FAIL BETTER:
OR, WHAT CAN TEACHERS OF PREACHING LEARN FROM IMPROVISATIONAL PERFORMERS AND FROM PIXAR?

Jared E. Alcántara
Trinity Evangelical Divinity School

Abstract
In recent years, educational theorists have focused greater attention on the ways that improvisational performance theory can enhance pedagogical practice. As a result, values endemic to improvisational performance such as play, collaboration, and experimentation are now considered significant markers of healthy classroom ecology. Although several homileticians have written about pedagogy, no one has attempted to engage with these conversations. Ongoing discussions in educational theory have not yet made their way into homiletical dialogue, research, and teaching practice. This article asks, What can homileticians learn from improvisational theory in order to enhance their pedagogies? It offers three proposals: privilege process over outcomes, embrace failure, and commit to constant rehearsal. While improvisational performance theory remains the primary conversation partner, Pixar Animation Studios is also enlisted on account of the values it shares with improvisational performance theory. Specific ideas for teaching born out of these proposals are also recommended.
In recent years, educational theorists have focused greater attention on the ways that improvisational performance enhances pedagogical practice in the classroom. As a result, values endemic to improvisational performance such as play, collaboration, and experimentation, are now considered indispensable to a classroom ecology in which students grow and thrive. For some theorists, the privileged metaphor for the teacher is not that of a scripted, well-rehearsed performer reciting lines to a passive audience, but that of an unscripted, improvisational performer collaborating with students as co-participants in knowledge construction. In this framework, the teacher functions more as a facilitator than a director, and the students’ roles shift from that of passive receptivity to active agency.

Although a growing number of educational theorists have adopted an improvisational-performative approach to pedagogy, this approach has not yet found its way into homiletical dialogue, research, and practice. Some homileticians choose to work at the intersection of preaching and performance studies. Others make anecdotal parallels between preaching and jazz music. Still others reflect on the task of teaching or offer concrete strategies for teachers of preaching. But, no one in homiletics at present draws attention to improvisational performance as a constitutive metaphor for a vibrant preaching pedagogy. Perhaps those who teach current and future generations of preachers, homileticians like myself, need to think more intentionally about how we can benefit from improvisational performance research.

The task of this article addresses the question: What can homileticians learn from improvisational performance to enhance their pedagogy? My answer unfolds by way of three proposals: privilege process over outcomes, embrace failure, and commit to constant rehearsal. I also attempt to extend the conversation beyond improvisational performance by enlisting a non-traditional interlocutor: Pixar Animation Studios. The reason Pixar was chosen is not because it makes popular movies and is a successful business; it has more to do with its institutional commitment to the same values that educational researchers lift up as emblematic in improvisational performance. The similarities between Pixar and improvisational performance will become evident as my argument unfolds.

Before attempting to answer this question, a few delimitations and qualifications are necessary. First, significant connections exist between improvisational performance and theology, many of which are rich and varied. Fascinating discussions are already taking place in systematic theology, practical theology, ethics, and hermeneutics. A growing number of theologians use the metaphor of improvisational performance as a way of describing the task of theological construction and/or the work of ecclesial practice. While these areas of research are important, they do not delve into pedagogy directly, that is, their subject matter is somewhat peripheral to what is being discussed in this article and, thus, outside the parameters of this particular discussion. Second, the primary and direct audience of this article is somewhat small – homileticians – but, the values embedded in an improvisational-performative approach are beneficial to theological educators in other disciplines. Although the practical suggestions I offer are specific to the preaching classroom, perhaps they can spark alternate ideas among those who are interested in teasing out the implications of an
improvisational-performative approach to their own teaching. Finally, my proposals are not novel or innovative among educational theorist; in fact, these ideas are well established in those circles. However, they are undeveloped in homiletical discussion. In other words, the ideas set forth (e.g., process, experimentation, and failure) are already familiar in educational theory, but remain somewhat unexplored in homiletical theory and pedagogy.

