From Caves to Networks

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For most of human history, remix practices dominated the creative process.² Premodern creativity sprang from an unbroken tradition of reuse and juxtaposition of pre-existing expressive content. As literary pillars of Western culture, the Iliad and the Odyssey were forged in the cumulative and collaborative furnace of the oral tradition. Out of that tradition grew medieval epics, which appeared under the aegis of Macrobius's art of rewriting and the Latin principles of interpretatio, imitatio, and aemulatio. Continuations, free reuse of stories and plots, and the remodeling of iconic figures and characters, such as Alexander the Great, King Arthur, and Roland, made chansons de geste and romance literature a powerful vehicle for propelling cross-country cultural dissemination. This is, however, by no means only a Western experience. For millennia, until the Enlightenment and Romantic Individualism, Western and Eastern culture shared a common creative paradigm. From Confucian China, across the Hindu Kush with the Indian Mahābhārata, the Bible, the Koran, and Homeric epics to African xhosa imbongi and European troubadours, the most valuable components of our immortal culture were created under a fully open regime of access to pre-existing expressions and reuse.3

The following review sheds light on the evolution of premodern, modern, and post-modern notions of appropriation, reuse, creative collaboration, and plagiarism. This might be of use to contextualize how the humanities function today. In particular, this brief history of "remix" helps explain conceptual positions extrapolating how digital humanities has changed the way creative acts are understood since the early days to emerging forms of today. In addition, the application of digital resources and computational tools and methods to the study of the evolution of these notions, which is well ongoing, will hopefully bring about further understanding of the mechanics of creativity throughout history. In turn, this understanding can help clearly in highlighting the role of reuse, appropriation, and collaboration—all acts that are part of remix practice today—in the history of creativity. This insight should then lead to changes to the regulatory framework, so that remix, rather than being a practice just tolerated or outright prohibited by the law, will regain a central role in the creative process.⁴

Cave Art, Cumulative Creativity, and Remix

In Lascaux, the relics of prehistoric art are on display across the vaults and halls of a French cave complex.⁵ Lascaux's cave paintings were made thirty-five thousand years ago in the Chauvet Cave, close to the French village of Vallon-Pont-d'Arc.⁶ Even older cave paintings were discovered in Indonesia in 2019.⁷

Cave art is arguably the first form of mass collaboration. The entire cave structure could have served as a repository of past stories and information, remixing the old with the new for several millennia. Henri Breuil discerned the collaborative character of cave art with striking acumen by noting "[t]his is no longer the work of an individual, but a collective, social affair, showing a true spiritual unity." Projects like the Xiangtangshan Caves Project, which digitally reconstructs a group of damaged Buddhist cave temples in China's Hebei province with image modeling, will definitely provide more insights regarding the nature and scope of the creative practices of cave art.

Art Is Mimēsis of Reality

Reuse and appropriation—foundational elements that inform what we call remix today—found fertile ground in Ancient Greece due to a peculiar approach to art and creativity. Plato said "Art is mimēsis of reality." Plato—and later Aristotle—considered imitation the general principle of art, ¹⁰ In his Poetics, Aristotle added that imitation is the distinctive character of humanity: "indeed we differ from other animals in being most given to mimēsis and in making our first steps in learning through it—and pleasure in instances of mimēsis is equally general." The practice of reusing, remixing, or even bodily appropriating other works had deep roots in ancient Greek philosophy. Plato's doctrine of artistic imitation powerfully justified the imitative nature of ancient Greek creativity.

The Oral-Formulaic Tradition

The creative process of the *Iliad* and the *Odyssey* demonstrates a tradition of open literary reuse. This process was dissected by Milman Parry. For Parry, a formula is a "group of words regularly employed under the same metrical conditions to express a given essential idea." Using formulas, oral poets could improvise on a subject, develop it, memorize thousands of verses, and recite them. Identifying the reuse of formulas, common stock, and patterns become easier today through the deployment of digital tools, such as in the case of the *Chicago Homer*, a multilingual database that uses the search and display capabilities of electronic texts to make the distinctive features of Early Greek epics accessible to readers with and without Greek.¹⁴

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The poetic diction permeating Homeric works was, therefore, the cumulative creation of many generations of oral poets over centuries. They had created a "grammar of poetry" to be superimposed on the grammar of language. ¹⁵ Aoidoi and rhapsodes could draw from this grammar to perform their poetic speech. In drawing from this literary commons and reusing it, poets would add their own contributions. In the case of a particularly brilliant aoidous, such as Homer, the original contribution may have been more substantial than in other instances. A single poet could have changed an old formula, created something new from an old pattern, or put formulas together in different ways. As Parry noted,

under this model, the capacity of taking that quality improvement process to the extreme was recognized as creative genius. Homer was perhaps that creative genius. He was not the original genius dear to the Romantics. He was the *aoidos* who gave Unity to a tradition.

