

A la recherche du “sens” perdu: Copyrightable Creativity Deconstructed

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As the functional capabilities of computing systems continue to grow and mature, computers are no longer just replacing human labor. They are also infiltrating areas traditionally considered the province of human judgment. By way of an example of this phenomenon, two researchers at Rutgers University have recently designed computer software that can analyze works of art and rank them based on their creativity.¹ Their software works by leveraging image processing technology to analyze digital images of paintings.² It then applies a fixed algorithm to the input images that determines the depicted painting’s creativity based on two factors, the work’s novelty and historical influence.³ The values assigned to the novelty and influence variables are generated within the software through a chronological analysis of the totality of paintings input to the system. Essentially, the software analyzes each painting in its historical moment – say, the Mona Lisa, completed as late as 1517 – by way of comparison with other paintings that preceded and succeeded it.⁴ Paintings unlike their predecessors, but which sparked substantial similarity in successors, were deemed most creative.⁵ The obverse case, where a painting parroted an earlier work without generating later mimicry, led to the opposite result, a finding of lesser creativity.⁶ The software’s initial iteration spanned over 62,000 works of art created over a period of roughly 600 years, from 1400 AD to the present.⁷ The winners in this creativity pageant? Leonardo da Vinci’s work (perhaps unsurprisingly) received high marks when measured against his Renaissance peers.⁸ Van Gogh produced some favorably analyzed work in the latter half of the nineteenth century, while Mondrian’s⁹ geometric vision seems to have carried the first half of the twentieth.¹⁰ Finally, recent works by Fernando Calhau and Piero Dorazio are the standard bearers for modern art.¹¹

This software’s advent has to come as something of a relief to the art community. No longer will art historians need to debate the artistic and creative merits of various paintings. Software like that described above will provide them with a clear and simple answer. No longer will impassioned arguments between art students drown out the rhythm of chairs placed on tables

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¹ Dominic Basulto, *Why it matters that computers are now able to judge human creativity*, WASH. POST, June 18, 2015, available at: <http://www.washingtonpost.com/blogs/innovations/wp/2015/06/18/why-it-matters-that-computers-are-now-able-to-judge-human-creativity/>. See also Ahmed Elgammal and Babak Saleh, *Quantifying Creativity in Art Networks*, PROCEEDINGS OF THE SIXTH INT’L CONFERENCE ON COMPUTATIONAL CREATIVITY 39-47 (2015).

² *Id.* at 39. The researchers claim that the software could also analyze sculpture, literature, and other fields; but their initial work covered only painting. *Id.* at 46.

³ *Id.* at 40.

⁴ *Id.* at 41.

⁵ *Id.*

⁶ *Id.*

⁷ See Basulto, *supra* note 1.

⁸ See Elgammal and Saleh, *supra* note 1 at 46.

⁹ Whom the authors regularly refer to as “Mondrain.”

¹⁰ *Id.* at 45.

¹¹ *Id.* at 46.

in cafés closing in Rome’s *Monti* and Paris’ *Rive gauche*. Such students will have at their fingertips an electronic ranking as readymade as the Marcel Duchamp fountain whose virtues they extol. No longer will a painter new to the field need to question the creativity of her first work. It will be susceptible to a clear classification, if not upon its immediate creation, then at least after the passage of time grants context to the work’s historical influence. And no longer will the present day require its own version of works of historical fiction like Emile Zola’s *L’Œuvre* or the Goncourts’ *Manette Salomon*. Modern software will obviate the need for a refreshed take on these novels, whose fictional painters Claude Lantier and Coriolis are relegated to ignored, but highly creative struggle while the art establishment crowns their less creative *confrères*.

The creativity-ranking software stands to have an additional, less likely beneficiary – the legal community in the form of copyright scholars and judges applying copyright law. This is because the latter body of law relies on creativity in certain critical respects. At a general level, copyright’s fundamental charge is the promotion of creativity¹² - a charge indirectly captured in copyright law’s Constitutional foundation, which empowers Congress to “promote the Progress of Science and useful Arts.”¹³ The so-called “useful Arts” are those typically reflecting artistic creativity, such as painting and sculpture.¹⁴ Beyond the overarching creativity inherent in copyright’s purpose, creativity rears its head more specifically in a number of sub-doctrinal areas of copyright. When assessing whether a derivative work is sufficiently original to merit its own copyright protection, copyright law relies on a variety of creativity standards. An oft-cited example of one such creativity analysis occurred in *L. Batlin & Son, Inc. v. Snyder*,¹⁵ a case involving a recreation of a public domain Uncle Sam piggy bank. There, the Second Circuit found that the recreation in question did not sufficiently build on the original to merit copyright protection because the later work did not evince “substantial originality”¹⁶ vis-à-vis its public domain predecessor.¹⁷ Other circuits have adopted their own standards when determining whether a derivative work embodies sufficient creativity to merit copyright protection. These standards may be mapped on a scale, where bookending the substantial creativity required by the *Batlin* case are minimal creativity and gross creativity standards.¹⁸

In a subset more relevant to the analysis proposed here, copyright law also relies on assessments of creativity when asking the threshold question of whether a specific work is copyrightable at all. This requirement follows from the Supreme Court’s decision in *Feist Publications, Inc. v. Rural Telephone Service Co.*,¹⁹ which declined to find infringement in a case involving a telephone company’s copying of a another company’s white pages telephone directory.²⁰ The Court based its decision not on the extent of copying by the latter company – it

¹² William F. Patry & Shira Perlmutter, *Fair Use Misconstrued: Profit, Presumptions, and Parody*, 11 CARDOZO ARTS & ENT. L.J. 667, 690, n. 104 (1992).

¹³ U.S. CONST. art. I, § 8, cl. 8.

¹⁴ This is in contradistinction to the mention of “Science” in the same Constitutional provision, which is regularly interpreted to refer to Congress’ ability to enact patent legislation.

¹⁵ 536 F.2d 486 (2d. Cir 1976).

¹⁶ *Id.* at 491.

¹⁷ *Id.* at 492.

¹⁸ Robert A. Gorman, *Copyright Courts and Aesthetic Judgments: Abuse or Necessity?*, 25 COLUM. J. L. & ARTS 1, 6 (2001)(observing these three standards of creativity).

¹⁹ 499 U.S. 340 (1991).

²⁰ *Id.* at 342-344, 363.

was clear that the copying had been wholesale in nature²¹ – but on the lack of copyrightability of the original white pages.²² For lack of copyright protection, then, the original telephone directory compiler could not show infringement. The Court supported this finding by inaugurating a new standard of originality required of a work to obtain copyright protection. Where works traditionally only had to be original to their authors in the sense of having been created by their authors without copying another work,²³ the *Feist* decision added a second Constitutionally-mandated²⁴ requirement – that a work also evidence a “modicum of creativity”²⁵ to qualify for copyright protection. Because the white pages at issue in *Feist* were deemed “garden-variety” and “devoid of even the slightest trace of creativity,”²⁶ they did not satisfy this new requirement.

In either the context of derivative works or *Feist*’s originality standard, software like that designed by the Rutgers researchers might benefit both courts and copyright scholars. Certain updates to the software would be necessary, however. First, the software would have to be expanded to include piggy banks, telephone directories, and any other object whose creativity was at issue in a given litigation. Each class of goods might require its own iteration of the software – with the creativity of piggy banks being compared to other piggy banks, the creativity of phone directories being compared to other phone directories, and so on. While litigants might hypothetically argue over the proper set of works to be included in a specific class, the authors of the creativity software do contemplate expansion to other fields beyond painting. Once the spectrum for creativity is mapped for a given class of works, all that would remain for a court to make a determination on creativity would be to assign threshold values corresponding to each standard at different points on the spectrum. A certain point would map to a “modicum of creativity” for the *Feist* originality standard, and other points would track to the three different creativity standards applied in derivative works cases. The thorny, qualitative, and subjective question of creativity would thereby be reduced to a predictable, quantitative, and objective analysis in the hands of courts.

If only it were so simple. Beyond the methodological issues just barely addressed regarding the application of software to questions of copyrightable creativity, there looms a far more monolithic issue. How can software meaningfully compute creativity? The short answer to this – and the authors of the creativity software acknowledge as much – is “it cannot, at least not with any complete precision.” The authors of the creativity software note in particular that their chosen analysis was limited by a few critical factors. Because creativity is determined within the software on the basis of only the set of images scanned, the software’s results are only as good as the richness of its database.²⁷ A greater number of paintings scanned might have changed the program’s output by potentially catching new pioneers earlier in time and condemning the previously vaunted to the status of less-creative laggards. Further, the program can only analyze “what it sees,” that is, the images fed to it through a scanning process and subject to “underlying computer vision methods.”²⁸ It does not appreciate the rich texture of a Jackson Pollack. Finally,

²¹ *Id.* at 344. The copying was so substantial as to reach fictional names included by the original white page compiler.

²² *Id.* at 362.

²³ See, e.g., Ralph D. Clifford, *Random Numbers, Chaos Theory, and Cogitation: A Search for the Minimal Creativity Standard in Copyright Law*, 82 DENV. U. L. REV. 259, 260 (2004)[*hereinafter Random Numbers*].

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.*

²⁷ See Elgammal and Saleh, *supra* note 1 at 39.

²⁸ *Id.*

the software is entirely dependent on the algorithm that it implements.²⁹ If that algorithm were changed to reflect a different weighting of the novelty versus influence factors, its output results would shift, as well. If the algorithm reflected an entirely different definition of creativity – one which did not value influence, for example – then the results would change in still other ways. This complication flows from a more fundamental concern – by reducing creativity to so many specks on a numerically-bound scatterplot, the creativity software provides a single, supposedly objective answer to a question that is almost hopelessly subjective. “Creativity” is a term of inherent fluidity, whose meaning might legitimately vary as between art scholars, art students, painters, judges and laypeople at a given historical moment, and as between aesthetic notions accepted at different historical moments. What dominant thought in the Renaissance deemed “creative” might look very different from that same notion as conceived now. Upon closer investigation, then, what a computer posits as an objective measure of creativity is no more than a single subjective iteration bound by algorithm among potentially infinite others that algorithms or human beings might espouse.

These issues do not just plague the search for creativity by computers. In many similar ways, they contaminate the creativity analyses currently used by courts. For now, let us hypothetically consider a court standing in the place of the computer program discussed here. At least at a superficial level, the comparison has its points of resonance. Just as the computer software cannot expand beyond the set of images made available through scanning, so too must a court limit itself to the evidence that is properly brought before it in litigation. A court theoretically can no more speculate on what lies outside the realm of admitted evidence than can a computer speculate on images outside the realm of its database. Further, if a computer can only apply the methods that it technologically embodies, a court can only apply its own set of methodologies to the case at hand. For purposes of the analogy here, the vision technology limits that bound computational analysis become limits on evidence and procedure when transplanted to a courtroom. Finally, and by way of the ultimate methodological limit, the court, like the computer, can only apply a relatively fixed definition of creativity. Here, the programmer’s chosen definition reliant on novelty and influence becomes the articulation of creativity espoused in precedent by a given circuit court.

