Second Nature: Why NFL coaches are so prone to clock management blunders

QUICKLY

• Every week games are decided by how coaches manage the final minutes. And even though one man wrote the book on the subject, killer mistakes are made all too often.

Plays are precious; seconds are plays; therefore, seconds are precious.

– Homer Smith

If you lived on Enterprise Avenue in Tuscaloosa, Ala., around the turn of the millennium, you did not see much of the Smiths on fall Saturdays. True, Homer and Kathy hadn't had a free autumn weekend since roughly 1948, but now their lack of availability wasn't because Homer was on the sideline coaching college football (as he did for 36 years, plus one with the Chiefs). No, he was now busy hunting the game's most cryptic secrets.

An unknowing neighbor cracking open the front door would have found the married couple of nearly five decades scurrying up and down their stairs like figures in Escher's *Relativity*, carrying videotapes and yelling things like, "Is Tech over?" and "You gotta watch Florida before half!"

The humble VCR, it turns out, enabled the most astute clock manager in the game's history to publish his *Odyssey* in 2004. Homer Smith called it *The Complete Handbook of Clock Management*, and if today's NFL coaches are to be believed, copies of his book, in its sixth printing, lie somewhere in the headquarters of every team. It's a survival tool. The book's opening words:

"The playing of football is at its best when players accept responsibility for the playing. When one player blames one coach for one problem, the playing is not at its best. The managing of the clock is at its best when coaches accept responsibility for the managing. When one coach blames one player for one problem, the managing is not at its best." Just because it's written in relatable prose, however, doesn't mean the message is taken to heart.

Smith coached at West Point mostly during the post-Vietnam years of 1974 through '78, an uneasy time when the Academy was associated more with napalm and civilian casualties than with Glenn Davis and Doc Blanchard—a time when the advance scout at archrival Navy was a man named Steve Belichick. Had Smith still been among us two years ago, he would have had a field day with the most recent championship won by Steve's son, Bill—the game that today's coaches hold as the singular example of all that can go wrong, and right, when wrangling with the clock.

Surely Smith would have focused on the final 2:02 of Super Bowl XLIX, after Julian Edelman's TD put the Patriots up 28–24. He would have gushed over the Seahawks' first play on their next (and final) possession, a risk-free fade down the left sideline to Marshawn Lynch for 31 yards, after which Lynch got out-of-bounds. He would have cringed, though, at the timeout Russell Wilson called after the ensuing incompletion, when the play clock had been allowed to approach zero.

Smith would have taken little issue with the next two plays, a deep shot that fell incomplete and an 11-yard completion on third-and-10. But the following one, a juggling grab at the Pats' five by Jermaine Kearse would have brought Smith out of his seat—not for its impressiveness, but because Kearse had the presence of mind to lunge toward the sideline to stop the clock. Smith would have been maddened moments later by the second timeout Seattle wasted on the drive, due to another inexplicable draining of the play clock.

It would have mattered little to Smith—other than the fact that Seahawks coach Pete Carroll played safety for him at Pacific in 1971—that the ensuing four-yard run by Lynch put Seattle squarely in control at the one, second-and-goal, one minute left, down by four, with the best short-yardage back in the game. This enviable position wouldn't have excused those two wasted timeouts, not in Smith's mind, although not even he could have imagined how crucial they would become. The following play has since been cited as an egregious error in play-calling (which it was), but Wilson's fateful slant pass, intercepted at the goal line by Malcolm Butler, would likely have never been thrown if not for the Seahawks' regrettable management of the clock.

The 2015 NFL season featured more games decided by seven or fewer points (131) than any season in history. And most of those outcomes can be directly attributed to clock decisions made in the closing minutes. Broncos assistant Joe DeCamillis, who coaches special teams for the reigning champs and aids in their clock management, was asked recently whether outsiders have any idea how hard it is to grasp the infinite scenarios presented by the clock, the score and the game situation—and then to make pressurized, split-second decisions. "No," he replied, laughing. "I was talking about it with my father-in-law. The closest comparison we could come up with was an air traffic controller. You've got a thousand things going on, you're watching 20 planes....".