In oral poetry, any individual work is ceaselessly reworked and modified. Creativity is the act of blending together individual contributions. Arnold Hauser noted the distance and the irreconcilable tension of the Homeric idea of creativity with the romantic ideal of artistry and authorship:

It upsets all romantic conceptions of the nature of art and the artist [...] to have to think of the Homeric epics, in all their perfections, as being the product neither of individual nor of folk poetry, but on the contrary, as an anonymous artistic product of many elegant courtiers and learned literary gentlemen, in which the boundaries between the work of different personalities, schools and generations have become obliterated.¹⁷

If all his work was formulaic, then Homer is no more than a "spokesman for a tradition." Oral-formulaic theories were treated with great suspicion for threatening the perceived originality of Homer. As described by Theodore Wade-Gery:

[t]he most important assault made on Homer's creativeness in recent years is the work of Milman Parry, who may be called the Darwin of Homeric studies. As Darwin seemed to many to have removed the finger of God from the creation of the world and of man, so Milman Parry has seemed to some to remove the creative poet from the Iliad and Odyssey.¹⁹

According to oral-formulaic theories, the cultural artifact does not come to life as a perfect final product. Instead, it undergoes a prolonged process of evolution. The Bible also has oral roots that makes it the final textualization of a collaborative and evolutionary creative model, as well as the *Gilgamesh*, the *Mahābhārata* and the *Rāmāyana*, the Koran, and plenty of other ancient and medieval literature.

Interpretatio, Imitatio, and Aemulatio in Ancient Rome

According to modern studies, there were three forms of imitation in ancient Roman literature: *interpretatio*, *imitatio*, and aemulatio.²⁵ Interpretatio was unoriginal adaptation involving the direct translation of one source. Imitatio was adaptation that involved borrowing the form, content, or both from one or more renowned Greek sources. Aemulatio, finally, was a form of creative rivalry. Powerful examples are Virgil's emulation of Homer's epics and Horace's emulation of Alcaeus' lyrics. Imitation also dominated Roman sculpture.²⁶

The Roman perception of creativity is far removed from the "modernist value system, which from the Romantic era onwards has valorized originality and artistic genius and, in consequence, denigrated copying." Seneca the Elder explained the rationale for generalized borrowing and reuse in the Latin creative tradition: "not for the sake of stealing, but of open borrowing, for the purpose of having it recognized." This theme would later dominate medieval literature. ²⁹

Originality of theme or story was far less important for Roman authors than it is today.³⁰ Quintilian regarded imitation as a way to achieve excellence.³¹ Vitruvius wrote: "drawing from [past authors] as it were water from springs, and converting them to our own purposes, we find our powers of writing rendered more fluent and easy, and relying upon such authorities, we venture to produce new systems of instruction."³²

By the first century BCE, in the *Rhetorica ad Herennium*, Cicero's *Brutus* and *De Oratore*, and Dionysius of Halicarnassus' On *Imitation*, rhetorical doctrine put forward the conviction that imitation of great authors was the surest instrument for attaining excellence in creative endeavors.³³ In the Roman creative experience, originality is only one term of a function, whose desired result is excellence. Lack of originality, therefore, was unlikely to arouse disapproval or even special attention.³⁴

The Roman conception of creativity extended literary *mimēsis* to the imitation of earlier literature. In the *Ars Poetica*, Horace crystallized the idea that literary *mimēsis* meant not only imitation of nature, but also imitation of literary precedents and models.³⁵ The literary *mimēsis* initially included exclusively Greek literature, although it was later extended to include a select group of Roman authors. In the early stages of Roman literature, there were great presumptions that the majority of dramatic writings that appeared in Rome were in great part based upon Greek works.³⁶