Admittedly, this comparison takes a highly mechanistic view of courts. Courts are, of course, free to exercise a higher degree of discretion in many cases where a computer program running a simple algorithm cannot. Where the latter’s input entirely determines its output (presuming no unforeseen error, defect, system failure, or bug), the former is tasked with making an argument that might dynamically highlight certain aspects of a given case’s facts or law to reach a decision in contradiction with another court’s hypothetical application of the same law to the same facts. That said, the almost Cartesian³⁰ view of courts proposed as a possibility here may be viewed as a hypothetical comparison between the behavior of courts and computers. It is one task of this Article to see if that hypothesis gains any support in the practical legal world.

This is only the secondary goal of this Article, however. The primary, but related, goal is to show how the concept of “creativity” as defined and applied by courts in copyright cases fails to map to *any* reasonable concept of creativity in certain critical respects. It is posited that courts and computers are both limited when determining the presence or absence of creativity; but their limits may not overlap – perfectly or at all. As to the judicial application of concepts of

²⁹ *Id.*

³⁰ To view a court’s function as mechanistically as here is to associate that function with the method proposed by Descartes in books like his *MÉDITATIONS* and *DISCOURS DE LA MÉTHODE*.

creativity, the first charge undertaken here is a deconstructive one – to show the lack of meaningful overlap between the legal definition of creativity and the “actual” meanings of that same term. To undertake this comparison, Part II of this Article focuses on perhaps the more easily determined of these two definitions of the term – “creativity” as defined by courts. Rather than giving an unduly broad berth to this analysis, however, the Article will limit its review to creativity as applied in the context of *Feist*-based threshold creativity reviews. As a matter of further distillation, such cases will be highlighted where courts rely on an alternatives-based test to find creativity. This test dictates that a creator’s work is creative under copyright if she enjoyed sufficient alternative means of communicating the idea underlying her work. Part III of the Article will show how the alternatives-based conception of creativity – while perhaps well-meaning and successful in promoting unrelated policy objectives – is ill-suited to measure the presence of actual creativity. This limited fit is demonstrated, in part, via hypotheticals that reveal inconsistent results between creativity according to courts and creativity in practice. Part III also attempts to prove such inconsistencies by drawing on both scholarly legal literature on the topic of creativity, and from certain philosophical treatments of the topic, notable among them the view of physicist and philosopher Henri Poincaré. Having completed a deconstruction of the legal notion of “creativity,” part IV of this Article concludes on a more constructive, if not wholly restructuring, note by invoking a separate model of creativity that would seem to necessarily exceed the views of courts and computers – a model indirectly proposed by a different “Henri” – the Nobel laureate Bergson in his work *The Creative Evolution*, among others.

Over the course of the three parts that follow, then, this Article will trace the form of the first period of sine curve. It begins here at an origin, a zero-point with no preconceived notion of creativity. Part II builds from this point of origin by constructing positively, ultimately reaching a peak by way of a mature judicial conception of the term “creativity.” Part III serves to undermine and deconstruct Part II’s edifice while recognizing a further deficit in meaning of the term creativity outside the legal world. It is thus the arc falls below the imaginary x-axis to reach its nadir. Part IV resurrects the curve with a proposed construction of creativity that restores the system to something of an original point. From there, the reader is left to imagine further cycles of growth and decay passing to the infinite. It may be that through just such sinusoidal cycles of varying amplitudes and frequencies, creativity in its non-legal sense pulsates and flows, grows and shrinks, and bursts and rests.

II. Creativity as Defined by Courts Applying *Feist*

The *Feist* court’s mandate that works evidence a “modicum of creativity” to merit copyright protection provided lower courts with an immediate challenge. This challenge arose from a curious combination of two factors in the case. On one hand, the Supreme Court inaugurated a new creativity standard.³¹ On the other, the Court denied that the artifact before it, the telephone directory, possessed such creativity.³² This mismatch between the Court’s new rule and its holding could be viewed as reducing the vast majority of the *Feist* decision to the status of dictum.³³ Clearly falling in this legally non-binding category are those portions of the decision opining what constitutes sufficient creativity. The work at issue did not possess such creativity

³¹ See *supra* note 25.

³² See *supra* note 26.

³³ Dennis Karjala, *Copyright and Creativity*, 15 UCLA ENT. L. REV. 169, 169 (2008).

due to its “garden variety”³⁴ nature; a work exceeding the new standard was not before the Court such that the Court could establish what aspects would enable the purely “garden variety” to transition to the protectably creative. The problem then shifts to a question of proof by negation – unless a given set not meeting a criterion represents the *whole* set not meeting such a criterion, the meaning of the affirmative rule cannot be inferred. In other words, unless the telephone directory (and perhaps others like it) represent the outer bounds of the “uncreative,” one cannot deduce what *is* creative. Clearly, the Court did not intend to limit its new rule to telephone directories; otherwise, it would have denied copyright protection on the narrower ground that the work at issue was an uncreative telephone directory, not an uncreative work more generally. So a certain space necessarily remains between the object determined insufficiently creative – an iteration of traditionally standard white pages – and the class of goods that are sufficiently creative. What other objects that are at once insufficiently creative and “not a white pages” accordingly remained completely unclear after *Feist*.

Even if one is willing to afford some value to the non-binding language in *Feist*, the decision still does not get very far in advancing an affirmative definition of creativity. At one point, the Court explains that “the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, no matter how crude, humble or obvious it might be.”³⁵ This language is plainly not a definition of the term “creativity.” Instead, it is a statement unhelpfully establishing a threshold level in the as-yet undefined term. Seen from this perspective, this particular pronouncement would have lost no effect if it had been articulated using any other concept. The requisite level of “anarcho-syndicalist communism”³⁶ would have served just as well, if that term remained equally undefined. Through the first sentence of this quotation, the Court has provided a number without a yardstick. The second sentence, far from providing such a yardstick, muddies efforts at a possible definition. Reassurances that most works (none of which were before the Court, of course) would satisfy the undefined creativity standard merely restates the first sentence’s problem, but the addition of the words “crude, humble, or obvious” provide some rough substance by which creativity might be defined as a fairly low bar. Yet the Court also uses the term “creative spark,” which would seem to conjure grander images of potentially Promethean creativity. So even where the Court begins to give a somewhat wispy form to the creativity requirement, it does so equivocally, in arguable self-contradiction. And as commentators have further noted, the Court provides no guidance elsewhere in the decision as to what a “creative spark” might mean.³⁷ The rest of the *Feist* case is little more helpful, so it is fair to view the case as the implementation of a new standard without a “workable definition” of what that standard might be.³⁸

This has left lower courts with a certain degree of freedom to interpret the *Feist* creativity standard in different ways; and the results have been, perhaps unsurprisingly, divergent. To demonstrate this divergence, further background is necessary. Let us begin prior to the *Feist* decision, with a bedrock principle of copyright that serves as a mediating term in later creativity analyses. This principle is the “idea-expression dichotomy,” which dictates, in its simplest terms,

³⁴ See *supra* note 26.

³⁵ *Feist*, *supra* note 19 at 345.

³⁶ See *MONTY PYTHON AND THE HOLY GRAIL* (Michael White Productions 1975) for a use of a form of this term.

³⁷ *Random Numbers*, *supra* note 23 at 268.

³⁸ *Id.* at 279-80. See also Russ VerSteeg, *Rethinking Originality*, 34 WM. & MARY L. REV. 801, 822 (1993) (“What the Court failed to do in *Feist* was explain just how it determined that Rural’s white pages lacked the creativity requisite to elevate it to ‘original’ status for purposes of copyright.”).

that ideas remain uncopyrightable while the expression of those ideas may be susceptible to copyright protection.³⁹ For example, the “idea” of sculpture of a deer is not protectable, but a particular sculptor’s iteration of this would be.⁴⁰ This summary of the idea-expression dichotomy is deceptively simple, and a good bit more texture is necessary to explain the doctrine’s subtleties. Perhaps the most typically cited description of the dichotomy comes from Learned Hand in the case of *Nichols v. Universal Pictures, Corp.*,⁴¹ a case involving a play by the plaintiff entitled “Abie’s Irish Rose,” alleged to have been infringed by a later motion picture “The Cohens and the Kellys.”⁴² Because the case did not involve the literal taking of any dialogue of the original work, the court was compelled to consider the similarities of the works at an abstract level. This it did according to the following general idea/expression framework:

[U]pon any work..., a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the play is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the playwright would prevent use of his ‘ideas’ to which, apart from their expression, his property is never extended.⁴³

Because the two dramatic works at issue only overlapped to the extent that they were comedies based upon both a quarrel between ethnically diverse families and the love that two of the families’ children develop despite the quarrel, the elements allegedly taken fell on the unprotected “idea” side of Hand’s framework.⁴⁴ As such, no infringement was found.

At first glance, this test is of fairly limited value. It basically says that there are things called “ideas,” to which copyright protection does not extend, that are more general or abstract versions of a given work. And then there is a separate class of things called “expression,” which may be protected, that are more concrete in nature. Somewhere between these two ends of a spectrum from general to specific, protection begins to vest, although that point is not clear.⁴⁵

It is at this point of limited clarity that one iteration of the idea/expression dichotomy, called the merger doctrine, might meaningfully guide discussion. The merger doctrine refers to the possibility that idea and expression might merge in a single work, such that they become effectively indistinguishable. In such a case, the unprotectability of an idea trumps the protectability of expression. For example, in *Veeck v. Southern Bldg. Code Congress Intern.*,⁴⁶ the appellee developed model fire and gas codes for buildings, which the appellant copied to his web site.⁴⁷ Between the creation and subsequent copying of the model codes, however, certain towns in north Texas adopted the codes as their own law.⁴⁸ Because the appellant who copied the codes presented them as the law of the Texas towns on his web site, the court found that the

³⁹ This principle is codified within the Copyright Act, which states that “In no case does copyright protection for an original work of authorship extend to any idea...” 17 U.S.C. § 102(b) (2012).

⁴⁰ *Superior Form Builders, Inc. v. Dan Chase Taxidermy Supply Co., Inc.*, 74 F.3d 488, 492 (4th Cir. 1996) (“Several sculptors may copy a deer, even the same deer, in creating a sculpture, and each may obtain copyright protection for his or her own expression of the original.”).

⁴¹ 45 F.2d 119 (2d Cir. 1930).

⁴² *Id.* at 120.

⁴³ *Id.* at 121.

⁴⁴ *Id.* at 122.

⁴⁵ “Nobody has ever been able to fix that boundary, and nobody ever can.” *Id.* at 121.

⁴⁶ 293 F.3d 791 (5th Cir. 2002).

⁴⁷ *Id.* at 793.

⁴⁸ *Id.*

appellant was copying no more than law not properly subject to copyright. Once the model business codes were adopted, in other words, they merged with the law of the towns in question.⁴⁹ If someone – including the appellant – wished to cite to that law, that person needed access to the exact expression embodied in the law.⁵⁰ So what began as creative expression by the appellee fundamentally changed in character when it became law, for the idea of a north Texas building code merges with the expression of that code.