Certainly the stakes are higher in that setting, but air traffic controllers don't work under the scrutiny of tens of millions of eyeballs. "You can prepare yourself," says Darren Rizzi, the Dolphins' assistant who'll help new coach Adam Gase with clockrelated decisions, "but the unpredictability is why I don't think anyone can ever truly master it. Even the best coaches have made mistakes."

Other coaches compared clock management to surgery or giving birth or even a person's final days. In his book Homer Smith listed eight ways that managing the clock is like a pilot's handling a mid-flight Mayday. The last one: "In neither can you make a major mistake and survive."



Homer Smith coached college football for 36 years, serving as the head coach of Army in the mid-1970s before offensive coordinator stints at UCLA, Alabama and Arizona. Rusty Kennedy/AP

Smith grew up in Omaha, the son of a car salesman. Football, he told SI in 1980, "was all I thought about from the seventh grade on." He squeezed in enough studying to get accepted at Princeton in '50, serving as class president his last three years and as an All-Ivy League fullback his last two. After a two-year stint as an Army officer, he earned an M.B.A. at Stanford.

"Stanford was his first coaching job, under Jack Curtice," recalls Kathy, who is 85 but sounds half that. "When he went to the Air Force Academy [as an assistant in 1961], that's when he got really interested in the clock." Upsets over highly ranked Washington in back-to-back years, due in no small part to Smith's control over the stacked lightbulbs at the center of the scoreboard, earned him an early reputation as a clock savant. He was vastly overqualified to be a coach, a job he didn't pursue in search of championships. Smith coached because he loved teaching and, as he admitted in later years, because the money was good.

Andy Reid earned \$7.5 million last season, which is better than good, and yet the Chiefs' coach made clock-related decisions in 2015 that cannot be explained away by the task's complexity. Exhibit A is the game that ended Kansas City's season, a 27–20 division-round loss at New England. Trailing 27–13 with 6:29 left—needing two touchdowns to tie—Reid and his quarterback, Alex Smith, inched down the field, huddling as if it were the middle of the first quarter. The first three snaps tell the story of a 16-play, five-minute possession that would have made Vince Lombardi proud, but that did the Chiefs and their fans no favors:

On first-and-10 at his own 20, Smith scrambled for two yards, running out-ofbounds to stop the clock at 6:21. Not a bad result ... *if* Smith had communicated the next play to his teammates and snapped the ball shortly after the ref swung his arm to restart the clock. Instead the Chiefs huddled, burning 23 seconds. The incompletion that followed wasn't terrible, either. It stopped the clock. But on the ensuing completion near the sideline, receiver Chris Conley fought in vain for extra yards and allowed himself to get tackled inbounds. A killer 26 seconds wasted.

And so it went, until K.C. struck pay dirt with 1:13 left and, having no other choice, lofted an onside kick toward Rob Gronkowski, who made the easiest catch of his career. Game over.

An impartial review of that game tape reveals that if the Chiefs had run the same plays with the same results but quickened their pace in the ways that every coach knows, the TD that cut the lead to seven could have been scored with about 3:45 left. Maybe Reid's fatal flaw isn't clock management but an unreasonable faith in his onside kick unit. That loss to the Patriots was reminiscent of the drive Reid engineered versus the same team in the waning minutes of Super Bowl XXXIX. The main differences are that Reid's Eagles trailed by 10 with 5:40 left and that the New England tight end who fielded the onside kick was Christian Fauria. It's easy to second-guess coaches. Social media even allows us to second-guess them en masse and receive instant validation from other second-guessers. It's also easier than criticizing players. Ripping Wes Welker for dropping that seam pass in Super Bowl XLVI against the Giants (Gisele, this means you), requires forgetting for a moment the myriad physical talents that Welker possesses (and 99.9% of his critics don't). Men like Reid and former Giants coach Tom Coughlin, on the other hand, are just old, unfit guys wearing facial expressions that don't always suggest they're Mensa members.

Reid might have been given a free pass for his mismanagement last January if he hadn't already been labeled a poor clock manager. We hunger to place the pedestaled elite beneath us, and as the original Homer wrote a couple of millennia ago, "Hunger is insolent, and will be fed."

