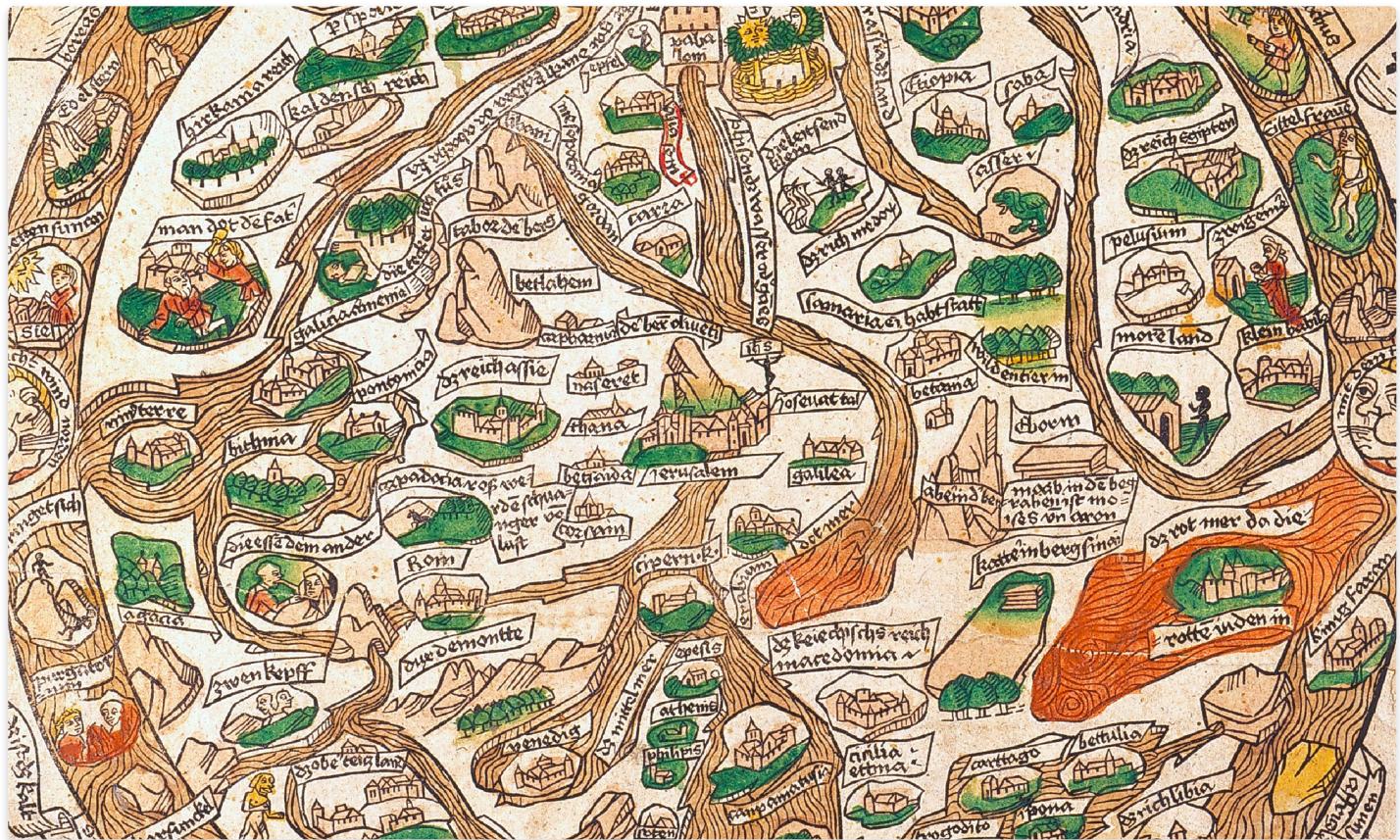




The Seven Styles of Soccer

🔒 • 5 Feb 2021 • 10 min read



I forced a bot to become Marcelo Bielsa. Here's how it categorized every team in Europe's top leagues.

There are a lot of good stories about Marcelo Bielsa, but my favorite might be one the former Argentina goalkeeper Pablo Cavallero told about a national team camp in 2001. Security at their facility on the outskirts of Buenos Aires had recently been beefed up due to a threat of kidnappings, but of course the manager never thought about that. He only thought about soccer.

“Bielsa used to say that there were 22 tactical formulas. He recorded a CD where he explained each tactic and how to counter it,” Cavallero said. “He always wore a Discman when he went for a run at night. Once, at two in the morning, the security guards saw a guy running through the trees, so they pointed their searchlights at him and ordered him to stop. He couldn’t hear anything because of the headphones, but when he saw the lights he got scared shitless, dove behind a tree and shouted: ‘Don’t shoot, I’m Bielsa!’”