Underpinning this finding is a Lockean policy objective. The protectability of expression must yield to the unprotectability of idea when the two merge because to find otherwise would deprive the public domain of necessary expressive tools. As the *Veck* court noted, the appellant web site operator “could not express the enacted law in any other way.”⁵¹ What matters in the merger inquiry are the number of expressive alternatives available to articulate a given idea. In *Veck*, there were no such alternatives to cite to a legal document. In other cases, a paucity of expressive alternatives has served to deny protection to a map of a fixed pipeline route,⁵² scented candle labels depicting the fruits and flowers whose odors were captured in the candle scents,⁵³ and a set of basic box top instructions,⁵⁴ among others. To allow copyright in works amenable to so few expressive alternatives would mean that subsequent cartographers, candle makers, and box top designers could not express basic ideas necessary to their trade without infringing another’s copyright. This violates the basic Lockean principle where property rights are acceptable as long as alternatives to the property are “enough, and as good.”⁵⁵ Merger cases present a scenario where there are neither enough ways to express an idea, nor other ways that are as good.

This same Lockean reasoning leads to a contrary result in copyright cases where an idea admits of sufficient expressive alternatives. The recent copyright dispute pitting technology giants Google and Oracle offers one example of this.⁵⁶ The case concerned Google’s unlicensed implementation of Oracle’s Java programming language in Android phones.⁵⁷ Google adopted an argument not very different from the appellant in *Veck*, where Google’s purported need to use Java replaced the *Veck* appellant’s need to use the building code. The *Oracle* court was not sympathetic to Google’s *post hoc* merger argument, however. The court instead commented that “copyrightability is focused on the choices available to the plaintiff at the time the computer program was created,”⁵⁸ not at a later time when a subsequent user wishes to copy the program. In the *Oracle* case, such choices were evident in the various ways that Oracle (or its predecessor Java author, Sun Microsystems) could have expressed the various functions accomplished by Java and copied by Google. Indeed, “Google could have structured Android differently and could have chosen different ways to express and implement the functionality that it copied.”⁵⁹

⁴⁹ *Id.* at 802.

⁵⁰ *Id.* at 801.

⁵¹ *Id.* at 802.

⁵² *Kern River Gas Transmission Co. v. Coastal Corp.*, 899 F.2d 1458 (5th Cir. 1990).

⁵³ *Yankee Candle Co. v. Bridgewater Candle Co.*, 259 F.3d 25 (1st Cir.2001).

⁵⁴ *Morrisey v. Procter & Gamble*, 379 F.2d 675 (1st Cir. 1967).

⁵⁵ Julie Cohen, *Creativity and Culture in Copyright Theory*, 40 U.C. DAVIS L. REV. 1151, 1171 (2006)[*hereinafter Creativity and Culture in Copyright Theory*].

⁵⁶ *Oracle Am., Inc. v. Google Inc.*, 750 F.3d 1339 (Fed. Cir. 2014).

⁵⁷ *Id.* at 1347-48, 1350-51.

⁵⁸ *Id.* at 1370.

⁵⁹ *Id.* at 1368.

Because Google enjoyed alternatives that were both “enough” and “as good,” copyright protection could properly subsist in Oracle’s expression.

The cases outlined to this point serve to highlight two critical aspects of the idea-expression dichotomy. First, they provide a view – albeit introductory – as to what an “idea” is. An idea is a general statement of a work’s (or a subpart of a work’s) subject matter or aim – to provide a citation to a building code, to map a pipeline route, to communicate candle scents visually, or to implement certain functionality in a computer language. But as Learned Hand’s initial statement intimated, there is some flexibility in the generality or specificity of an idea, without a clear definition as to when a move towards specificity converts the idea to expression. The idea in the *Veeck* case could be recast more specifically as a citation to the specific building code of two towns in North Texas. This would not have altered the outcome of the case, as merger occurs in either articulation of the idea offered here; but the move towards a more specific idea does not seem *per se* unreasonable. One can imagine a similar change in a case like *Oracle*. The idea there might not be “to implement certain functionality in a computer language,” but, hypothetically, “to implement a cloning function in an object-oriented programming language using certain declarations required by that language.” The dividing line between idea and expression would seem mobile, indeed.

The mobility in the line between idea and expression might present enough of a challenge on its own, but the idea/expression dichotomy features a second critical complication. Essentially, the dividing line between idea and expression does not just demarcate idea and expression, it determines their *interplay* in what could be compared to the two-body problem in physics. This latter problem considers the dynamic forces exerted between two bodies in space. When the bodies move in space, it is not enough to measure the change in force exercised by one on the other; one must consider how the bodies dynamically exchange force in an ever-changing feedback loop. There is a similarly dynamic feedback loop in play between idea and expression when the line dividing one from the other moves. One could consider the hypothetical change in idea for the *Oracle* case proposed above as one example of this. The much-criticized case of *Whelan Assoc. Inc. v. Jaslow Dental Laboratory, Inc.*,⁶⁰ offers another. There, the court confronted an accusation of infringement in certain dental management software,⁶¹ but the overlap between the software programs at issue was limited to the programs’ shared structure and functionality, not their actual source or object code.⁶² The court thus had to determine if copyrightable expression could subsist at a level of generality above the literal form of software code. To structure this analysis, the court concluded that “the line between idea and expression may be drawn with reference to the end sought to be achieved by the work in question.”⁶³ The idea of “a computerized program for operating a dental laboratory would not in and of itself be subject to copyright,”⁶⁴ while copyright could extend to the court’s conception of expression for software - “the manner in which the program operates, controls and regulates the computer in receiving, assembling, calculating, retaining, correlating, and producing useful information either on a screen, print-out or by audio communication.”⁶⁵ This concept of expression followed directly from the court’s conclusion that there were “many ways”⁶⁶ that a computer program

⁶⁰ 797 F.2d 1222 (3d. Cir. 1986).

⁶¹ *Id.* at 1224.

⁶² *Id.* at 1233-34.

⁶³ *Id.* at 1236.

⁶⁴ *Id.* at 1238.

⁶⁵ *Id.* at 1239.

⁶⁶ *Id.* at 1238.

could perform this set of functions. Setting aside whether the *Whelan* court’s approach is correct, it may be observed that it established an extremely broad idea level when reviewing the software before it. That choice had the practical effect of allowing expression to climb into higher levels of abstraction because its “idea” standard allowed for expressive alternatives at those levels. So a very general definition of “idea” does not just move a line of demarcation between idea and expression, it feeds more and more alternatives into those levels of abstraction more specific than that idea.⁶⁷ It crosses the very territorial boundary that it establishes. The hypothetical example offered regarding the *Oracle* case would have precisely the opposite effect. As the idea of the functionality implemented in the Java language became more specific, fewer alternatives would be available at more and more specific levels of abstraction, thereby doubly constricting the scope of copyright in a dynamic feedback loop. Idea, viewed from this angle, serves both as line of demarcation to be distinguished from expression, and constraint that enters expression’s territory and applies a dynamically changing force.

The functioning of the idea/expression dichotomy is of critical importance in the question of copyrightable creativity under *Feist*, because it drives a methodological distinction: between those courts that view the creativity inquiry as an extension of the idea/expression dichotomy, and those that view the creativity inquiry as an entirely unrelated condition. Perhaps the best example of the first approach comes from the opinion in *American Dental Ass’n v. Delta Dental Plans Ass’n*.⁶⁸ In that case, the Seventh Circuit dealt with the purported infringement of American Dental’s taxonomy of dental procedures, comprised of both descriptions and serial numbers.⁶⁹ Delta Dental, which had copied most of American’s system in its own publication, defended in part on the ground that the taxonomy in question was not properly copyrightable.⁷⁰ The Seventh Circuit disagreed with this contention, noting:

Classification is a creative endeavor. Butterflies may be grouped by their color, or the shape of their wings, or their feeding or breeding habits, or their habitats, or the attributes of their caterpillars, or the sequence of their DNA; each scheme of classification could be expressed in multiple ways. Dental procedures could be classified by complexity, or by the tools necessary to perform them, or by the parts of the mouth involved, or by the anesthesia employed, or in any of a dozen different ways. The Code’s descriptions don’t ‘merge with the facts’ any more than a scientific description of butterfly attributes is part of a butterfly. There can be multiple, and equally original, biographies of the same person’s life, and multiple original taxonomies of a field of knowledge. Creativity marks the expression even after the fundamental scheme has been devised.⁷¹

The court’s citation to *Feist* immediately prior to this, coupled with its use of the word “creative” within the paragraph, clarifies that its comments do relate to the question of copyrightable creativity. Confusion as to the comments’ scope would be understandable, however. After all, the court mentions the non-creativity-informed doctrine of merger directly. Its reasoning is also

⁶⁷ A different way of putting this appears in *Lexmark Intern. v. Static Control Components*, 387 F.3d 522 (6th Cir. 2004), where the court concluded that certain copier codes were uncopyrightable. In this respect, it faulted the district court’s previous finding of alternatives in the codes by noting that the possible use of other constants in the codes “do not appear to represent alternative means of expressing the ideas or methods of operations embodied in the Toner Loading Program; they appear to be different ideas or methods of operation altogether.” *Id.* at 540. Thus, by constricting the scope of the idea, potentially copyrightable alternatives were displaced from the space of protectable expression to the space of unprotected idea. This will be discussed more later in this Section.

⁶⁸ 126 F.3d 977 (7th Cir. 1997).

⁶⁹ *Id.* at 977.

⁷⁰ *Id.* at 978.

⁷¹ *Id.* at 979 (internal citation omitted).

thoroughly consonant with the structure of traditional idea/expression inquiries. When the court lists possible ways in which dental procedures could be classified, it is implicitly setting out an idea – the classification of dental procedures (of course). When it subsequently enumerates criteria by which the classification could be organized – complexity, tools, or anesthesia – it is generating a list of alternatives available based on the initial choice of idea. The court then repeats the exercise in dictum with another example – that of the ‘idea’ of a biography permitting the “expression” in the form of multiple alternatives.

The reading of *Feist*’s creativity standard in a manner coextensive with the traditional idea/expression inquiry raises two immediate complications.⁷² The first is an extension of an issue noted above – the two body problem of idea and expression. The court’s statements on butterflies, *bouches*,⁷³ and biographies imply the determination of specific idea levels, but there is no reason to view these as the only possible idea levels. The court could have imagined the idea of each falling at a more specific point, like “butterflies grouped by color,” “dental procedures grouped by complexity,” or the “biography of Urkel.”⁷⁴ Each of these more specific idea choices would entail an associated constriction in the number of alternatives available to a creator acting on that idea. Such more specific ideas would inevitably affect the scope of a work’s copyright; and if articulated in a sufficiently specific manner, they could go so far as to deprive a work of copyright entirely. It would seem that the court played somewhat fast and loose with this (inherently fast and loose) aspect of the creativity question.

The second immediate complication of the *American Dental* court’s analysis is a question of redundancy. Among the set of examples that the court offers to justify its holding of copyrightability in the dental taxonomy, a citation to *Whelan v. Jaslow* would be by no means out of place. The idea of “a computerized program for operating a dental laboratory,”⁷⁵ like a taxonomy of butterflies, would not be copyrightable; but the chosen expression of each could be. Yet the rationale in *Whelan* was not based on *Feist*; it could not be, as *Feist* was decided five years after *Whelan*. This leads to the conclusion that the *American Dental* approach to creativity is not just consistent with the traditional idea/expression analysis, it is *duplicative* of it. The very idea constraint leading to alternative expressive possibilities necessary to satisfy the idea/expression dichotomy in *Whelan* operates in *American Dental* to show creativity. This does not seem a proper approach to the question of creativity, if only because it is inconsistent with the approach and methodology of the Supreme Court in *Feist*. When considering the white pages before it in the latter case, the Court did not conclude that the idea of a white pages directory merged with the expression of that directory, such that the traditional idea/expression analysis would dispose of the case (and it certainly could have done so, for there are no alternatives to the traditional white pages format). Instead, the Court initiated a new requirement which, it should be presumed, meant something more than the old one.