**Privilege Process Over Outcomes**

My first proposal for addressing the question, *What can homileticians learn from improvisational performance in order to enhance their pedagogy?*, is to privilege process over outcomes. Process is not a four-letter word in improvisational performance. As a general rule, improvisational performers privilege process more than scripted performers. According to Viola Spolin, one of the central figures in the development of ensemble improvisation in the U.S., improvisational performance is primarily about “process as opposed to result.”9 Those who teach and coach improvisational actors (like Spolin) encourage them to “focus on the process and suspend judgment of the outcome.”10 The reason for this is simple: improvisational performance is spontaneous and unpredictable. *Improvisateurs* participate in performances with high levels of unpredictability, what theologian Jeremy Begbie refers to as “contingency.”11 In some ways, the only predictable thing is unpredictability. Scenes emerge through collaboration; they are unscripted. The process is the performance.

High levels of contingency in improvisation mean that some performance outcomes will not be good. This is neither strange nor unexpected among improvisational performers. They are usually the first to say, “There is such a thing as a bad improvisation.” One of the differences in this particular genre of performance, however, is found in the responses that these performers have to outcomes. The focus is on growth through process, not on making judgments about the goodness or badness of outcomes. As Anthony Frost and Ralph Yarrow observe, “[Improvisation] is about enjoying the process without straining to get a known result.”12

A common saying in many performance genres is, “The play is the thing.” For most improvisational performers, however, the play is not the thing. The process of play is the thing. Whether improvisation produces a good outcome, a bad outcome, or something in between, improvisational performers believe it is always worth the risk of trying. Unforeseen outcomes are an inevitable part of performance in much the same way that wind is an inevitable part of sailing. They are so integral that they are almost taken for granted in their importance.

Enter Pixar. With each film that it produces, commitment to process is at the center of its ethos. Pixar’s cofounder and president Ed Catmull summarizes Pixar’s approach to all of its films with this simple dictum: “going from suck to not-suck.”13 Each new film project starts with Pixar’s sketch artists producing prototype storyboards instead of scripts. Storyboards are three-by-eight inch sheets of white paper that sketch artists draw, compile, and submit to the larger group for
critique. The storyboard phase is rigorous and oftentimes grueling for those who participate in it. As journalist Peter Sims observes, “Pixar used 27,565 storyboards on A Bug’s Life, 43,536 for Finding Nemo, 69,562 for Ratatouille, and 98,173 for WALL-E.”

After storyboarding, the sketches are put onto reels in much the same way that Disney animators used to do this two generations ago. Members of Pixar’s “Braintrust” (a smaller group of directors, animators, story experts, and designers) view the sketched storyboards on a screen with amateur voiceovers. No one on the team is allowed to move on to the more expensive digital animation phase until the storyboard has gone through several iterations, the directing and production team has seen the story reel-to-reel, and the design team has made substantial changes to the original product.

As with improvisational performances, many of the initial outcomes in Pixar’s storyboard prototyping phase are not good. As Pixar president Ed Catmull describes it, “Early on, all of our movies suck.” The imagery Catmull uses to describe films at this stage is that of “ugly babies.” He writes: “They [the films] are not beautiful miniature versions of the adults they will grow up to be. They are truly ugly: awkward and unformed, vulnerable and incomplete. They need nurturing – in the form of time and patience – in order to grow.” This process, as difficult as it can be for those who participate in it, is both healthy and integral to Pixar’s success. Pixar’s production teams know that excellent films do not drop down from the sky or appear to animators in a dream. Excellent films are born through relentless critique, revision, discipline, and a fair amount of thick skin on the part of everyone involved. As Peter Sims observes, this process “facilitates experimentation by the animators as it allows for a rigorous and continual scrutiny of the work in progress, enabling Pixar to practice healthy perfectionism.”