Ancient Remix: The Art of Cento

The cento was originally a cloak made of patches,³⁷ The term was later used to refer to a form of poetry based on the rearrangement of phrases from other poems. The expression in the cento poems is by definition completely unoriginal, nevertheless, that expression is perhaps the highest exploitation of the knowledge of the original work. Mythological, secular, and Christian examples of both Homeric and Virgilian centos have survived.³⁸ The so-called Centones Virgilianes came into being using a great number of pieced-together phrases, ideas, and expressions from Virgil.³⁹ Again, the reuse of the Homeric verses by the Theodosian Empress Eudocia in the Homerocentra was a form of creative rhapsodic art, tightly correlated with the oral-formulaic tradition.⁴⁰ The works of Homer, Euripides, Virgil, Ovid, Cicero, and later Petrarch, Shakespeare, Goethe, and many others served as raw material for cento composition.⁴¹

The Imitatio Vergilii

Scott McGill noted, the *cento* "became part of a literary world that in various ways treated Virgil as an open work, or as a body of material that could be reworked to yield fresh text." However, Virgil himself was a spectacular imitator of Homer and other Roman authors. Macrobius provided a full account of Virgil's borrowings in the *Saturnalia*, written in the fifth-century CE. Macrobius quoted, "actual lines of Homer which Virgil has translated almost word for word," and then decided "to go through the Aeneid from the beginning, book by book." Later, Macrobius "tells us of Virgil's borrowings from the old writers of Rome as well." It lasted more than ten chapters of instances of verbatim duplications, borrowings, translations, and rewriting of the Homeric and Roman authors, such as Ennius, Lucretius, Furius, Lucilius, Pacuvius, Naevius, Sueius, Varius, Accius, and Catullus. Ar

Concerned with the reaction that such a massive amount of Virgil's borrowings might have had on his readers, Macrobius endeavored to plead the case of the greatness of Virgil. In doing so, Macrobius sketched out the principles of *imitatio*, and *aemulatio* that governed ancient literary creativity. According to Macrobius, "borrowing both from one another [...] is what our writers have often done." Thus, poets and other writers are "partners holding in common [haec societas et rerum communio]." ⁴⁹

Following upon Macrobius's study, modern digital humanities research has provided a quantitative picture of text reuse and interactions between poets in the Latin hexameter tradition using the freely available *Tesserae* website. Tesserae automatically searches pairs of texts in a corpus of over three hundred works of Latin literature in order to identify instances where short passages share two or more repeated lexemes. In line with poetry scholars' conclusions on intertextual relationships in the Latin hexameter tradition, this study finds that the works of Ovid and Vergil are the most important verbal resources for the later works of the tradition.

Macrobius' Saturnalia heavily influenced later mediaeval literature. It laid down the fundamental principles of literary description as an exercise of imitation and emulation through invention.⁵³ A large proportion of the most representative medieval and early Renaissance works produced in Latin, French, English, and Italian were rewrites, following Macrobius' principles of description.

The Mouvance and Art of Rewriting

For about two millennia, similar mechanics of creativity and authorship applied repeatedly to literary production. Bards, minstrels, jongleurs, and troubadours played the same role of ancient Greece's *aoidoi*.⁵⁴ Authors of early medieval heroic epics were anonymous, as "even in their literary form heroic tales were regarded as cultural common property rooted in an oral tradition of storytelling in which individualistic claims of authorial achievements were out of place." ⁵⁵

The fluidity of traditional epic and popular literature derived from the symbiotic relationship between oral and written tradition. In this respect, Paul Zumthor noted that the medieval work often "has no authentic text properly speaking," but was "constituted by an abstract scheme, materialized in an unstable way from manuscript to manuscript, from performance to performance." Mouvance, as Zumthor termed it, was the defining character of the medieval text, which "was generally presumed [...] to be subject to [...] reinterpretation in the light of a new *rnatiere*, new understanding, new intentions, or a new audience or patron." Recent screen-based visualization and computational approaches have made significant progress in analyzing and visualizing *mouvance*, variant mediaeval traditions, and textual instability. 58

The art of rewriting, whose principles Macrobius's *Saturnalia* illustrated to medieval authors, characterized most of the medieval romance literature. Tightly connected to the *mouvance* and episodic nature of medieval text, rewritings were created by bringing together different versions or episodes of the legend to form new works. The next teller will pick them up or drop them as irrelevant, according to the environment in which the new retelling is to be told.⁵⁹ The proliferation of traditional premodern narrative evolved from the idea that "every story is constituted of many smaller stories or potential stories," because at the intersection of each unit is situated the possibility of new stories, retellings and remixing of the old.⁶⁰ This practice has come to be known as lyric

insertions in narrative. A new work was created from the adaptation and development of those borrowed elements through a *bele conjointure*—the blending of elements that is aesthetically pleasing and meaningful. The phenomenon of romance *conjointure* is, thus, described "as a *montage* or even a *collage*."