Other cases that rely on an idea/expression structure for their own *Feist*-based inspiration address the risk of redundancy in tests by adding a new element to the old test: author selection or arrangement. Here, the Article will take a brief turn to a “meta” level by rehashing *Matthew Bender & Co., Inc. v. West Pub. Co.*,⁷⁶ a case involving the copyrightability of various aspects of West case reporters so beloved by attorneys everywhere. Because cases themselves are in the public domain, West’s claims to copyright were limited to those aspects of the reporter that they

⁷² With additional criticisms to follow in Part III.

⁷³ French for “mouths” – anything for alliteration.

⁷⁴ Such a biography would presumably have at least one chapter dedicated to cheese.

⁷⁵ See *supra* note 64.

⁷⁶ 158 F.3d 674 (2d Cir. 1998).

selected, in this case the content of the header at the top of each case.⁷⁷ To guide its analysis, the court commented that “when it comes to the selection or arrangement of information, creativity inheres in making non-obvious choices from among more than a few options.”⁷⁸ So it is already clear that the court would not limit itself to the typical idea-expression search for alternatives, it required a non-obvious selection from among those alternatives. While the use of the patent term “non-obvious” is probably inappropriate in view of *Feist*, it does add a probabilistic shading to the basic alternatives test. Rather than viewing all alternatives as equally likely, and merely tallying them to find possible copyrightability in each, the *Matthew Bender* court seems to require both a tallying *and* a related assessment of likelihood to find copyright in only those alternatives that are “non-obvious.” The case also highlights the additional wrinkle that the alternative be *chosen* by the author among the others. This analytical framework led the court to find that West’s various contributions to case headers were all insufficiently creative to merit copyright protection.⁷⁹ The court acknowledged other cases where such creativity had been found, but emphasized the “exercise of judgments more evaluative and creative” than West’s.⁸⁰

It is doubtful, however, that the addition of a light probabilistic shading and an emphasis on a creator’s judgment and selection will meaningfully change the original idea/expression quantum in *Feist* creativity cases. On the issue of probability, it should be recalled the *scènes à faire* doctrine already puts just such a light probabilistic shading in the traditional idea/expression context. The doctrine accomplishes this by finding uncopyrightable, or at best of limited copyrightability, those expressions effectively generic or inherent to a work’s genre.⁸¹ An annoying and meddlesome neighbor on a sitcom would be one example of this phenomenon; the use of a parrot, eyepatch, and peg-leg for a pirate character would be another. The core of the *scènes à faire* doctrine, then, is to find more probable forms of expression, and then eliminate or limit their protectability, in much the same way the modifier “non-obvious” would attach to less probable, and accordingly protectable, forms of expression. So the *Bender* inquiry into the probability of a given alternative would not seem to change the traditional idea/expression quantum.

The second supplement to the traditional idea/expression query proposed by the *Bender* case – author selection or judgment – would not seem to add very much to the test either. This much can be shown in practical terms. As a baseline postulate for this statement, copyright must require no more than that authorial selection or arrangement happen at one time, any time in the creative process. To conclude otherwise would eliminate copyright in well-timed photography, like Alfred Eisenstaedt’s famous shot of the sailor spontaneously kissing a woman in jubilation at the end of World War II.⁸² Eisenstaedt clearly merited copyright for his well-timed shot, but he did not arrange anything at the time of the photograph. He merely took the photograph and *at a*

⁷⁷ *Id.* at 683-85.

⁷⁸ *Id.* at 682.

⁷⁹ *Id.* at 688-89.

⁸⁰ *Id.* at 689.

⁸¹ *See, e.g.,* *Incredible Technologies v. Virtual Technologies*, 284 F. Supp.2d 1069, 1079-80 (N.D. Ill. 2003) (acknowledging in the context of competing golf video games that certain aspects of such a game may be subject to very thin copyright protection - “the wind meter and club selection features, for example, account for variables in a real game of golf and are indispensable to an accurate video representation of the sport. The game selection features, such as the menu screens and player quit options, are standard to the video arcade game format, as is the fixed placement of certain icons around the border of the screen... Though these elements are protected at least in their ‘shapes, sizes, colors, sequences, and arrangements,’ like the graphics on the control panel, they are to be treated as scenes a faire, and are afforded protection only from virtually identical copying.”).

⁸² This photograph is entitled *V-J Day in Times Square*.

point sometime later selected it as worthy of adoption as his work. If copyright is to protect Eisenstaedt’s work (as it should), it must on occasion accept a limited quantity and quality of artistic selection. Most works will exceed these limits, leaving the alternatives test a dominant rudder in the space of many *Feist*-based creativity analyses.⁸³ And if the alternatives test assumes such a role, then judicial assessment of creativity is necessarily subject to the two issues already noted above – inherent unpredictability according to a court’s determination of a work’s “idea,” and almost complete redundancy with previously existing modes of analysis.

The alternatives-based analysis of creativity under *Feist* presents further issues, which will be discussed in part III; but for now we would do well to introduce a few cases that view the *Feist* creativity inquiry as entirely separate from the alternatives-based analysis. One such case is *ATC Distribution Group, Inc. v. Whatever It Takes Transmission*,⁸⁴ involving the alleged copying of a parts catalog by the defendant’s founder after leaving the plaintiff’s employ.⁸⁵ That this case treats the *Feist* inquiry as divergent from the idea/expression inquiry can be shown through the court’s comment that “original and creative *ideas* are not copyrightable.”⁸⁶ A test for creativity that aligns with the traditional idea/expression analysis cannot make this comment, for creativity can only be found where there are sufficient expressive alternatives at an abstraction level more specific than a work’s idea. The *Whatever It Takes* court further rejects a consistent reading of creativity and the idea/expression test when it acknowledged that the parts catalog at issue could have been arranged in alternative ways, yet the existence of such alternatives was insufficient to render the catalog creative.⁸⁷ Yet the *Whatever It Takes* court, like the *Feist* court before it, provides almost no substance to its alternate understanding of copyrightable creativity. When opining that the catalog embodied “creative ideas,” the court immediately shifted to a regurgitation of the section 102(b) prohibitions on copyright, not an explanation as to why the ideas at issue were creative.⁸⁸ When dismissing the catalog’s part numbers as uncreative, the court rejected copyright on the basis of randomness in the selection of parts numbers.⁸⁹ The remaining copyright inquiries – on the arrangement of the catalog and the catalog’s illustrations – offered no more creativity in the court’s opinion, and the court offered little to no more guidance as to why it reached its result.⁹⁰

Other courts do only slightly better on the issue.⁹¹ Some focus more on the selection question already discussed above.⁹² In *Warren Pub., Inc. v. Microdos Data Corp.*, for example, the court focused on choice among a universe of possible choices in the context of cable television directory.⁹³ Yet this looks an awful lot like the alternatives-based methodology already

⁸³ One exception to this might be the use of computers to generate content without additional authorial choice. See *Random Numbers*, *supra* note 23 at 295.

⁸⁴ 402 F.3d 700 (6th Cir. 2005).

⁸⁵ *Id.* at 702-703.

⁸⁶ *Id.* at 707 (emphasis in original).

⁸⁷ *Id.* at 712.

⁸⁸ *Id.* at 707.

⁸⁹ *Id.* at 709.

⁹⁰ *Id.* at 710-13.

⁹¹ Gregory N. Mandel, *Left-Brain versus Right-Brain: Competing Conceptions of Creativity in Intellectual Property Law*, 44 U.C. DAVIS L. REV. 283, 326 (2010) (“Judicial opinions, in fact, rarely even try to describe the artistic creative process, presumably because it is considered so ineffable. When opinions do describe authorial creativity they default to traditional right-brain artist conceptions, for instance, referring to ‘the mysterious ebb and flow of an artist’s creative powers’ or an ‘intrinsically individualistic’ process.”).

⁹² *Key Publications, Inc. v. Chinatown Today Publishing Enters., Inc.*, 945 F.2d 509, 513 (2d Cir.1991).

⁹³ *Warren Pub., Inc. v. Microdos Data Corp.*, 115 F.3d 1509 (11th Cir. 1997).

discussed above.⁹⁴ The court in *Meshwerks, Inc. v. Toyota Motor Sales U.S.A., Inc.*⁹⁵ highlighted the intent of the creator when considering 2-D digital depictions of originally 3-D Toyota cars.⁹⁶ Yet intent seems something like a light spin on choice which, further, might not be amenable to many useful applications. For one, intent sometimes fails to execute its vision in a final product, as in the notable *Alfred Bell & Co. v. Catalda Fine Arts, Inc.* case,⁹⁷ where exact replica engravings of famous art pieces could reflect the copyist engraver’s muscular twitch that contradicted the intent of the project (and merited copyright). Intent also seems most useful only in those disputes where creative intent is clear. Such was the case in the *Meshwerks* case, as the 2-D digital depictions were intended to be nothing more than exact replicas of Toyota cars.⁹⁸ Creative intent is rarely so unambiguous or single-minded, however. Perhaps the best approach to creativity as an alternative to the alternatives-based query is that of then-Judge Alito’s dicta in *Southco, Inc. v. Kanebridge Corp.*,⁹⁹ where the Third Circuit considered the copyrightability of parts numbers. Because of the part numbering plaintiff’s reliance on an analogy between its creation and photography, Judge Alito felt it necessary to distinguish the cases:

The Southco numbers convey information about a few objective characteristics of mundane products — for example, that a particular screw is one-eighth of an inch in length. A photographic portrait, by contrast, does not simply convey information about a few objective characteristics of the subject but may also convey more complex and indeterminate ideas.¹⁰⁰

Creativity is a movement away from the merely functional and the accurate in representation in favor of greater complexity and indeterminacy. Nowhere are alternatives to be found in this dicta. The work and its own complexity and indeterminacy are the point of inquiry. This may not be a full-fledged methodology, inasmuch as the court did not particularly apply it to the parts numbers at issue, nor explain how to discern the presence or necessary amount of complexity and indeterminacy. Yet there is much to commend it, as it presents a sketch of creativity that does not answer to a distinction between ideas and expression. The test’s very indeterminacy, if not amenable to completely predictable judicial decision-making as articulated, would allow a court the liberty to seek creativity in its many forms, not just through its genesis as an alternative among others answering to a single idea. Judge Alito seems to be on to something with his view of creativity in *Southco*, and we will return to another view much like it when Part IV considers the philosopher Henri Bergson’s view of creativity. But first, Part III will pursue the critique of the alternatives-based creativity standard.