Enter homiletics professors. Do most preaching students tend to be a) process-oriented or b) outcome-oriented? Usually, the answer is “b.” What about the students who absolutely need to get an “A” in order to get into a great PhD program? Again, the answer is “b.” My point here is not that outcomes are never worth pursuing. Professors need to have desired learning outcomes for their classes. Students often enter classes with at least some desired outcomes, conscious or unconscious, for the course they are about to take. Rather, my point is that students (and professors) tend to get caught in an outcome-oriented way of thinking about preaching class.

So, how can homileticians help students move toward being process-oriented? Here are two simple suggestions. One idea is for a student to preach the same sermon more than once. The first sermon can serve much the same purpose that the storyboard does for Pixar. After preaching the sermon the first time, the student can receive feedback and suggestions from their peers and their professor and preach it a second time. If the student goes into class knowing that this will not be a make-or-break sermon without opportunities for revision, perhaps it will relieve some of their outcome-oriented anxiety.

A second idea is to emphasize the student’s growth in preaching as the semester progresses. The focus can be on the way that X, Y, or Z student has improved over time. Why not take the
Practical Matters

Commit to Constant Rehearsal

The second proposal is to commit to constant rehearsal. Dusya Vera and Mary Crossan contend that improvisation is “not about doing one right thing, but about continuously doing things right.” Getting things right over time through repetition is more important than succeeding or failing on one occasion. Actors become excellent improvisers through rehearsal. According to French director and theorist Jacques Copeau, improvisation is an “art that has to be learned” through years of study and practice. Expert performers study their craft, that is, they gain performative knowledge through constant, repetitive practice and performance. They hone their abilities over time and critically reflect on their practices. To quote again from Copeau: “Improvisation is not just a gift. It is acquired and perfected by study.”

Contrary to some of its caricatures, improvisational performance does not occur in a vacuum, and it is not tradition-less. In an article on improvisation in musical performance, Philip Alperson comments: “The truth, of course, is that even the freest improviser, far from creating ex nihilo improvises against some sort of musical context. In fact, learning to improvise is often, in large part, learning to master that tradition.” Put differently, one must master the tradition in order to riff on it. In addition or furthermore, excellence is not innate; it comes by way of years of study and experimentation. Lesa Lockford and Ronald J. Pelias suggest that specific forms of knowledge are needed for improvisational performance, what they refer to as “cognitive, affective, and intuitive capacities.” Some of these capacities are tacit and embedded in a performer’s abilities, what one might call natural gifting, but most capacities are attained through rehearsal and performance. In other words, rehearsal is the primary spring from which performative capacities flow. Sustained practice over time leads to a level of performative excellence that some cognitive and behavioral theorists describe as “automaticity,” or higher-level actions and behaviors performed instinctively.

The best moments of spontaneity in improvisational performance are not purely spontaneous in the strictest sense of the word. Rather, they arise when veteran performers draw from a reservoir of skill sets made accessible by years of study and thousands of hours of rehearsal. “Creative improvisation depends on a lifetime of practice and rehearsal,” writes R. Keith Sawyer, “and improvisers have a large body of material that they draw on during performance.” In this sense, as Amy Seham observes, “the notion of pure spontaneity is a myth.” Theologian Stanley Hauerwas puts it this way: “Spontaneity . . . is but the outcome of years of training and practice and thousands of experiments.”
Committing to constant rehearsal enriches the performer and the performance in at least two ways. First, it provides the performer with a reservoir of stored material. In a series of interviews with jazz musicians about their solo performances, musicologist Martin Norgaard discovered that one of the "generative strategies" these musicians employed in live performances was drawing from an "idea bank" that they developed in rehearsal. In other words, the musical ideas perfected in practice became the musical ideas leveraged in performance. Second, committing to constant rehearsal is a constructive way to embrace failure and become more process-oriented in one’s approach to preaching and to preaching pedagogy. Robert Poynton observes: “The best way to make sure you have good ideas is to have lots of (good and bad) ideas.” To believe this is to acknowledge that one’s first ideas can and should be tested over time, that one’s first shot is almost never one’s best shot.