Stanford professor David Eagleman studies time and the way we perceive it, and he has something to say on the dark art of second-guessing: "I think there are two factors here. First, the armchair quarterback gets to see [the perceived flub] happen, watch it unfold and think about it. He's not forced to make a rapid decision. The other issue is psychological. The way our brain works is: If the coach has three options to choose from and you, the fan, are 80% sure that Option A is the right call, when [the coach] calls Play A and fails, we tend to backtrack. 'Come to think of it, I was only about 50% sure.' This is true in every field, in every decision that gets made."

NFL 2017 NFL draft Big Board 1.0: Garrett, Watson atop rankings as season starts

The 2015 season ended with lots of second-guessing. A few hours after Reid took his sweet time versus the Patriots, the Cardinals found themselves leading the Packers 17–13 with 2:34 left. Arizona's O faced second-and-eight at Green Bay's 22. The

Cards appeared destined for a TD, or at least a field goal. More important, they could bleed the clock so Packers QB Aaron Rodgers would have too little time to respond.

Then Arizona coach Bruce Arians called for a deep pass that, when it fell incomplete, stopped the clock. After a Cardinals field goal, Rodgers used the extra 40 seconds Arians had gifted him—an Arizona run would have melted that time away—to set up a Hail Mary to Jeff Janis that sent the game to overtime.

Only Larry Fitzgerald's breathtaking catch-and-run in OT bailed out Arians, but not before the coach had been exposed as a man unvaccinated against the clock's venom.



Down two scores with 6:29 left in their divisional round game against New England, the Chiefs wasted precious time inching down the field.

Cowboys coach Jason Garrett was never a pupil of Homer Smith's, despite their shared standing as Princeton football's proudest sons, but he knows the legend. "I've been hearing about him since I was 18 years old," says Garrett. "The interesting twist is that [Coach Smith] was at UCLA right before [Cowboys Hall of Fame QB] Troy Aikman got there. Troy didn't play for him, but there are so many great stories from that time about [Smith's] devotion to clock management. The amount of time and effort they spent on it was unbelievable."

Smith had been lured back to UCLA in 1980 from Harvard Divinity School, to which the coach had escaped after a tumultuous firing at Army. He returned to the game with guns blazing, instilling in the Bruins a knowledge of the clock that one quarterback, David Norrie, still uses as a college football commentator on ESPN. "Homer was the greatest teacher, in any field, that I've ever come into contact with," says Norrie. Smith, he recalls, was never too far from his oversized wooden board, painted green and white, and accompanied by 22 triangles and circles, which he used to drill his students on situation after situation. One QB would man the stopwatch, another would keep track of down-and-distance and timeouts, and the third, Norrie recalls, "would get grilled." *Down two. Minute-30 left. Ball on our 10. One timeout ... Up five. Three minutes left. Ball on their 30....*

"I got to know [clock management] so well that by the time I became the starter my senior year, I didn't have to turn to [Smith]," says Norrie. "As Homer put it, 'David, you're flying the plane."

This informal postgraduate work of Smith's included reviewing videotapes of endgame scenarios around the country—the same practice that informed his book. "We had four or five VCRs running on different TVs throughout the house," Kathy recalls of the scene on Enterprise Avenue in the late 1990s. "I'd run up and down the stairs trying to record the last two minutes—before the half and at the end of the game—and he would analyze what they could have done better in clock management. He couldn't believe how many teams made huge mistakes."

Garrett has adopted at least one of Smith's doctrines. "The biggest thing we talk about [when reviewing film of clock decisions] is being honest," he says. "Independent of the outcome, did we handle this the right way? I coached under Nick Saban for two years, and that was something he always stressed. You've gotta be careful about saying, Well, it worked out, so we handled it correctly. You have to evaluate these things independent of the result. Then you institute [what you learned] in practice."

From Chapter 20 of Smith's book: "Without constant practice, the coaches will be nervous and undecided when mustering for the game; without constant practice, the head coach will be wavering and irresolute when the crisis is at hand. The previous sentence is a paraphrasing from the strategy classic *The Art of War*, written by China's Sun Tzu–2,500 years ago. [Practicing] this stuff is difficult," he goes on. "If it is allowed to embarrass, it will be avoided. And the ones most vulnerable to embarrassment—the coach and the QBs—are the ones who can least afford to avoid it."