III. The Alternatives-Based Test as an Inaccurate Reflection of Creativity

*Longtemps, je me suis couché de bonne heure.*¹⁰¹

⁹⁴ So too does the case of *William A. Graham Co. v. Haughey*, 430 F.Supp.2d 458 (E.D. Pa. 2006), although with a slight twist. There, the insurance form under scrutiny was deemed sufficiently creative under *Feist* because it was found to feature “numerous creative differences” in comparison to another similar form. *Id.* at 466. Comparison to other similar artifacts might be a more concrete way of demonstrating the presence of creative content, yet it functionally equivalent to the alternatives test for the obvious reason that it relies on such alternatives.

⁹⁵ 528 F.3d 1258 (10th Cir. 2008).

⁹⁶ *Id.* at 1266.

⁹⁷ 191 F.2d 99 (2d Cir. 1951).

⁹⁸ *Meshwerks, Inc. v. Toyota Motor Sales U.S.A., Inc.*, *supra* note 95 at 1270.

⁹⁹ 390 F.3d 276 (3rd Cir. 2004).

¹⁰⁰ *Id.* at 284.

¹⁰¹ Marcel Proust, *DU CÔTÉ DE CHEZ SWANN* 3 (1988).

So begins Marcel Proust's novel (or series of novels), *A la recherche du temps perdu*.¹⁰² The line might be translated as, "For a long time, I went to bed early," and it initiates a monolithic story following the narrator as he negotiates his relationships with his mother, Swann, and many other notable characters. Setting aside the overwhelming *suite* to this incipit, one can begin to situate its importance on a smaller scale. The noted semiotician Roland Barthes views this sentence as an opening for the first episode of the novel, where the work meditates on sleep.¹⁰³ Sleep, for Barthes, is the organizational mode of Proust's originality; yet in so organizing his work, the author actually disorganizes it.¹⁰⁴ Proust's narrator, by invoking sleep as a theme of his work, introduces a "false conscience," a conscience that is "off-kilter, vacillating, intermittent."¹⁰⁵ Through this conscience, the very "logical shell of Time is attacked,"¹⁰⁶ and no strict chronological ordering is possible. This worthwhile reading of Proust's first sentence goes a long way to showing how Proust was creative in the context of the fifty pages (and then, by extension, several thousand more) that followed this first line.

Yet I would argue that Proust's creativity can be situated on an even more microscopic scale – that of the sentence itself. The sentence is actually quite unusual, the commonplace tenor of the translation notwithstanding. To demonstrate this, here must intrude a brief explanation of the grammatical structure of the sentence, along with some additional background on French grammar more typically. The oddity of the sentence flows from the choice of verb tense, *le passé composé*, or simple past, typically used to describe discrete events. This tense functions in French in the same manner as the past tense in English when a list of past event is narrated. The *passé composé* would be used for all three verbs in a translation of: "I went to the movies; I saw a movie; I came home." The French have a second primary past tense,¹⁰⁷ *l'imparfait*, or imperfect, which describes past states that have a certain ongoing duration. For an example of the equivalent in English, the verbs in the following would be translated to the imperfect in French – "I was happy," or "I used to go to the movies." In his sentence above, Proust is invoking an activity that should have had a duration. Instead of "I used to go to the movies," he seems to mean, "I used to go to bed early." Yet he did not use the imperfect in the sentence to express this [*je me couchais de bonne heure*]; he used the *passé composé*. What took place for a "long time" is something that he has collapsed to form a single discrete event. The logical shell of time is broken, indeed, but one need not look to the fifty pages that follow this opening line to prove it. By altering something as simple as a single past tense to use a form that no one

¹⁰² I have left the title of the opus in its original French for almost the same reason that I have left the first line unchanged. The translations of the title into English – most typically, *In Search of Lost Time* or *In Remembrance of Things Past* – leave something to be desired. The former most closely tracks the literal meaning of the title, but even that sacrifices an additional meaning of "*temps perdu*" (literally, "lost time"). To do something *à temps perdu* in French is to do it in one's spare time. So the "lost time" of the first translation also has a connotation of "spare time" – Proust seeks not just the past, but a certain excess.

A second, but related, reason for leaving Proust's title untranslated follows from the title of this very Article. For in this Article, I am in search of something lost – not time (*le temps*), but meaning (*le sens*), and more specifically, the lost meaning of the term "creativity" in the context of copyright. There is equally something excessive sought here, a *spare* meaning of creativity beyond that found in courts.

¹⁰³ Roland Barthes, *LE BRUISSEMENT DE LA LANGUE* 336 (1984).

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at 337.

¹⁰⁶ *Id.*

¹⁰⁷ There are other past tenses in French, in particular, the *passé simple* and the *plus que parfait*, but they are not relevant here.

normally would, Proust has infused a single sentence with a remarkable dynamism in its complexity and seeming contradiction.

The sentence is not just dynamic, though; it is plainly creative. Supporting this conclusion is Ralph Clifford's similar showing of creativity on a small scale through the example of the phrase "couch potato."¹⁰⁸ While "couch potato" has become an entirely typical slang saying, Clifford comments that there could be no "formulaic and deterministic transformation" that would lead to the combination of the words "couch" and "potato."¹⁰⁹ Further, Clifford detected no repeatable process that would result in the phrase.¹¹⁰ The same indicia could equally apply to Proust's sentence, where the shift in verb tense evades the formulaic and deterministic, and the probable in process, to achieve a high degree of creativity. And to an even greater degree than the simple metaphor "couch potato," Proust's sentence manipulates the very conceptual basis of both his sentence and his work at large. That must qualify as creative.

Here points up the first of a number of additional methodological problems with the alternatives-based test for creativity under *Feist*. Beyond the issues discussed above - the test's potential redundancy vis-à-vis the idea/expression dichotomy and its inherent flexibility in selecting a point of demarcation between idea and expression, the test suffers from the drawback that it depends on the presence of alternatives to show creativity. In the case of Proust's sentence, there are almost no alternatives whatsoever for the expressive choice made. The words in the sentence cannot be meaningfully reordered and still retain their meaning. Certain words in the sentence have synonyms – *de bonne heure* could have been replaced by *tôt*, for example – but these are very limited in number. Even allowing for the most generous range of synonyms, there are not enough, or as good, to satisfy a Lockean rationale. Further, no variation is possible within the verb tense. If Proust had used the imperfect tense, as would be expected, his sentence would shed its complexity in favor of a very typical (and far less creative) meaning. For lack of expressive alternatives, Proust's highly creative sentence would be deemed uncreative under the test espoused by the *Delta Dental* court and others. This seems a plainly incorrect result.

There are still other issues with a test for creativity based on choice among expressive alternatives. Barthes' essay on the first sentence of Proust provides an entry-point to one such issue. It is in that writing that Barthes explains his identification with Proust in his own personal desire to write a novel.¹¹¹ What unfolds here, then, is an interaction between actors in what Julie Cohen calls a "cultural landscape."¹¹² This landscape is, in Cohen's words, "a distributed set of cultural resources"¹¹³ with which individuals interact, including through creative processes. This concept places more value on the human body¹¹⁴ as a mediator of creative production. It is often through bodily interaction and access that creativity occurs – through iterative process in communication with cultural artifacts, and not as the result of an immediate creative spark.¹¹⁵ This view of creativity has been endorsed elsewhere. Michael Madison, for example, highlights the "sometimes messy, unplanned, accidental, idiosyncratic nature of creativity and creation"

¹⁰⁸ *Random Numbers*, *supra* note 23 at 274.

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ See Barthes, *supra* note 103 at 333 and 343-45.

¹¹² *Creativity and Culture in Copyright Theory*, *supra* note 55 at 1180.

¹¹³ *Id.*

¹¹⁴ *Id.* at 1181.

¹¹⁵ *Id.* at 1182.

when discussing how Shakespeare was known to have cribbed materials from cultural artifacts all around him.¹¹⁶

For commentators like these, the critical myth that they aim to debunk is that of the romantic author. This archetype posits a creator, toiling away alone, immune to the buffeting of the surrounding world, and creating something truly individual. This creator is often described as drawing immediate inspiration, in the form of a novel idea, through some odd stimulus, like the rusty spinning of a weathervane or the mosaic pattern in a kaleidoscope. Of course, the problem with these myths is that they are just that – myths. While one cannot disprove all such myths, one notable example might help paint the picture more clearly. Newton, who is rightly respected for his mechanical theories, fits clearly within this mythology, as early twentieth century physicist Pierre Duhem demonstrated. Duhem’s critique is coextensive with Cohen’s – he faults the common person’s tendency to believe that scientific inspiration (and quite probably, inspiration in general) happens like chicken hatching, or the touch of a magic wand to the theorist’s head.¹¹⁷ He then proceeds to trace at length how Newton answers to this flawed view of discovery. The common myth conceives of Newton as having seen an apple fall in a field, and having thereby immediately discovered his mechanical laws.¹¹⁸ Nothing could be farther from the truth. Duhem painstakingly¹¹⁹ shows, with a tracing of scientific history from Ancient Greece through Newton’s contemporaries, that Newton’s discovery had long been prepared. Consider Newton’s gravitational equation, which measures force exerted between two objects by multiplying their masses by a constant and dividing that total by the square of the distance between the objects.¹²⁰ Duhem notes that the study of light had already relied on a relation based on the inverse of a distance squared. The physicist Halley, among others, was already conducting work relying on this relation in the field of mechanics as Newton performed his own work.¹²¹ Newton, meanwhile, did not create his equation in an immediate flash. His initial development of the law of gravitation occurred in 1665; but due to a widely accepted, but inaccurate conception of the Earth’s size, he was unable to apply the law to his satisfaction until the inaccuracy was cleared up... in 1682.¹²² So the falling apple myth and the immediate development of a law from a single idea goes right out the window. What remains is Duhem’s observation that the greatest ideas are often born of their time, as if “floating in the air, carried by the wind from one country to another.”¹²³

The idea/expression dichotomy – and associated alternatives-based test for copyrightable creativity – tend to serve the image of the romantic author, however. By reducing the point of comparison for expression and creativity to a monolithic abstract idea, the author or creator who has such an idea and then articulates it through individual expression is well-served, for the test tracks exactly what this creator is doing. The test is less effective for those creators, even great ones like Newton, who wander in the wilderness for 17 years developing work in close collaboration with the theories of their time. This failure of the alternatives-based test is part and

¹¹⁶ Michael J. Madison, *Comment: Where does Creativity Come From? and Other Stories of Copyright*, 53 CASE WESTERN RESERVE L. REV. 747, 760 (2003).

¹¹⁷ Pierre Duhem, LA THÉORIE PHYSIQUE, SON OBJET, SA STRUCTURE 307 (2007).

¹¹⁸ *Id.*

¹¹⁹ Duhem devotes 45 pages to this history. *See id.* at 307-352.

¹²⁰ This is represented mathematically as $F = g \cdot M_1 \cdot M_2 / r^2$, where g is the gravitational constant, the M 's are the masses of the objects, and r is the distance between them.

¹²¹ Duhem, *supra* note 117 at 344.

¹²² *Id.* at 345.