I love everything about that story, especially the fact that a guy who spends all day obsessing over soccer tactics wanted to go for a run to listen to *himself lecture on soccer tactics*. And the precise number of formulas! For years I wondered about the 22 ways to play and whether El Loco had solved the sport, until I came across a line in his Wikipedia entry where he claimed there are 29 formations, from a book titled *Marcelo Bielsa: The 11 Paths to Goal*. More recently there was a lecture in Brazil where he winnowed the number of fundamental systems down to 10. Maybe the man just really likes numbered lists.

What I’m trying to suggest is that if the following attempt to quantify soccer styles strikes you as kind of ridiculous, first of all you’re right, but also, hey, we all do it. Don’t shoot!

How it Works (Math, Mostly, But Also Art)

Since I’m blessed with neither Bielsa’s genius nor his army of video analysts to prepare scouting reports on every club’s third-string goalkeeper, we’re going to do this style investigation using stats. FBref has tables full of Statsbomb data that you can browse and sort and make charts

out of to get a feel for who does how much of what, and after a while you'll start to notice some patterns that correspond to styles you see on the pitch. For a simple bird's eye view, though, wouldn't it be cool if we could just dump all the numbers we care about into a computer and let it sort them out for us?

Researchers who study data-heavy subjects like single-cell RNA sequencing have ways of doing that, and American Soccer Analysis's real-life scientists Eliot McKinley, Cheuk Hei Ho, and Mike Imburgio have borrowed some of those techniques over the years to look at team and player styles in soccer. Some of their work is linked at the end of this letter if you want to learn more about this stuff from guys who know what they're talking about. For our purposes, all you need to know is that I got help from Eliot to run a bunch of team stats through an algorithm called UMAP that mapped out teams based on overall similarity, then used another algorithm called k-means clustering to carve the playstyle map into seven, uh, countries or whatever. Don't look at me, I'm not a scientist.

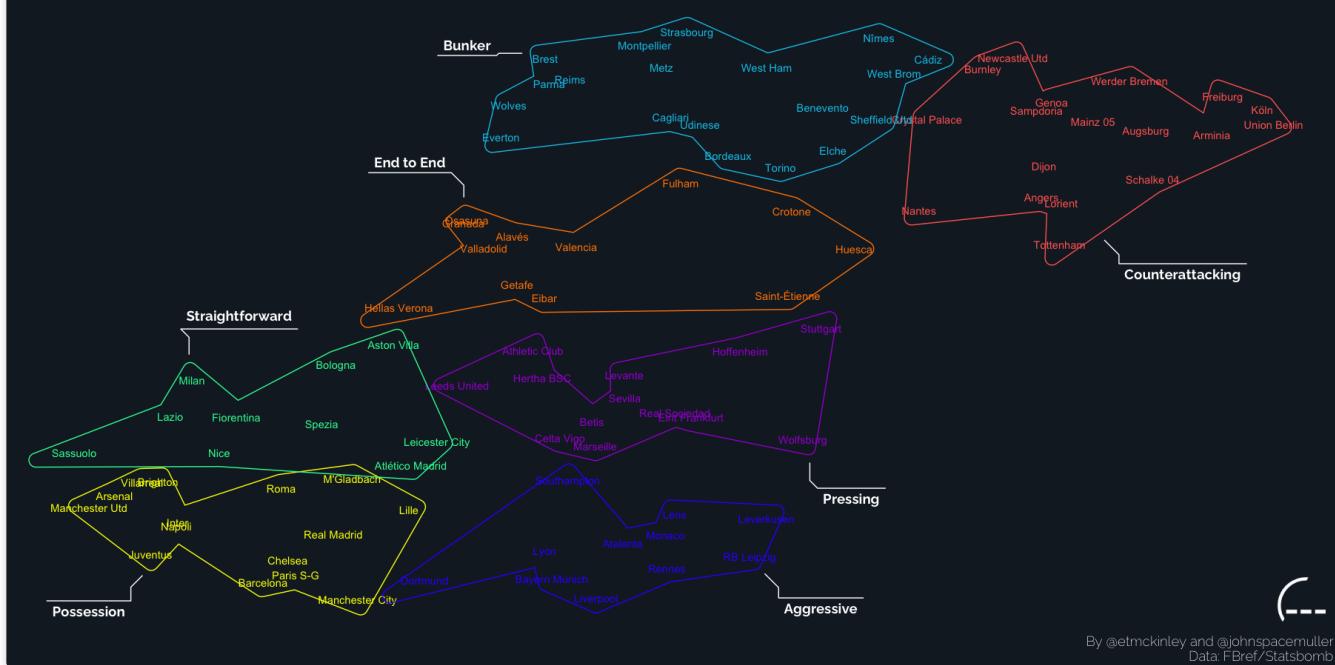
Oh, one more thing. You know how people call things that involve judgment "more art than science"? Turns out scientific techniques can be kind of artsy, too. Every time I ran UMAP on the same numbers it generated a slightly different map, and every time I ran k-means on the same map it came up with slightly different clusters. Even the number of styles was a judgment call: instead of seven clusters it could have been 22 or 29 or 10. So if you're mad that your team falls into a certain group instead of one nearby that's obviously a better fit, you might be right. Soccer is messy. If I'd chosen other metrics this all could have looked different; there was an early, less curated version where Lens kept showing up next to Manchester City for ... reasons. I kept messing with it until it gave me something that felt like it mostly made sense, and that's the one we're going to go with.

