pass and go”. What this means more precisely is “Never pass and watch.”

Holonically speaking, performing or executing your job or task is only half the holon, the self-assertive tendency; the other half is supporting others as they execute theirs, the integrative tendency. Along the same lines, your job on the team isn't perform OR support, it is perform-support constantly. This speaks somewhat to roles, contributions, tasks and their place in team accomplishment. More directly, it speaks to the intentional blurring of these roles for a more collaborative endeavor.

Soccer is Emergent

Again, in scientific language, emergence refers to the arising of new and unexpected structures and phenomena that could not have been expected to arise from the initial conditions of their dynamic. Emergence is a product of self-organizing systems.

Soccer players understand emergence in three ways:

First, it is usually the reason that play seems slow (for Americans). A pass here, a header there, drop it backward 20 yards, switch it across the field, *for godssake when is someone going to knock it out of the park?!* But while this sort of fundamentally sound tactical play seems boring, slow and ineffective, understand that it is *within these initial conditions* that players are watching for openings to exploit in the defense, waiting for the right time for a support run, seeing where the space is that a teammate can get to. Some of it may be predictable, but much of it is not. Rather, those moments we would recognize as “progress” (Americans recognize this by the crown cheering), arise spontaneously from the existence of momental field dynamics.

Second, thus, it is what happens when a particular offensive configuration appears about the mid-line or anywhere really, when passes and drops and heads and switches and ball tricks have been received and reciprocated, when they know that what they are

doing now is clearly working, and all of the possible conditions have collapsed into this zone of thrilling potential (effectiveness). The momentum is up, the spirit is unmeasurable, and the light in their eyes tells all of the exhausting unmitigated fun they have at this play.

Third, they understand it from the defensive perspective also. They realize that what the other team is doing clearly has transcended their own constants or structure; they are working harder and faster, not smarter, relying on the gut work of those hours of honing individual expertise and fundamental skills, trying desperately to be able to see a field in which particle is not becoming wave right in front of them. Indeed, emergence is rarely countered with managed skill or protocol.

Teamwork Lessons from Emergence

Form Follows Function

Nothing of surprising significance can emerge from tightly prescribed functions and conditions, assigned roles, managerially “necessary” team members, controlled expectations or status quo team structure.

From personal experience: Several years ago, as a function of large scale university restructuring, my department merged into the business school. In July or August, the B-school organized a “retreat” out at the lake to welcome its new members, to get to know each other, integrate, and start to organize the business of the coming year. Part of this was the assignment/organization of the yearly B-school committees. I was assigned to a new committee for the B-school – the “Innovation Committee.” Our new, particularly foresighted Dean gave this committee one charge: “Think out of the box!” (At the time, the phrase was not the cliché it is now.) What are the possibilities here with these new members, what could we conceivably accomplish, given this influx of new and different talent? I was excited.

For a minute. Thinking out of the box began with a disheartening discussion about an agenda and a Chair. After several minutes of fumbling with that structural albatross, it became apparent, that as a new committee, we were in uncharted territory – agenda and Chair became sort of interdependent, well, because there had to be a goal and, well then a path to the goal, and certainly some measures of progress, and who’s going to report this and so on *ad nauseum*. It was evident to me that none of the accountants, management professors, marketing or economics folks that surrounded me had thought about innovation much. Though their default mechanism was “structure”, how could there possibly be an agenda?

Sheepishly, I offered: “We are the *innovation* committee. The only charge we have is “think out of the box.” How ‘bout if we just go without an agenda for awhile?” Stunned silence – for several long agonizing moments. Like I had launched a tornado across their desks of nice neat papers. Then, some nervous chuckles, and the idea was dropped. I never spoke again in that meeting, and the Innovation Committee has never met since that retreat seven years ago. Evidently because there was no extant structure for discussing innovation or possibility.

The concepts I mentioned earlier in the essay – flow, synergy, jazz, improvisation, possess the same pedagogical and practical difficulties as does ‘emergence’. However, what is usually left out of those prior concepts is the distinctly quantum explanation: all derive from a technical deftness and expertise that strives to imagine the unimaginable breadth of possibility within formal, structured or accepted limits. Such striving often sounds/seems complex and disorderly – much like soccer.

Soccer is Engaged

Soccer players recognize the importance of engagement with their teammates on the field, as their actions are moment to moment. By engagement I mean things like talk, trust, communication. Developing soccer players are always communicating (or should) – where they are, where to put the ball, who to play to, who to mark (guard). By the time they have played together for a couple of seasons they know each other very well; on and off the field relationships are for the most part solid. Importantly, what ensues from this is sort of a telepathic self-organization on the field – where they all know each other’s assets and liabilities, their tendencies. They trust each other to do their best with every pass, every reception, every tackle, every shot. And if ineffective at a particular moment, “unlucky, we’ll get it next time.”

Teamwork Lessons From Engagement

1. Understand each other, as well as the project.

Appreciate the diversity of talent on your team. Value your own talent for exactly what it is, no more, but no less.

2. Build relationships of connection and support.

In organizational teamwork, are we afforded the opportunity to develop relationships that help us in the long-run? Do we communicate in supportive ways that help the team or each other, or mostly defensive ways that protect turf, are self-interested and don’t rain outshine anyone else?

In conclusion, the implications and lessons I have drawn here are admittedly idealistic. They are derived from an amateurish, perhaps overdetermined infatuation with the beauty and perfection of the game. Undoubtedly, the sport of soccer is not absent those maladies characteristic of sports teams in general. There are the “superstars”, the grumpy, the disenfranchised, the overpaid; certainly, there are team dynamics that don’t work, personality conflicts and all sorts of mismanaged phenomena. And even in youth soccer, though strongly discouraged, there is always the most competitive coach who will put the 11 year old who has matured about two years too early “up top” at forward, where he can simply outrun and out muscle everyone. Despite that, the way the game is designed to be played is my emphasis here – collaborative, creative.

Finally, it may be worth mentioning that the popularity of soccer among American youth is tremendous. According to a 2003 report by Gary Davidson of *SoccerTimes*, there were 7.783 million avid participants in 2002; by that measure, that makes soccer the second most popular U.S. team sport behind basketball (19.982 million) and ahead of softball (5.438 million) in 2002. Moreover, the large majority of players in the country are youngsters and an increasing number are women. Three-quarters of those playing are aged between 6 and 17 while 37 percent are women.

Speculating just a little . . . in 2008, these players should be at or near working or college age – perhaps entering B-schools or business/management education. I think the soccer metaphor would work for them; already possessed of the “alternative” quantum mindset that soccer entails, they may be the ones ready for the change to genuine collaborative teamwork.

*Note: Two things worth mentioning here. First, I have no coaching license. I stopped coaching at about U12, leaving it to those who had played the game. My observations are drawn from watching and studying it as my three sons progressed through the ranks, developed by increasingly better coaches for about ten years. Second, as such, coaches with more experience and credentials may take issue with some of the soccer nuances in the essay.