¹²³ *Id.* at 349.

parcel of a certain binary that commentators like Professor Cohen seek to debunk, that which divides the IP pirate from the romantic author. While creators may undoubtedly be categorized along a spectrum from more original to more derivative work, Cohen highlights creation as a process that contains both internal and external, culturally-inspired components.¹²⁴ There is no simple binary between romantic author and pirate.¹²⁵

Other binaries hardwired into copyright law's creativity inquiry represent reasonable candidates for improvement. Cohen also criticizes the dichotomy's methodological bias towards a natural rights versus economics binary.¹²⁶ The former model concerns itself with the sets of rights that an author or creator should expect to enjoy as a matter of social ordering.¹²⁷ The latter model attempts to develop intellectual property law in a manner that best promotes market efficiency in the creation and dissemination of protected artifacts.¹²⁸ Setting an artificial idea/expression limit is one way, depending on one's view, of either ordering the expectations of authors or promoting an efficient market of intellectual property. Authors can either expect a certain scope of protection, or market theorists can expect a certain availability of communicative tools while economically incentivizing expression. Cohen seeks to see beyond this in her proposed decentered cultural landscape that serves as an engine for creativity. Professor Gregory Mandel supplements the economics-natural rights binary with another: that between stereotypes of right- versus left-brained thought. He offers this binary in criticism of joint author law's tendency to view copyrightable creativity as right-brained, and patentable invention as left-brained. He notes that "[s]tereotypes... are often both incorrect and dangerous, and such is the case here. Current research indicates that the common author and inventor stereotypes do not accurately portray actual creative processes. As a result, the dichotomy between modes of creativity for authors versus inventors - in both perception and intellectual property law - is substantially exaggerated."¹²⁹ Copyrightable creativity should not reflect merely those creations that seem more right-brained in origin. The brain creates by marshaling both hemispheres in varying measures, and any creativity inquiry should be up to the task of accepting all such permutations of creativity.

The alternatives-based methodology relies on a further problematic presumption – that there is a single set of abstractions. Abstractions are no more than a series of Russian dolls in a court's hands, sure to envelop each other coherently. But just as the line between idea and expression can shift between levels of abstractions, the very levels of abstraction themselves can shift seismically. It was the philosopher Alfred North Whitehead who pointed out that the first human to discover counting discovered a whole new way of abstracting as compared to all

¹²⁴ *Creativity and Culture in Copyright Theory*, *supra* note 55 at 1178.

¹²⁵ I would criticize Profs. Cohen and Madison for their failure to recognize the entire spectrum of more original to more derivative work. Their models are highly geared towards the social and the socially accepted, regardless of the consequences of such activity on the incentive to create by later-comers. Cohen, for example, mostly seems to want to construct an elaborate theory to allow non-commercial fan fiction at all costs, even if future authors would not produce or publish work because of the threat of fan fiction. In other words, where the idea/expression dichotomy and the alternatives-based test (along with other aspects of current copyright doctrine, like joint author law) tend to favor a more romantic author-like creator, Cohen chooses to favor a far more derivative creator to the detriment of authors who are more "romantic" in their creations. The most effective type of copyright rule – like that suggested for creativity in section IV – is one that attempts to embrace as creative all forms of creativity, not just those that answer to a currently disfavored, but fairly derivative, form.

¹²⁶ *Creativity and Culture in Copyright Theory*, *supra* note 55 at 1155.

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ Mandel, *supra* note 91 at 331.

predecessors. The abstractions techniques used to conceive of a copyrightable work's levels today might not look anything like such levels when conceived under new abstractions methodologies of tomorrow. And even the abstractions technique outlined by Hand admits of numerous distinct permutations at higher levels of abstraction. When considering the first fifty pages of *A la recherche du temps perdu*, is the idea “the story of a child who has an Oedipal complex?” Is it “how memory is stimulated through pastry?” Is it “how to convey a sleep state literarily” (à la Barthes)? Any of these descriptions is possible, and none necessarily overlaps with another. It is hard to trust a methodology dependent on such fundamental divergence. Professor Roberta Kwall would propose a criticism of the current creativity methodology in copyright from another perspective – its lack of concern for process.¹³⁰ In this respect, she observes a broad-based “belief in the universality of ‘hidden organic development at some stage of the creative process.’”¹³¹ Creativity is not the metaphorical lightbulb going on immediately over the creator's head; it is an ever-developing, ever-evolving process. Yet copyright law generally applies only to a work of authorship “fixed in a tangible medium of expression,”¹³² and the alternatives-based methodology presumes an established snapshot of expression by which to gauge its alternatives. This creates potentially incorrect results, as in the case finding a garden in Chicago uncopyrightable because its constant growth belied the required fixed form.¹³³ Professor Kwall comments, by contrast, that the process of garden growth is really no different than the constant change and evolution inherent in every work of creativity, as such works represent the result of a process, not an instantaneous creation. That process often includes necessary breaks or rests - periods of preparation and incubation that couple with other moments of illumination and verification.¹³⁴ The fluidity built into that evolution should not necessarily cause a loss of copyright, in Kwall's view.¹³⁵ Creativity follows a wide permutation of movements, evolutions, and processes, to which copyright's current doctrines seem particularly ill-suited. Any effective view of creativity must, on some level, consider creative process.¹³⁶

By way of a final critique of the alternatives methodology for copyrightable creativity, the test comes across as highly unrealistic. Never have two human beings engaged in a dialogue akin to the following:

Person 1: That movie was really creative, don't you think?

Person 2: Yes, absolutely, the filmmaker really selected from one of many alternative ways of expressing the various ideas captured on film.

Person 1: I couldn't have said it better myself.

¹³⁰ See, e.g., Roberta Rosenthal Kwall, *Inspiration and Innovation: The Intrinsic Dimension of the Artistic Soul*, 81 NOTRE DAME L. REV. 1945, 1965 (2006); Roberta Rosenthal Kwall, *Remember the Sabbath Day and Enhance Your Creativity*, 10 U. ST. THOMAS L.J. 820 (2012-13); Roberta R. Kwall, *Living Gardens, Living Art, Living Tradition*, 5 I.P. THEORY 73 (2015).

¹³¹ Roberta Kwall, *Inspiration and Innovation*, *supra* note 130 at 1965.

¹³² 17 U.S.C. §102(a) (2012).

¹³³ *Kelley v. Chicago Park Dist.*, 635 F.3d 290 (7th Cir. 2011).

¹³⁴ Roberta Rosenthal Kwall, *Remember the Sabbath Day*, *supra* note 130 at 833-34.

¹³⁵ Roberta Kwall, *Living Gardens*, *supra* note 130 at 76 (“Clearly, the degree of fluidity of a given work should be taken into account in determining its copyrightability, but it should not be the case that a degree of fluidity should, in and of itself, be a bar to copyright protection based on the work's inability to satisfy the fixation requirement.”)

¹³⁶ Professor Clifford believes process should figure in a creativity analysis for a more limited reason – to ensure that strictly computer-generated artifacts do not pass muster. *Random Numbers*, *supra* note 23 at 272.

In other words, no one thinks of creativity the way that courts applying the alternatives-based methodology do. In view of this, and the legion other criticisms lofted in the test’s direction above, there must be a better-conceived, more natural way for courts to determine the presence of creativity as dictated by *Feist*. The next section will offer one possible candidate, taken from the field of philosophy. As Justice Story once compared copyright to “the metaphysics of the law,”¹³⁷ reliance on philosophy to supplement copyright theory is by no means inappropriate. With that in mind, let us see what Henri Bergson has to say about creativity.¹³⁸

IV. A Bergsonian View of Creativity

It would seem an insurmountable task to try to summarize a philosopher’s entire work in a few sentences or paragraphs. This measure of caution should apply all the more to a philosopher with as long and distinguished a career as Henri Bergson, whose *Essai sur les données immédiates de la conscience* opened a parenthesis in 1889 that would not close before he received the Nobel Prize for Literature in 1927 and published *La Pensée et le Mouvant* in 1934. To summarize briefly a career made up of over forty years of relentlessly plumbing the depths of something as complicated as human existence – would seem a fool’s errand, destined to omit far more than could be included. Yet Bergson himself believes that just such a summary is not only possible; it is potentially a desirable product of the nature of philosophy itself. Observers of the history of philosophy, Bergson notes, are initially tempted to see in a philosopher’s work a somewhat complicated edifice drawing on a wide variety of historical influences to be arranged in a coherent, if substantial, whole.¹³⁹ Close, prolonged contact with a philosopher’s work reveals this initial view to be overwrought. As the observer places herself in the thought of the philosopher, the initial complication of that thought sloughs off gradually, revealing a “single point” [*un point unique*], “something simple, infinitely so.”¹⁴⁰ So simple, in fact, that the philosopher could not articulate it, and was instead driven to try explain this single point through an ever-expanding series of complications and abstractions aimed at chasing the “fleeing and evanescent image” haunting the philosophy.¹⁴¹ What begins as infinitesimal intuition in theory ends up infinite instantiation in practice. The goal of the observer of philosophy might be couched as an attempt to retrace the philosopher’s footsteps in the opposite direction – to unravel and distill the complexity of the final doctrine to uncover the original intuition animating it all. If Bergson is willing to invite this sort of methodological practice in conjunction with the work of other philosophers, there is no coherent reason not to take up the invitation for Bergson’s own work. That is precisely what this Section will initially attempt, to distill some of Bergson’s concepts and theories into a more summary form (if not to reach Bergson’s single initial intuition). That process of distillation will permit a second step, an application of Bergson’s theories to the concept of “creativity,” both as the term is conceived legally and as it might be conceived more generally. Much as the previous Section revealed a

¹³⁷ *Folsom v. Marsh*, 9 Fed. Cas. 342, 344, no. 4901 (C.C.D. Mass. 1841).

¹³⁸ Professor Russ VerSteege acknowledges Bergson’s interest in this topic in one of his articles, listing Bergson along with Plato, Aristotle, Descartes, among others. Any of these other philosophers might have served here, though in very different ways; but for now, I would propose focusing on Bergson as a legitimate choice of topic in VerSteege’s view. VerSteege, *Rethinking Originality*, *supra* note 38 at 826.

¹³⁹ Henri Bergson, *LA PENSÉE ET LE MOUVANT* 154-55 (2014) [*hereinafter La Pensée et le Mouvant*].

¹⁴⁰ *Id.* at 155.

¹⁴¹ *Id.*

fundamental rift between the legal conception of creativity under copyright law and the “real-world” conception of the term, this Section will demonstrate a rift between the former notion of creativity and its philosophical analogue. As this distinction becomes clearer, a new, more intuitive understanding of creativity might supplant the legally structured iteration of the term.

Reliance on Bergsonian philosophy to sketch a concept of creativity does not seem misplaced when one considers that the title of Bergson’s most famous work is often translated into English as *The Creative Evolution*. Questions of translation aside,¹⁴² some of the doctrinal concepts described in that book serve as a possible jumping-off point when considering Bergson as a philosopher of creativity. If I were to answer Bergson’s *défi* and attempt to summarize his work in one sentence, his is a philosophy of life as a continual, unpredictable process of unfolding, evolving, and becoming [*devenir*] that takes place over a certain indivisible period of time [*durée*]. Each of these terms is quite general, and must remain so to a certain extent, even after more in-depth analysis – for it is precisely analysis and language under the guise of reasoning and logic that causes these terms to lose their inherent force or *élan vital*.¹⁴³ The latter point is part and parcel of Bergson’s primary critique of traditional human reasoning, and it is from the perspective of this critique that Bergson’s more positive assertions might take shape. Put differently, with Bergson, comprehensibility is better served when beginning with negation before passing to affirmation.