A Soccer Map of Europe

Enough caveats. Here are the definitive, immutable, and unquestionably correct seven styles of soccer.

The Seven Styles of Soccer

Top 5 leagues, 2020-21



Teams that are closer to each other are more similar according to the 49 stylistic stats the algorithm looked at.

There are no axis labels here because up, down, left, and right don't really mean anything; all that matters is that similar teams are close to each other. But it's hard not to notice that good teams are mostly at the bottom and bad teams are at the top, like an all-leagues table flipped upside down. That wasn't a given. To keep this thing from telling us what we already know, I stripped out shot metrics and most information about what happens in the penalty area. The idea was to evaluate *how* teams play more than how *well* they play, which is why it's possible for a bottom feeder like Spezia to squeeze between league leaders AC Milan and Atlético Madrid or for Spurs to land dangerously near Schalke. That most Champions League sides wound up in the Possession and Aggressive styles points to something we've talked about before here at *space space space*: happy teams are all alike.

Some Styles Are More Successful Than Others

Top 5 leagues, 2020-21



Even though shot stats were excluded, most good teams play similarly enough to group near each other.

Another thing you might have picked up on is that clubs from the same country tend to stick together, from the Counterattacking German peninsula in the northeast corner of the map to the Straightforward Italian coast in the southwest, separated by a spiky range of End to End Spanish sides. Outside the elite, the closest match for any given team is probably another one in the same league. It's hard to say how much of that is a product of local playstyles (weren't we supposed to have globalized our way out of those by now?) and how much is caused by these teams facing the same opponents, since every stat in here is measured both for and against each team. But then that's sort of capturing local styles too, right?

Different Leagues Have Distinct Style Clusters

Top 5 leagues, 2020-21



Teams from the same country tend to look similar to the algorithms.

What Went Into It

Before we dig into the clusters, you might be curious where they came from. Here's a map of every metric that went into the analysis on the "for" side. Pink means the teams in that cluster did more than average of that stat; blue means they did less; dark is neutral. Possession is included as one of the 49 features in the set, but almost everything else is normalized in some way to try to focus more on what a team does with the ball than how much of it they have (share of touches in the attacking third rather than attacking third touches per 90', etc.).

How the clusters compare in the "for" stats (colorblind-friendly version [here](#)).

And here are the same metrics on the "against" side. The algorithms looked at both sides to get a more complete picture of how teams play.

How the clusters compare in the "against" stats (colorblind-friendly version [here](#)).

It'd be fair to argue that these stats don't measure the specifics that make up a style, that they show the what more than the how. But when you do enough high-level vibe checks on different parts of the game, it does start to give you a decent idea of how these teams play. Let's see if we can feel our way through the stylistic similarities the algorithms are picking up on.

The Seven Styles

Aggressive

Southampton, Rennes, RB Leipzig, Monaco, Lyon, Liverpool, Leverkusen, Lens, Dortmund, Bayern Munich, Atalanta

They press, they possess, their passes progress. This is a gang of very good, very attacking clubs and, ahem, Southampton. It's probably not a coincidence that Ralph Hasenhüttl and Jürgen Klopp are grouped with the German elites—there's some serious Ralf Rangnick influence in this group. Sure, these sides give up more than their fair share of throughballs due to high lines, but that's also how they pin opponents deep, smother counters, and get directly to goal.

Possession

Villarreal, Roma, Real Madrid, PSG, Napoli, Manchester United, Manchester City, Monchengladbach, Lille, Juventus, Inter, Chelsea, Brighton, Barcelona, Arsenal

The kinder, gentler half of the elites. They're a little laxer off the ball than the Aggressive group but even better on it, with effective short passing styles that keep the game in the attacking third. A few smaller clubs like Brighton and Gladbach are kind of awkward stylistic fits with the PSG-City side of the cluster, which is why they're on the border between their group and another one nearby (placement matters!). For the most part, though, any team that's this controlled in possession has a good shot at playing in the Champions League next season, even if it may be a little late for Arsenal.