Again, the Pixar case study is instructive. Experimentation, evaluation, and revision are the primary vehicles that drive the company’s larger goal of moving from “suck to not-suck.” “What we see [at Pixar],” writes Peter Sims, “is not effortless genius. Through tireless iteration, toil, and (often) sleepless nights, the films start to come together.” Here is Pixar president Ed Catmull’s description:

We dare to attempt these stories, but we don’t get them right on the first pass. This is as it should be. Creativity has to start somewhere, and we are true believers in the power of bracing, candid feedback and the iterative process – reworking, reworking, and reworking again, until a flawed story finds its through line or a hollow character finds its soul.

The team tears the story apart and redoes it. They rework and rework and rework the storyline. They commit themselves to collaborative experimentation by means of iteration with the goal of innovation. As with improvisational performance, the play is not the thing at Pixar. The process of play is the thing. Present - Evaluate - Start over - Repeat. Present - Evaluate - Start over - Repeat.

The “iterative process” is rigorous. According to Pete Docter, the director for Toy Story 2, Monsters, Inc., and Up, the average Pixar film takes about five years from start to finish, involves a team of about 400 people, and requires approximately 20,000 hours to produce. Each of the three films mentioned went through around eight storyboard revisions in which the team practically started from scratch with each revision. The storyboard revisions alone took two to three years before the animation phase. The process required an immense amount of discipline, vision, motivation, and resilience even after the storyboard phase was complete. On average, animation takes four seconds per week!

The team does find ways to delimit the process in order to keep healthy perfectionism from becoming unhealthy perfectionism. Without deadlines, the projects would stall, morale would be low, and a healthy drive for success would give way to an unhealthy form of perfectionism. The goal is not perfection through obsession; it is excellence through rehearsal. Even after films hit the theaters, they are not considered complete or perfect by those who create and produce them. As the CEO of Pixar, John Lassiter, likes to say, “We don’t actually finish our films, we release them.”
Practical Matters

What can homileticians learn about committing to constant rehearsal? What would change in the homiletical classroom if homileticians took experimentation seriously? How might we take a page from improvisational performers and from Pixar? One idea is for professors to invite students to preach and/or write shorter sermons, and to do so more often. Thomas H. Troeger and Leonora Tubbs Tisdale have their students write thirteen one-page mini-sermons over the semester (one every week) so that they cultivate their preaching voice and become more adept at preaching for the ear. One of the ideas I have tried is a one-minute sermon, a two-minute sermon introduction, and a five-minute sermon. Increasing the number of sermons (or portions of sermons) even if it means shortening the time allotted for them might help students make progress by way of constant rehearsal, as well as see the value in it. Moreover, doing so gives the teacher more opportunities to offer evaluation and feedback, thus, giving students more chances to improve.

Another option is for professors to divide students up into preaching triads. This often happens in pastoral care courses at seminaries. In pastoral care triads, students have opportunities to “practice” providing pastoral care to parishioners. One student role-plays as the parishioner and the other is an observer. Why not develop preaching triads, that is, spaces where students have opportunities to practice preaching in smaller groups before preaching to the larger class? This allows them to experiment at least once with the sermon before they preach it in front of their professor and a larger group of their peers. The chances are good that their sermons will be better than they would have been otherwise. Just as Pixar’s production team revises and tweaks their storyboards before moving on to reeling or animation, so also student preachers could revise and tweak their sermons before they preach them in front of a larger audience.

Embrace Failure

The third proposal is to teach students to embrace failure. The acclaimed writer and poet Samuel Beckett puts it this way: “Ever tried. Ever failed. No matter. Try again. Fail again. Fail better.” As with the words process and rehearsal, failure is not a four-letter word in improvisational performance. Veteran performers see failure as an opportunity for growth. When one fails, one has an opportunity to fail better next time. High tolerance for failure does not mean acquiescing to sub-par performance or below-average professionalism. One can have a high tolerance for failure and a commitment to excellence. The two are not mutually exclusive. Improvisational performers think of failure as a necessary and even meaningful step in the pursuit of excellence, not an impediment to it. Failure is not a roadblock; it is a road sign.