Bergson’s criticism of traditional human reasoning rests on an ostensibly realistic view of that reasoning’s source. In an echo of his predecessor Darwin, Bergson contends that human beings have fundamentally evolved to perceive the world around them in manner that best serves their survival.¹⁴⁴ Human intelligence has developed, according to this evolution, in a manner that prepares humans to act on their surroundings most successfully.¹⁴⁵ Human conscience and memory serve, first and foremost, to oversee action and to clarify choice when acting.¹⁴⁶ Success in action is most likely to occur when a human can isolate what is perceived in the present as a sort of momentary snapshot, and compare it to similarly momentary snapshots stored in memory.¹⁴⁷ That process allows for a prediction of an effect, given certain possible responses as cause. Buttressing this process, lending it an apparent reliability, is an implication of repetition - that if events that looked and felt a certain way in the past produced a certain result, then events that look and feel that way in the present will do likewise.¹⁴⁸ Equally included is an assumption of reversibility – events that can be redone must, to a certain extent, be undone before they can be performed again. As a consequence of this reversibility and repeatability, it may be concluded that reality can be broken down into isolated and independent groups.¹⁴⁹

Science, and geometry in particular, according to Bergson, take the preformed repeatability and reversibility to its extreme end point. Bergson offers a small stove boiling water in a pan to demonstrate this.¹⁵⁰ Once the boiling of water on the stove has been observed, it is

¹⁴² The French title *L'évolution créatrice* does not track exactly to *The Creative Evolution* in the most apparent sense of the translation. This is due to Bergson’s use of the word *créatrice*, which has a distinctly spiritual connotation in French, something almost akin to creationist. “Creative” in the usual meaning of the word is *créatif* in French.

¹⁴³ See, e.g., Henri Bergson, *L'ÉVOLUTION CRÉATRICE* 250 (2008 ed.) [*hereinafter L'évolution créatrice*].

¹⁴⁴ *Id.* at 29.

¹⁴⁵ *Id.*

¹⁴⁶ Henri Bergson, *MATIÈRE ET MÉMOIRE* 190 (2012 ed.) (*hereinafter Matière et mémoire*).

¹⁴⁷ *L'évolution créatrice*, *supra* note 143 at 29.

¹⁴⁸ *Id.* at 224-26.

¹⁴⁹ *Id.* at 215.

¹⁵⁰ *Id.* at 215-217.

natural to conclude that this same process would occur in exactly the same way at any later time.¹⁵¹ In this respect, the act of boiling water once is reduced to a member of a class predicated on no more than a geometric relation. If one has a lit boiler with a pan full of water on it, one will have boiled water in an *if x, then y* relation. Such a relation is precisely the equivalent of a right triangle, where two sides are known and the length of the third is sought.¹⁵² The mental move here, as with thought guiding human action more generally, is towards a more generic space of repeatable and reversible abstraction.

The conversion of reality into such abstract or generic groups, or at an even finer level, snapshots, is related to a phenomenon that Bergson calls *la méthode cinématographique* – a movie-like method of perceiving reality.¹⁵³ As an example of this, Bergson proposes the flight of an arrow.¹⁵⁴ The natural tendency when imagining such a flight is to picture the arrow at a certain number of discrete points along its path – at t_0 , the arrow is in the quiver; at t_1 , it has traveled a certain distance to a certain point; at t_2 , it might be at the midpoint of its flight; and so on. It is precisely this sort of decomposition of space and time that informed Zeno’s famous paradox of the tortoise and Achilles. By decomposing the arrow’s movement to render it susceptible to understanding, the viewer both cuts space and collapses time, reducing these two dimensions as necessary. If further understanding is needed, the viewer need only add further snapshots between those already gathered in an attempt to complete the line. The dynamic movement of an object, then, is no more than a series of coordinates that articulate like a fan, according to the viewer’s whim – able to collapse snapshots to simultaneity or stretch them out in space and time, as desired. It is precisely this idea that animates human thought when a process is subdivided into stages. The life course of a human might accordingly be comprised of four stages – childhood, adolescence, adulthood, and old age.¹⁵⁵ Each of these four stages represents a “real stopping point”¹⁵⁶ [*arrêt reel*] concentrating the movement of a prolonged portion of life into a single fixed or immobile moment.¹⁵⁷

The common thread through each of these examples, from the boiling water and the flying arrow to the racing reptile and the aging human, is a tendency to reduce transition and movement to mere “things” in “states.” The water boiling in the pan is not a specific, stochastic variant different from all others somewhat like it; it is just another example identical to others like it among a class of things. The tortoise outpacing Achilles is not endowed with specific characteristics; it is just an object subdividing space into asymptotically decreasing halves like any other. And for each of these things, there is, in a given movie snapshot, an associated state. The arrow is at a point directed at a certain angle in one such state. The human is in a state of youth, adolescence, adulthood, or old age.

The similarities between this manner of reasoning and the rationale underpinning the abstractions test should be immediately clear. But Bergson brings the comparison into even

¹⁵¹ *Id.* at 216.

¹⁵² *Id.*

¹⁵³ *Id.* at 306.

¹⁵⁴ He proposes a number of models to describe this, actually. His hand moving from point A to B is another example of such a model. *Matière et mémoire*, *supra* note 146 at 238. Zeno’s paradox of Achilles chasing the tortoise but never catching it is yet another. *Id.* at 239 and *L’évolution créatrice*, *supra* note 143 at 310-311. This concept is probably one of Bergson’s most common themes.

¹⁵⁵ *Id.* at 311.

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

sharper relief when he discusses the artistic or literary creation in his essay *Le possible et le réel*.¹⁵⁸ There, Bergson describes a question that an interviewer posed to him asking him to predict the future of literature following World War I.¹⁵⁹ When Bergson punted on that question, the follow-up question plumbs Bergson's views on what might be possible in then-future literary currents.¹⁶⁰ Bergson again bristles at the question, due to its presumption that Bergson somehow holds the "key" to a metaphorical wardrobe of possibilities for future literature.¹⁶¹ No, he responds, "the work of which you speak is not possible yet."¹⁶² The most Bergson would concede to the interviewer is that eventually, the work *will have* been.¹⁶³

What does Bergson mean when dismissing speculation on the possible future of literature? In part, he views the term "possible" as subject to two potential meanings, only one of which would make sense in the mouth of his interviewer. This meaning of "possible," he suggests, is "that which encounters no insurmountable obstacle to its creation."¹⁶⁴ This is the negative sense of the word possible, which would lead to a literature susceptible of any number of future permutations, to the extent that they are not completely foreclosed.¹⁶⁵ From this perspective, Bergson might theoretically speculate on future literature, but his speculation would be almost unlimited in scope. What took Bergson aback, by contrast, was the positive form of the word "possible" implied in the interviewer's question – a form that Bergson takes to mean "that which preexists in the form of an idea."¹⁶⁶ This second meaning of "possible" is an "absurdity"¹⁶⁷ in Bergson's estimation. A work only becomes possible at the precise moment when its creator pens or paints it, the work being the specific product of that specific person in that specific time.¹⁶⁸ *Hamlet*, Bergson offers as an example, could not be possible except as Shakespeare wrote it at the time when he wrote it.¹⁶⁹ What Bergson underscores, then, is a fundamental change in polarity in how possibility should be conceived – rather than adhere to the traditional construction in which the possible becomes real, it is actually the real that becomes retrospectively possible at the time of the former's genesis.¹⁷⁰ There is no competition among possibilities, just a constant, ever renewed, surge of unpredictable novelty, or newness, and this newness is not limited to the world of art of high theater; it envelops every being at all times in a profoundly liberated environment.¹⁷¹

Bergson's view on possibility is certainly not above criticism for depicting the entirety of existence as a cloud of near-complete indeterminacy. There is a classic thought experiment that suggests that an infinite number of monkeys chained to typewriters would eventually write all of Shakespeare, including, of course, *Hamlet*. Should a monkey actually sit down and type *Hamlet*, Bergson would acknowledge that his production *will have* been possible at its completion. Prior to that, it was only "possible" in the sense that the obstacles to it – like the monkey's motor skills

¹⁵⁸ *La Pensée et le Mouvant*, *supra* note 139 at 135-151.

¹⁵⁹ *Id.* at 145.

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ *Id.* [emphasis in the original].

¹⁶⁴ *Id.* at 147.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *Id.* at 148.

¹⁶⁹ *Id.* at 147-48.

¹⁷⁰ *Id.* at 149.

¹⁷¹ *Id.* at 150.

and general lack of knowledge as to what was going on - could be overcome. Yet in reality, the monkey producing Hamlet *is* possible; it is just extraordinarily improbable. As every letter chosen by the monkey represents a 1 in 26 chance, and the series of letters chosen comprise that same probability as independent events, then the probability is simply $1/26^n$, where n is the number of letters in *Hamlet*. That is very close to zero, but it is not actually zero. Bergson does not seem to allow for such a probabilistic approach, as all events are coded with what could be deemed a probability of 0 until they happen, at which time their probability instantaneously becomes 1.

That criticism aside, let us take Bergson's *Hamlet* example at face value and imagine what it has to say about the abstractions- or alternatives-based test for copyrightable creativity. Needless to say, his view of the test would not be favorable, for the test seems to do any number of things that he criticizes. First and foremost, the test is based on a method of abstraction which gradually removes the detail from a given work to render it a non-specific member of a class of works answering to the abstraction. This move is entirely consistent with the traditional form of human reasoning that Bergson critiques. In this way, the structure of an alternatives-based test begins by treating the creation of the work at issue somewhat like the arrow in flight or the stages of life. It reduces the work to a snapshot in time, in its fixed form, and then removes the work's vital details to make it part of a class. As noted above, no thought is given to the development or process that went into the creation of the work. Then the work is inserted into Bergson's boiler paradigm as part of the question whether alternatives do exist – for what is a court doing when determining the expressive alternatives available for a specific idea, if not posing an infinitely repeatable *if x, then y* relation? Instead of the x and y here, however, the court places a given idea in the place of the condition, and the potentially copyrightable work in the place of the condition's output. The court does not particularly concern itself with *when* or *how* this creation took place, the creation process is presumed identical and repeatable at all times. And all forms of expression answering to the idea might as well be equivalent or fungible, with all the variety and verve of basic boiling water. Put differently, it is the fact that each expressive alternative is just as good as another that makes a work copyrightable, a conclusion rooted in homogeneous equivalence.

There is, of course, some play permitted in this divergence of a single abstract idea leading to many potential expressive alternatives. Yet even if the court can theoretically imagine expressive alternatives as non-equivalent when divorced from the homogenizing idea, it still runs into certain additional complications. One is Bergson's view of the "possible." Before it, the court has one concrete example of what is possible, the work whose copyrightability it is probing. The latter work is possible under Bergson's view, of course, because it has come into being. Then and only then did the work become possible. It was not, as the abstractions methodology implies, possible prior to its creation - as if the work's author or artist got an idea in an abstract form and the work immediately took shape as a possibility chosen among others. The court's methodology relies on an *a priori* view of creativity that defines the work as possible in the sense of "that which preexists in the form of an idea," a move that Bergson would contest. The court applies the label "possible" to a work at a time when the work was still entirely undetermined. Needless to say, what goes for the work here goes double for the alternatives imagined by the court. Not only were they not "possible" (in the Bergsonian sense of the word) at the time of the work's creation, but they have not become possible in the intervening time leading to the copyright litigation. Where Bergson refused to subscribe to the existence of a wardrobe of possibilities when queried on future literature, a court using the alternatives test

claims not only that such a wardrobe exists, but that it possesses a key to it. (Even if there were such a wardrobe, I would be inclined to treat it as opening indefinitely – to Narnia or any other universe imaginable, not as some rigid, cleanly lined compartment.)