"A lot of coaches don't want to mess with [clock management]," says DeCamillis. "It's not a real sexy topic. It's not how coaches get jobs, being great clock managers. But this is where games are being won and lost.

"Guys still figure that if they put themselves in the right play, that's gonna win 'em the game. I don't think you can do that anymore, just run your plays and say, 'We're gonna whip these guys.' It feels like every game is a seven-point game or a threepoint game headed into the fourth quarter. You better be good at this part of [the game]."

"I always thought [clock management] was a great way to start practice," says Dick Curl, a retired NFL quarterbacks coach who kept one eye on the clock for the Chiefs and Rams between 2006 and '10. "It gets guys moving and running and thinking right away. Maybe the third night of training camp we'd go through it in our team meeting: 'This is what we're thinking in these situations.' And you always hope to get a two-minute situation in a preseason game [so you can] practice it live against another team. Sometimes we'd force it [even when a hurry-up wasn't called for], just to get a feel for it." The Rams have the advantage of Jeff Fisher, whose lasting obsession with late-game scenarios has him leading a drill just for getting his offense off the field, and the field goal team on, in the blink of an eye: The offense runs closer to the goal line, and if two players collide, they've failed. (When performed recently at training camp, the kickless drill either impressed the throng of fans into silence, or confused them there.) Three weeks ago the veteran of 20 years as an NFL head coach, respected within the league for his clock prowess, stood slathered in sunscreen at Rams training camp and, from afar, shared some advice for the league's four first-year head coaches, former coordinators all: First establish a clear chain of command when it comes to clock management.

"What I've seen over the years is you have assistant coaches emerging into head coaching positions, and they remain coordinators. Managing the game, staying on top of the clock—it's not easy.... [You need to] make it easy on your play-caller. Instead of [him hearing on a headset], 'Hey, it's fourth down—let's go for it!' you need to have already thought ahead. 'It's third-and-one here. You've got two shots.' Then nobody panics."



The Seahawks deployed Marshawn Lynch perfectly early in their last-gasp Super Bowl XLIX drive then seemed to forget about him near the goal line. David E. Klutho for SI

"And now New England has to think about taking a timeout." Those were Al Michaels's words as Lynch returned to the huddle after rumbling to the Patriots' one with a minute left in Super Bowl XLIX.

"By the book, Belichick should have called a timeout," says Rizzi, explaining that a stoppage would have given Tom Brady a few more seconds to respond to Lynch's imminent plunge into the end zone. "But he had a feel that he was gonna let it ride, that he had a good [defensive] call, and look what happened.

"I gotta say here that if Bill Belichick isn't the greatest NFL coach of all time, he's one of the greatest—but had they lost that game, he would have gotten second-guessed until the cows came home. My point: The good decisions are the ones that work, and the bad decisions are the ones that don't." Funny. Reid wound up raked over the coals for conserving his timeouts against Belichick. "Words empty as the wind are best left unsaid," wrote Homer—the ancient Greek one.

As the clock ticked on in SB XLIX (*0:54* ... *0:53* ...), Carroll didn't react to his apparent good fortune with his trademark grin. He looked instead like someone had tossed him an abacus made of butter. The tape shows Carroll working his gum, staring at Belichick, who was turned in profile to Carroll, wincing and saying, "What?" into his headset, followed by a quick glance upstairs, presumably toward his longtime game-management guru, Ernie Adams. "O.K.," Belichick said.

Maybe Adams uttered something prescient into Belichick's headset, something like *They're staying heavy; we're good*, or *They're lining up to run that pick*, or maybe just *Let it ride*. Maybe the Pats' course of action was decided during the timeout Seattle had just wasted. *They're gonna run it*. *When we stop 'em, we're gonna stay heavy and we're not gonna call time. Be ready.*

Maybe, somewhere under Belichick's sweatshirt, his gut was telling him there was no way Seattle could have prepared for the sudden arrival of this scenario within a scenario.... *0:36 ... 0:35 ...*

Maybe Belichick and Adams were banking on the Seahawks' overthinking things—on Carroll and his coordinator, Darrell Bevell, figuring that a pass would bring either a TD or a clock-stopping incompletion that would save Seattle's lone remaining timeout. A slant pass into traffic? Given all that could have gone wrong, it's hard to chalk that one up to anything but the pressure of a clock that Seattle didn't expect to be ticking.