Frost and Yarrow contend that improvisation, at its core, is about “generating meaning out of contextual accidents. It is about failing, and about not minding failure. It is about trying again.” The so-called accidents of improvisational performance are mistakes infused with opportunities. They function much like dead-end roads when one is trying to drive to a new place. Instead of getting frustrated, all one has to do is turn around and find another way to get there. By finding a way not to get there, one increases the likelihood of actually getting there.
Keith Johnstone, the founder of *Theatresports* (an improvisational theater organization that utilizes competition between teams and a panel of judges), argues that acceptance of failure is integral to improvisational performance. A happy audience member at a *Theatresports* performance is one who witnesses failure up close. “If the performance has gone well,” writes Johnstone, “you’ll feel that you’ve been watching a bunch of good-natured people who are wonderfully cooperative, and who aren’t afraid to fail.” Johnstone suggests that something about failure in unscripted performance bonds actors and audience members to one another. When he addresses actors, Johnstone says, “They don’t want you to be experts who never fail. They’re longing for a sentence to degenerate into unintelligibility so they can laugh at you. If you never made an error, they might as well be watching a rehearsed text.” Under this rubric of evaluation, mistakes are not an aberration. Perfection is.

Teaching improvisational actors how to cope with and learn from personal failure is also essential. When actors fail at an improv exercise during rehearsal, Johnstone says, “Excellent! We’ve found something difficult for you! What a great opportunity to improve your technique!” Failing at a task, at least when one responds positively, can lead to positive improvements such as enhanced creativity, new epistemic insights, and stronger motivation. When Johnstone’s students express anxiety about failure or fear of failure, he quotes the famous life-drawing sketch artist Kimon Nicolaides who writes: “The sooner you make your first five thousand mistakes, the sooner you’ll be able to correct them.”

Pixar also shares this attribute in common with improvisational performance, namely, a positive outlook on failure. Artists, animators, and directors embrace a mindset of failing fast and failing often. In fact, this mindset is integral to the ethos of the company. Andrew Stanton, the director of *Finding Nemo* and *WALL-E*, describes it this way:

> My strategy has always been: be wrong as fast as we can. Which basically means, we’re going to screw up, let’s just admit that. Let’s not be afraid of that. But let’s do it as fast as we can so we can get to the answer. You can’t get to adulthood before you go through puberty. I won’t get it right the first time, but I will get it wrong really soon, really quickly.

With improvisational performance as with Pixar, mistakes are not peculiar, but are a natural part of performance and/or production. No one is surprised or discouraged when they make mistakes. In some arenas such as in hospitals or in the airline industry, being mistake- and failure-free is necessary and even commendable. For instance, no one wants to fly on an airline whose motto is, “Be wrong as fast as we can.” Problems arise, however, when arenas that are supposed to be creative try to be mistake- and failure-free. Catmull writes: “When it comes to creative endeavors, the concept of zero failures is worse than useless. It is counterproductive.” Like other innovative companies, Pixar tries to embrace failure without apology even if doing so is expensive and involves occasional setbacks. This attribute, according to Peter Sims, is what marks out some of the best innovators: “[they] tend to view failure as both inevitable and instrumental in pursuing their goals.” Instead of practicing risk avoidance and minimizing the chance of failure, they embrace failure as an inevitable and even welcome guest at the table of success.
Are homiletical classrooms places in which tolerance for failure is high or low? Too often, students are so worried about getting the sermon “right”—having right theology, right exegetical methods, and right delivery before their professor and their peers—that they are devastated when anyone suggests to them that they might have “failed” at their assigned task. Even if the person doing the critique is not implying that the preacher failed, too often it is heard this way.