Most epic and romance literature revolved around the endless exploitation of an iconic character—a hero—and his legendary deeds. Heroic characters, such as Alexander, Beowulf, King Arthur, Lancelot, and Roland became cultural icons. Their stories were repeatedly rewritten and remixed, and their features were reused and adapted to new cultural and social settings.

Social Textuality

For Chaucer, the act of writing was represented by the metaphor of gleaning the harvest of poetry reaped by others. ⁶² Pearsall elaborated that poems in the medieval manuscript tradition "are no one's property and the whole notion of authorship is in a way irrelevant;" ⁶³ instead, the poetic text is an instrument to be used and not merely read. ⁶⁴ Arthur Marotti spoke of social textuality, malleability, and textual instability in manuscript culture. ⁶⁵ What is viewed as corruption from a modern author-centered perspective was viewed in manuscript culture as transformative elaboration, generally accepted, and often welcomed by the author. In the fourteenth and fifteenth centuries, *dérimeurs*—"de-rhymers"—turned the entire *chanson de geste* and romance tradition into prose to meet the needs of an emerging reading audience. ⁶⁶ They created completely new works by adding prologues, summaries, or dividing their narrative into chapters and headings. The so-called "textual bricolage," both in medieval and modern texts, has been recently studied with text similarity recognition software, such as Factotum. ⁶⁷

Publication processes at the time had a critical role in promoting "social textuality." Publication started with the initial delivery of the text, as in the case of an oral "pronunciation."68 Once in circulation, the text could undergo the author's corrections and revisions. Finally, publication allowed for the participation of the book producers—such as scribes, illuminators, and so on—and readers who made changes to the text they copied and reproduced. Hence, literature before print was in a permanent state of becoming, where writing became the effort of many, endlessly chiseling and adapting the text as sole authors. ⁶⁹ Jean Gerson, chancellor of the University of Paris in the fifteenth century and one of the most prominent scholars and theologians of his time, wrote in the tract In Praise of Scribes of Healthy Doctrine that writing can endure for a thousand years whether "on its own or through the multiplying of exemplars."⁷⁰ To map this permanent writing process in manuscript culture, the Mapping Manuscript Migrations project links disparate datasets from Europe and North America to provide an international view of the history and provenance of medieval and Renaissance manuscripts. Researchers can analyze and visualize the aggregated data at scales ranging from individual manuscripts to thousands of manuscripts.⁷¹

Renaissance Workshops and Collaborative Art

The collaborative furnace of the medieval and Renaissance workshop—the **bottega**—⁷²forged attitudes toward originality and copying still very different from those of our time, though an enhanced and individualized sense of authorship was powerfully

emerging. Richard Spear recounts an anecdote of the artist Guido Reni that perfectly illustrates the Renaissance mechanics of creativity. Pope Paul V Borghese commissioned Reni to decorate one Chapel of the Quirinal Palace. The Pope clearly spelled out that the work was to be carried out *di sua mano*, meaning by Reni's hand. One day, the Pope visited Reni's studio and, to his great dismay, caught one of Reni's assistants, Lanfranco, painting some draperies of certain figures. The day after, Reni visited the Pope and justified himself by saying "the drawing, sketching, and background painting are not the things that make up the work. [...] In addition to the ideas and the designs that are mine, I go over, finish and redo everything in a way that, if a work given to me does not turn out to be by my hand, I will be content to incur your indignation." ⁷⁵

In Reni's opinion, an original "was any work that he designed and approved of, regardless of whether retouchings were added to paintings that were not literally, 'by his own hand'." In similar fashion, in a letter of May 12, 1618, Rubens responded to the complaint of Dudley Carleton, who did not want student works retouched by Rubens, by insisting that the retouched works "are not simple copies but are so well retouched by my hand that it would be difficult to tell them from the originals." In sculpture, the same issues arose. When Colbert commissioned the equestrian statue of Louis XIV from Bernini, the sculptor was told to do the head himself, but to go over everything made by his assistants in such a way that it could be said that it was truly a work by Bernini. The notion of originality in the context of Renaissance artists' studios, therefore, expands well beyond modern boundaries into a collaborative and collective domain.