You can say the Patriots won the game on the next play—a miracle born of preparation and opportunism—but it's just as safe to say the call for a slant to Ricardo Lockette would never have been sent in if not for what Belichick did with the clock. Or rather, *didn't* do.

Alternatively, maybe he knew something that only a trio of obscure researchers knew.

In 2015 Nola Agha and two of her sport management students at the University of San Francisco—Bryan Beasley and Ryan Greenwald—published a study of the final moments of the 83 NFL games played between '09 and '11 that went down to the wire. Among the eyebrow-raising, counterintuitive nuggets they found—and this applies to Carroll, Wilson and Seattle's burned timeouts—was that when a team calls timeout during a two-minute drive it doesn't conserve precious time; it somehow ends up costing the offense 13 to 22 seconds off the game clock. "The evidence suggests that it helps the defense regroup and strategize," says Agha. "It's possible that giving the defense a timeout," adds Greenwald, "enables them to shift from a reactive mode into more of an attack mode and muck up the offense's plans."

Is that why Reid clung to his three timeouts while his 2015 season slipped away? And speaking of Reid, Greenwald notes that critics of the Chiefs' coach overlooked the fact that his top wideout, Jeremy Maclin, had left the game against the Patriots with a high ankle sprain, and that K.C.'s final drive was conducted with a rookie and a second-year man at receiver—players whose knowledge of the playbook wasn't as deep as Maclin's, and who each ended up making critical errors in failing to get out-of-bounds.

Of course Reid couldn't defend himself after the game by pointing to any of that. Doing so would have painted him as a complainer who passes blame to his players, and that can get a coach fired too.

DeCamillis, Rizzi and their clock-managing peers each chuckle at the idea of a layperson watching at home—eager to offer his criticism after a play—being teleported to the sideline, having the shot-caller's headset plopped upon him, then imploding under the pressure like a supernova. As for those enterprising USF researchers, when asked whether they will deepen their research, they too laugh. "It depends on how much time we have," jokes Greenwald. Which brings us to the most important clock management of all.

The 76-year-old Curl and his wife, Beverly, retired to Mount Laurel, N.J., because their daughters and grandkids live there. Their fall weekends remain busy, and although Curl seems to have plenty of time left, he's not waiting until the final minutes to manage his life's clock.

Homer Smith's situation was more pressing. He learned he had multiple myeloma (a cancer of plasma cells) not long after completing his book. After six weeks of aggressive stem cell therapy at the University of Texas, Kathy went to check out of the Austin hotel room where she'd lived and prepared to drive her ailing husband home to Tuscaloosa, where Homer served two stints as the Crimson Tide's offensive coordinator. To Kathy's surprise, her four-figure bill at the Austin Residence Inn had already been paid by an NFL general manager and a college coach whose names Kathy declines to divulge "because they wouldn't want me to. It was their way of showing him how much they loved him."

When one last hook-and-lateral attempt by doctors at Emory Hospital in Atlanta came up short, Kathy drove Homer home for the last time. Former Browns GM Phil Savage (who'd been hired in Cleveland by a third-year coach named Belichick) visited Smith on Enterprise Avenue and was told by his mentor, "I won't be here next Friday."

That's when Kathy called their two daughters and asked them to come over with the grandkids (including Taylor Hall, a quality control coach and, yes, clock management specialist at Princeton) to say goodbye.

The image of those descendants trudging up the same staircase that Homer and Kathy had traversed in researching their book, a volume that contains as much humility as hard-won wisdom (in one case study, Homer described a costly error by UCLA, noting, "the author was the offensive coordinator and QB coach"), calls to mind a line from the original Homer, who was hailed by the ancient Greeks as *protos didaskalos*, "first teacher": "There is a time for many words, and there is also a time for sleep."

At the very end, with his daughters at his side and his wife holding his hand, the 79year-old coach had something, Kathy says, that any man who has ever been embroiled in one of football's time-intensive predicaments—any coach who has played the percentages and lost, or has followed his gut, only to get punched there has too little of in such moments.

"He knew he had love."