How might professors alter this expectation? How might we allow failure to become an acceptable and normative dynamic in our classrooms while still maintaining high standards? Why not recast failure as an opportunity for growth? When students fail, invite them to fail again, to *fail better* next time. Peter Sims suggests that a positive outlook on failure actually leads to greater creativity:

> In placing so much emphasis on minimizing errors or the risk of any kind of failure, we shut off chances to identify the insights that drive creative processes (?). Becoming more comfortable with failure, and coming to see false starts and mistakes as opportunities opens us up creatively.43

Have students take a page out of the Kimon Nicolaides School or the Pixar School. That is to say, help them see that failure is not so much an event as it is a perspective on an event. Instead of rushing to judgment, a homiletics professor might say with Keith Johnstone, “Excellent! We’ve found something difficult for you!” Statements like these are probably not heard that often in a typical preaching class.

Another way to embrace failure as teachers is to encourage risk-taking. Inviting students to take risks might look a lot of different ways. Professors could ask students to pick a challenging biblical text that they think is difficult to preach, to preach on a topic that students wish they could preach on, but don’t feel free to on account of the political environment at their church, or, to experiment with their voice and body in delivery. It is far better for them to try and to fail in preaching class than in their local church. If they’re going to fail, why not do it in the preaching classroom with us? What is preaching if not a form of risk-taking?

A third idea is to invite students to be more vulnerable when they preach (which is also a form of risk-taking). Instead of the pulpit being a place of risk-avoidance or failure-aversion, which it can so often be, recast it as a place of openness, authenticity, and vulnerability. Brené Brown, who wrote the 2012 best-selling book, *Daring Greatly: How the Courage to Be Vulnerable Transforms the Way We Live, Love, Parent, and Lead*, contends that being vulnerable is a courageous act. “Our willingness to own and engage with our vulnerability,” writes Brown, “determines the depth of our courage and the clarity of our purpose; the level to which we protect ourselves from being vulnerable is a measure of our fear and disconnection.”44 Although we risk judgment from others and even rejection when we have the courage to be vulnerable, neither of these impediments should stop us, suggests Brown. “Rather than sitting on the sidelines and hurling judgment and advice,” she writes, “we must dare to show up and be seen. This is vulnerability. This is *daring greatly*.45
My point here is not to turn the pulpit into a soapbox or a sofa cushion; rather, it is to invite us to reframe it as being a radically open space for honesty, self-donation, and courage before God. Yes, such a claim may rankle our theologies or that of our students and, yes, taking this to its logical extreme would be unwise. Duly noted. Yet, it is also possible that professors inadvertently teach students that the pulpit is the place to check their humanity at the door, where they can go to hide. If we preach Jesus Christ, the Crucified One, and invite our students to do the same, perhaps we should ask, *Is there anything more vulnerable than a cross?*

**Conclusion**

The question we addressed in this article was, *What can homileticians learn about pedagogy from improvisational performance and from Pixar?*, and the answer was revealed by way of three proposals: privilege process over outcomes, commit to constant rehearsal, and embrace failure. Put simply, our job is to teach students to *fail better*. All three proposals were grounded in improvisational performance theory and in values central to Pixar’s ethos as a company. To list these three proposals was not to suggest that these conversation partners have nothing else to teach us. Other values such as collaboration and creativity are also points of convergence worth discussing and perhaps emulating. Furthermore, to list each proposal separately was not to imply a lack of overlap between them. Failure is part of rehearsal which is part of being process-oriented. In other words, these proposals are overlapping and interrelated.

What was not revealed explicitly in this article, but remained tacit throughout, was the ways that these proposals are also theology-laden. At the least, they invite homileticians to ask questions about our respective theologies of proclamation, and how we might (inadvertently) communicate these theologies to our students. Another way of framing the same issue might be, *If we incorporate these proposals into our pedagogies, what theological questions come to the fore?*

With respect to rehearsal, it seems like a delicate balancing act. If we challenge students to work and rework their sermons constantly, do we risk turning the sermon into an a-spiritual exercise, thus, removing the roles of prayer and spiritual disciplines? Conversely, if we *do not* challenge students to rehearse their sermons and to make revisions, are we exposing them to the opposite danger: taking God’s agency for granted, even presuming upon it?