Straightforward

Spezia, Sassuolo, Nice, Milan, Leicester City, Lazio, Fiorentina, Bologna, Atlético Madrid, Aston Villa

If this style were a person it'd be that guy at the office you've been friendly with for years but still aren't sure you've got his name right. There's not much personality here beyond "Like the Possession teams, but plainer." They control more of the ball than their opponents (but just barely) and prefer shorter passes (but just barely). One of the group's few identifying features is they tend to let opponents carry the ball long distances, which might be linked to the relative abundance of five-back formations—not surprising for a group that's more Italian than the Jersey Shore. But even if Straightforward sides aren't distinctive, they're effective; this cluster includes the current leaders of Spain and Italy. Normcore is back, baby.

Pressing

Wolfsburg, Stuttgart, Sevilla, Real Sociedad, Marseille, Leeds United, Hoffenheim, Hertha Berlin, Eintracht Frankfurt, Celta Vigo, Real Betis, Athletic Bilbao

Okay so check it out, what if we did the Aggressive style with teams that are worse on the ball but better at finding a plug for amphetamines. Not everyone here is as whacked out as Bielsa's Leeds, but they're generally pretty energetic about breaking up opponents' play, forcing hopeful switches, and keeping the ball away from their own goal. Even though most Pressing teams aren't outstanding at passing, they get it forward efficiently and don't get trapped in tight spaces like the next group we're about to talk about.

End to End

Valladolid, Valencia, Saint-Etienne, Osasuna, Huesca, Hellas Verona, Granada, Getafe, Fulham, Eibar, Crotone, Alaves

The farther we get from the good teams, the fuzzier the clusters get. Notice how the team names at the top and especially in the middle of the style map are more spread out than at the bottom: each unhappy team is unhappy in its own way. The End to End style includes Getafe and Eibar's hit-it-long-and-press-'em-high zeal but also Fulham, who are basically the opposite of that. On average, this heavily Spanish group plays chippy games marked by frequent pressure, fouls, and yellow cards on both sides, with lots of longballs and switches to try to escape the scrum. What unites the teams is less a single tactical approach than an ability to get out of their defensive block and into the attacking third somewhat regularly, which is more than you can say for the last two groups.

Counterattacking

Werder Bremen, Union Berlin, Tottenham, Schalke, Sampdoria, Newcastle, Nantes, Mainz, Lorient, Köln, Genoa, Freiburg, Dijon, Crystal Palace, Burnley, Augsburg, Arminia, Angers

Spursy af. Nah, to be honest Tottenham's kind of an outlier here just by virtue of being a not-terrible team, but you can definitely see why a Mourinho side might wind up grouped with the style that takes the largest share of it touches in the defensive third. What sets these teams apart from the Bunker group is that, on average, they're a little less passive about allowing opponents to get up around their box, strongly averse to carries, and prone to getting pressured into turnovers—which, I don't know, might mean they're at least trying?

Bunker

Wolves, West Ham, West Brom, Udinese, Torino, Strasbourg, Sheffield United, Reims, Parma, Nîmes, Montpellier, Metz, Everton, Elche, Cagliari, Brest, Bordeaux, Benvento

If Counterattacking teams generally look to escape their defensive third up the middle, Bunker teams are more likely to play out to the wings. Other

than that, the main feature of this group is that they give up the highest overall pass completion rate, the largest share of opponent touches in their third, and a lot of short passes and progressive carries. Basically, they make any team that faces them look like a Possession team, while Counterattacking sides make their opponents look like Aggressive teams. Is that because all the bad German teams are over on the Counterattacking side? Some interesting questions to dig into here if you've got time on your hands to watch a lot of terrible soccer. As for me, I think I'd rather dig my Discman out of storage and go for a nice two a.m. jog. ↩

Thanks for reading space space space! This letter is free, so feel free to share it, and please consider becoming a paid subscriber to get more letters like this week's on how No. 10s were replaced by wide creators.

Further reading:

- Eliot McKinley and Cheuk Hei Ho, You Down With t-SNE? (American Soccer Analysis)
- Cheuk Hei Ho, Clustering European Teams by Behaviors (Twitter)
- Michael Imburgio, Defining Player Roles: How Every Player Contributes to Goals (American Soccer Analysis)

Image: Hanns Rüst, Mappa Mundi

← Asymmetric Warfare

The No. 10 is Dead. Long Live the Wide Creator. →

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