Any potential non-equivalence among the alternatives packing a court's wardrobe is further belied by the very space in which the alternatives operate. Because a court generally¹⁷² considers all alternatives equally good, the imaginary space in which these alternatives exist is a homogeneous one. The court metaphorically draws a graph of Cartesian space, and assigns each square an alternative equal in size and shape to every other alternative. It is not enough that the court has the key to the rectilinear wardrobe; it further creates sub-compartments within that space. This type of homogeneous space within homogeneous space is precisely what Bergson decries as an incorrect manner of perceiving reality.¹⁷³ Homogeneous space, according to Bergson, is an empty container built of “rigid abstractions,” that must be replaced.¹⁷⁴

The key to resurrecting a new definition of creativity, in the Bergsonian sense, is to determine what should replace the homogeneous space of the abstractions test. What should replace the snapshots on an arrow's path or the repeatability of a stove's boiled water. Bergson's answer to this escapes simple summary or structure, ever reforming itself in lockstep with ever-changing reality.¹⁷⁵ Matter, far from being susceptible to subdivision in different snapshots according to the *méthode cinématographique*, is overflowing with “innumerable agitations”¹⁷⁶ [*ébranlements sans nombre*] emitting so many “shivers”¹⁷⁷ [*frissons*] continuously in all directions. It is this movement as a continual phenomenon or unfolding, like the set of ever-varying waves hitting the shore, that characterizes what Bergson calls *la durée*, or duration. This concept of movement through time is a totalizing curve, hiding behind the indefinitely divided images that human perception gathers; and it is the ultimate task to restore pure continuity where there is but discontinuity and abstraction.¹⁷⁸

¹⁷² The *scènes à faire* doctrine is a slight exception to this rule.

¹⁷³ *Matière et mémoire*, *supra* note 146 at 295.

¹⁷⁴ *Id.*

¹⁷⁵ As we begin to build a positive definition of creativity, I would like to take a moment to incorporate a few thoughts on one of Bergson's most popular works, *Le rire* (or “Laughter”), his study of the comedic. His thesis there, presented most broadly, is that the comedic is that which goes against social convention, most specifically in the direction of the mechanical. Where the social is a space of changing life, the characters who are robotic or wooden in their behavior break with this in a way that people find funny. If the book was published well over 100 years ago (in 1900), its ideas still resonate today. The character Sheldon Cooper has not only cited to the book on *The Big Bang Theory*, he is an incarnation of the book's observations in his robotically logical behavior. Setting that aside, Bergson's thesis in *Le rire* would seem to throw a wrench in this Article's line of reasoning. Indeed, it is posited that creativity is something more than the mechanical and robotic. Yet it is precisely such woodenness that makes comedy creative. So is comedy an exception or violation of the premise proposed here? There is an answer to this – the equivalence between the mechanical in art and the mechanical in reasoning is a false one. When presenting the mechanical in a comedic setting, the author or playwright is not removing creativity to replace it with a rigidity characteristic of the boiling water and arrow examples. Instead, that author or playwright is infusing the wooden with creativity, passing the former through the latter's filter. Further, a lot of what makes the comedic funny is not just the separation between the audience's expectations and a character's behavior, it is that same separation played out between characters on stage. Alceste, the main character of Molière's *Le Misanthrope* (oft cited by Bergson in *Le rire*) is funny because of how his odd behavior puts off the other characters. So while there are potentially similarities between the woodenness of traditional human reasoning and the woodenness of the comedic, such similarities are only superficial.

¹⁷⁶ *Matière et mémoire*, *supra* note 146 at 257.

¹⁷⁷ *Id.* at 258.

¹⁷⁸ *Id.* at 233.

Clearly, an application of Bergson’s view of reality as a process of constant, indeterminate “coming into being” does not lend itself to an easy or simple definition of creativity in either the legal or more general sense. Yet it should be clear what should not factor in an understanding of creativity – abstractions of other “possible” works that respond to the same “idea.” Each act of creativity is a total, indivisible process incomparable to others like it, whose development springs from a certain measure of indeterminacy. Comparing “alternatives” to this process does not make any sense for those alternatives do not exist, and could not have come into being. All that remains for a court to consider, when assessing a work’s creativity, is both the process that led to a work’s genesis and the work that followed as a result. Each should be reviewed in a totalizing manner – the process and the work as indivisible wholes. The court would accordingly ask two general questions – 1) what intellectual movement brought a work into being?, and 2) what work resulted? If any meaningful indeterminacy characterizes this process and its outcome, then the presence of creativity should follow. And because Bergson views the rippling of indeterminacy as a characteristic of both the exemplary and the mundane in life, creativity should be an easy bar to satisfy, indeed – just as *Feist* arbitrarily seemed to require. At the same time, while Bergson seems to find the indeterminate in all things, there must be a lower limit to that. A traditionally designed white pages, based on a fixed set of phone numbers and names, would seem a highly determinate arrangement, the minor risk of errors notwithstanding. Perhaps even a Bergson-inspired bar for creativity still might detect the rare case where a dominant indeterminacy yields to the highly determinate.

If this seems a bit fluid, it unfortunately must be so. There is no simple definition of creativity, just as there is no simple, perfectly precise reduction of the infinitely permutable variation of the perceived universe.¹⁷⁹ Bergson does, however, provide some clue as to how a creativity analysis might work when he discusses his forebear Ravaisson’s analysis of the Mona Lisa.¹⁸⁰ He begins by quoting da Vinci’s observation that “every living being is characterized by an undulating or serpentine line, and art’s object is to render that individual form” on the canvas, in sculpture, or whatever medium is selected.¹⁸¹ This line that art seeks to represent need not be visible in the final piece of art, Bergson comments, yet it is this line that holds the key to the entire work.¹⁸² Thus does Bergson observe in the Mona Lisa a tendency of the painted lines to climb towards a “virtual center”¹⁸³ situated “behind the canvas,”¹⁸⁴ where a single word would solve the famous smile’s sphingian mystery.¹⁸⁵ For Bergson, this is art, and by extension, creativity – the dynamic consolidation and presentation of the simplest of thoughts beyond what the eye can immediately see.¹⁸⁶ Perhaps one should not expect most works to live up to the creative genius of the Mona Lisa – for few do – yet the very movement that Leonardo’s canvas, or Proust’s incipit, captures in an ethereal center is present in differing degrees in a child’s study hall doodle, a grainy recording of a campfire singalong, or a hastily penned short story chronicling a vampire’s travails. Works like these are creative, and should be copyrightable.

¹⁷⁹ Science is not such a reduction. There are lots of good approximations – like Newtonian mechanics to model the behavior of solid objects on the surface of the Earth – yet any number of other models could have been devised to describe “reality” equally well. In fact, Poincaré was one of the parties responsible for this proposition.

¹⁸⁰ *La Pensée et le Mouvant*, *supra* note 139 at 287-88..

¹⁸¹ *Id.* at 287.

¹⁸² *Id.*

¹⁸³ *Id.* at 288.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

V. Conclusion

And so, to a certain extent, we have come full circle, as the very Leonardo that the Rutgers computer program deemed “creative” answers equally to a Bergsonian definition of creativity. The two methodologies for reaching this same result rest at opposite ends of a spectrum, however. On one hand, the Rutgers software defines creativity according to a fixed formula, measuring influence and novelty according to a fixed database of images fed to it. It is an impressive piece of software, of course, but its results are completely certain given both the material input to it and its encoded algorithm. At the other end of the spectrum lies the Bergsonian view just disclosed, where the method for detecting creativity is as potentially varied as the creative process itself. There, what is prized is not a work’s ability to respond to an algorithm measuring influence on later works, but its almost inherent novelty bound up in the inherent novelty of life. It is no coincidence that Bergson’s most famous work is translated as *The Creative Evolution* – the passage of time, and by extension, human creation that marks it, is ever evolving and renewing itself. That movement is not reducible to snapshots or single images, least of all those snapshots and images that might be fed into even the most sophisticated computer program. The indeterminate process and genesis of a creative work finds its reflection in the method that seeks such indeterminacy, not in the rote application of a rigid rule structure.

Somewhere between these two poles, though much closer to the software’s algorithm, sits the abstraction-based test that courts use to find creativity based on the presence of expressive alternatives. Such expressive alternatives serve essentially the same purpose as the paintings fed into the computer software – that of reducing creativity to a series of fixed options. The court’s methodology, in some respects, is even more wooden than its coded counterpart. While the latter takes into account a certain chronological ordering and development of works over time, the abstractions test reduces creativity to a series of alternatives available at a single instant, that of the potentially copyrightable work’s creation. Generally speaking, there is no probabilistic variation between such alternatives. It merely suffices that such alternatives exist, provided that the chosen alternative is not a stock element of the work’s genre. Despite these strictures, a court enjoys more flexibility in applying the abstractions test than would a computer applying a mechanistic algorithm. A court’s definition of a work’s idea – and the associated alternatives that flow from that definition – is subject to no clear point of demarcation. By selecting higher levels of abstraction to define the “idea,” a court will find a greater number of works copyrightable to a greater degree; by selecting lower levels, fewer works will merit protection in lesser measure. It is this flexibility that moves the abstractions test towards a Bergsonian conception of copyrightable creativity. If the test does take a few steps in this direction by virtue of its flexibility in defining an idea, it does not seem to capture adequately the indeterminacy of the creative process or work. The artistic movement completely outside the abstractions framework is much more akin to the *Southco* dicta – a space of less defined “complex and indeterminate ideas.”

A proposed use of Bergson’s theories as a paradigm for copyrightable creativity is not above certain criticisms. Philosophy might generally seem insufficient when applied to a space where a certain degree of scientific research has taken place. Bergson would reply to this by pointing out that science and philosophy are ever in contact along a certain boundary, and stand to gain much from each other. This seems all the more true in a space as fluid as creativity, where the challenges of brain science meet the ephemera of language and the vicissitudes of aesthetics. Another line of attack might question the utility of applying a deconstructive

philosophy to a something as theoretically structured as the law. What is proposed here, however, is not an application of Bergson's thought to contracts, evidence, or civil procedure. Those (and many other) areas of the law would clearly suffer from undue reliance on indeterminacy. But not so for creativity, whose inherently changing nature and deep subjectivity fit quite well within any number of strictly philosophical views. Creativity, even in the law, cannot be a site rigid structure, lest the term fail to fit its real meaning. It is just such a failure that the abstractions-based test commits. Perhaps a more philosophical view can restore the term its proper place and meaning, or more accurately, its proper places and its multiple meanings – from fits and starts to evolution and complexity.