With respect to process, what theological resources are available to help students take a more growth- and process-oriented approach to their preaching and to their preaching life? Recall Viola Spolin’s observation that improvisational performance is about “process as opposed to result.” Should homileticians introduce the doctrine of sanctification in order to talk about the ways God grows a preacher over time through the practice of proclamation? Or, perhaps we should reintroduce the doctrine of grace so that students preoccupied with good-outcome-sermons versus bad-outcome-sermons rethink the (idolatrous?) categories they have created.
Lastly, how might we think theologically and homiletically about failure? No doubt failure is a pervasive theme in Scripture: human failure in the Garden, moral failure by those in power, discipleship failure on the part of Simon Peter, perceived messianic failure on Good Friday. Scriptural resources abound. Moreover, when one considers some of the scriptural accounts of preaching, the theme emerges once again. It is curious that in 1 Corinthians 1, the apostle Paul refers to proclamation as “folly” or “foolishness” (depending on one’s English translation) and the “power of God” simultaneously. How is Christian proclamation folly and the power of God simultaneously, perceived failure to some and the dunamis of God to others? Success and failure seem to coexist in a healthy tension in Paul’s theology. Moreover, at the practical level, what do we say theologically to help students reframe failure itself, so that when they fail, they fail with courage and vulnerability, to return to one of the themes in Brené Brown’s book?

In my judgment, helping students to fail better is about more than leveraging the insights available from improvisational performance theory and from Pixar. It also communicates a tacit theological message about what preaching is and what it is supposed to be. The possibilities and trajectories that lie dormant in such a message are as numerous as are the limitations and potential perils. Failing better is both risk and reward. If my claim holds true in ongoing pedagogical practices, then students who learn to fail better are destined to preach better. If it does not hold true, then at least this much is certain: students will fail while daring greatly.

Notes

1 For instance, in a March 2004 journal article, R. Keith Sawyer claims that the conventional image of the teacher as an actor in a performance (with a script) is overly simplistic and even problematic. He writes: “This metaphor emphasizes important skills for teachers, such as presentation, delivery, voice, movement, and timing. Yet the metaphor of teaching as performance is problematic, because it suggests a solo performer reading from a script, with the students as the passive observing audience.” Sawyer argues that, “creative teaching is better conceived of as improvisational performance.” See R. Keith Sawyer, “Creative Teaching: Collaborative Discussion as Disciplined Improvisation,” Educational Researcher 33, no. 2 (March 2004): 12. Emphasis in original.


6 Drawing on the work of sociologist Pierre Bourdieu and his discussions of *habitus* and regulated improvisation, practical theologian Mary McClintock Fulkerson argues that wisdom gained by *habitus* involves shifting away from rule- or content-driven models of traditioning. Knowledge as practical wisdom is inherently improvisational by which Fulkerson means it is born out in one’s “ability to do a thing in a new way in a new situation.” See Mary McClintock Fulkerson, *Places of Redemption: Theology for a Worldly Church* (Oxford: Oxford University Press, 2007), 47.

7 Anglican ethicist and preacher Samuel Wells argues that a church must learn to “improvise within its tradition” if it hopes to remain faithful ethically in a rapidly changing world. By ecclesial improvisation Wells means: “…a community formed in the right habits trusting itself to embody its tradition in new and often challenging circumstances; and this is exactly what the church is called to do.” See Samuel Wells, *Improvisation: The Drama of Christian Ethics* (Grand Rapids: Brazos Press, 2004), 12.


Begbie defines contingency broadly as “non-necessity” when he writes: “contingent things do not have to be and contingent events do not have to happen.” (184) However, in the context of musical improvisation, contingency-as-non-necessity means that performers have a level of freedom to attend to newness, surprise, unpreparedness, and a multiplicity of possibilities. See Jeremy Begbie, *Theology, Music, and Time* (Cambridge: Cambridge University Press, 2000), 184-85.


Sims, “Pixar’s Motto.”

Catmull states: “Candor could not be more crucial to our creative process. Why? Because early on, all of our movies suck. That’s a blunt assessment, I know, but I choose that phrasing because saying it in a softer way fails to convey how bad the first versions really are. I’m not trying to be modest or self-effacing. Pixar films are not good at first, and our job is to make them so—to go, as I say, ‘from suck to not-suck.’” See “Catmull the Wise,” 68.

Catmull, *Creativity, Inc.*, 131.


Lesa Lockford and Ronald J. Pelias, “Bodily Poeticizing in Theatrical Improvisation: A Typology of Performative Knowledge,” *Theatre Topics* 14, no. 2 (September 2004): 439. Lockford and Pelias also argue that some of these capacities are embedded and embodied in a tacit sense. They write: “It is a place where performers sense what is right without, perhaps, being able to explain why. It is the place, ...of ‘tacit knowledge.’” Ibid., 436.


In the context of this quotation, Hauerwas is making a larger point about the connection between excellence and discipline in the cultivation of imagination and creativity. Great art, he claims, is not the result of “unprecedented achievement, but the culmination of extensive discipline which has learned to make a virtue of necessity.” Consequently, musicians repeatedly practice their craft, and poets and novelists repeatedly attend to the nuances of language. Hauerwas’s wider point here is that neither imagination nor creativity exist in a vacuum. They are the result of training and experimentation. See Stanley Hauerwas, *Against the Nations: War and Survival in a Liberal Society* (Minneapolis: Winston Press, 1985), 52.


Sims, “Pixar’s Motto.”

“Catmull the Wise,” 68. Emphasis added.

Stefan H. Thomke and Linda A. Hill *et al.* are researchers in the areas of business and organizational leadership who make a significant connection between experimentation-through-iteration and corporate innovation. In his study of businesses that excelled at technological innovation through rapid experimentation, Thomke writes: “An experimentation process…can do more than generate information useful to the process itself. When well structured and integrated into an organization, experimentation generates learning that has implications far beyond the ‘laboratory.’” See Stefan H. Thomke, *Experimentation Matters: Unlocking the Potential of New Technologies for Innovation* (Boston: Harvard Business School Press, 2003), 89. Researcher Linda A. Hill and others claim that those who have been effective in organizational leadership—they cites Pixar as an example—commit themselves to a “discovery-driven approach” in which collaborative experimentation, failure, and group evaluation are integral to the overall leadership culture. Hall and others write: “Without losing sight of the necessary outcomes, the leaders we studied were willing to let their organizations experiment, iterate, debrief, learn, and then start the process over again.” See Linda A. Hill, Greg Brandeau, Emily Truelove, and Kent Lineback, *Collective Genius: The Art and Practice of Leading Innovation* (Boston: Harvard Business Review Press, 2014), 32.

32 Sims, “Pixar’s Motto.”


35 Frost and Yarrow, Improvisation in Drama, 3.


37 Ibid., 173.

38 Ibid., 63.


40 Sims, Little Bets, 52–53.

41 Catmull, Creativity, Inc., 115.

42 Ibid., 33. Cf. also Stefan H. Thomke who writes: “Building the capability and capacity for rapid experimentation in early development means rethinking the role of failure in organizations. It also requires a deeper understanding and sensitivity to what it takes to promote experimentation behavior.” See Thomke, Experimentation Matters, 212-13.

43 Sims, Little Bets, 38.


45 Ibid.

46 Beckett, Worstward Ho, 7.

47 Spolin, Improvisation for the Theater, 361.

48 When she uses the phrase “daring greatly,” Brown quotes a Teddy Roosevelt speech delivered in 1910. The one who has the courage to enter the arena, claims Roosevelt, may experience, in the best case, the triumph of victory and, in the worst instance, “if he fails, at least fails while daring greatly.” See Roosevelt quotation in Brown, Daring Greatly, 1.