Additional complexities in grasping the attitude toward originality in the Renaissance period are connected with the tradition of making copies out of the artist's own works as well as works of other artists. In the first case, artist studios' practice substantially blurred the concept of originality by the traditional reliance on the work of assistants and students. As reported by Richard Spear: "many [...] paintings were replicated, but only a few were fully autograph[ed]; more were 'retouchings' (*ritocchi*) by [the Master] of studio versions, and a still greater number were copies by assistants."⁸⁰

Since the mid-fifteenth century, entire workshops were organized to produce copies on a large scale, such as the workshop of the so-called Lippi and Pesellino Imitator. Over forty years, this—apparently legitimate—reproductive enterprise produced more than hundred and sixty paintings derived from the paintings of Fra Filippo Lippi and Francesco Pesellino. In the case of the Lippi and Pesellino Imitator, the degree of precision between the originals and the copies was very high, perhaps by following a copying practice known as *retrahere*—to draw again—that consisted in the use of "pin-pricked drawings used like stencils to replicate the design."

In a letter to Paul Fréart de Chantelou, Nicolas Poussin condemned the rampant practice of copying in the sixteenth century.⁸³ The chancellor of the Duke Vincenzo I of Mantua refused a group of copies by noting in a letter that the copies were "not suitable for Your Highness, who has no need for copies but rather desires originals by good hand that are worthy to stand among the many others Your Highness has by the most excellent painter."⁸⁴

In contrast, the art collections of many important patrons, such as Cardinal Federico Borromeo or Cardinal Francesco Maria del Monte, also divided paintings according to whether they were "originals by artist of importance," or "originals by less famous painters," and "copies made with diligence." In some other instances, the inventory depended only on two designations, "by hand of" and "copy of." Sometimes the copies were even accredited to be able to surpass the original. For example, part of the early

fame of Guido Reni was attributed to a copy he made of Raphael's Santa Cecilia, which was praised by experts of the time for having "a mellowness and softness that the original lacked." Also Duke Cosimo de' Medici valued copies of high quality. De' Medici is reported to have said that in the case of copies that cannot be distinguished from the original "the copy should be preferred to the original because it contained both skills, that of the originator and that of the copier." As David Quint noted, if the imitator had come up to his model, the counterfeit would have been equal in worth to the original. Digital humanities projects, such as the Medici Archive Project, allow scholars around the world to engage with new research methodologies and trajectories within an ever-growing body of digitized manuscripts to unveil renaissance attitudes toward copying.

Together with pure reproductive copying, adaptations, modifications, and alterations of previous works were commonplace for authors and commonly commissioned by their patrons. This practice often involved the remixing of other works, where faces and figures were lifted from old to new paintings. Cardinal Federico Borromeo, for example, had Raphael's profane images transformed into sacred subjects by Antonio Mariani. 90

The Plagiarists of the Stage

Extensive—and unacknowledged—appropriations were commonplace in early modern England, especially in drama, though widespread in all literary fields. The *Mock Astrologer* of Dryden is a manifesto of proud plagiarism, and self-conscious reuse of others' plots and stories. In the play's prologue, Dryden laid down his own apologia of plagiarism:

I am taxed with stealing all my plays [...] [i]t is true that whenever I have liked any story in a romance, novel or foreign play, I have made no difficulty, nor ever shall to take the foundation of it, to build it up, and to make it proper for the English stage.⁹²

In writing his play, Dryden had drawn on Pedro Calderón de la Barca's *El Astrologo Fingido* and Thomas Corneille's *Le Feint Astrologue*, from which, by Dryden's own admission, he "rejected some adventures [...] heightened those which [he had] chosen; and [...] added others which were neither in the French or Spanish."93

Shakespeare was, in modern terms, a plagiarist on a vast scale. Robert Greene described his younger contemporary, Shakespeare, as "an upstart crow beautified with our feathers." According to Malone, out of 6033 lines of Parts I, II, and III of Henry VI, Shakespeare copied 1771 verbatim and paraphrased 2373. Whole passages of Antony and Cleopatra, to take just one example, were line-by-line versifications of historical prose works. Again, in The Tempest, Gonzalo's description of the ideal state was a word-for-word transposition of Michel de Montaigne's essays Of the Cannibals, as translated by John Florio in 1603. Digital humanities could shed further light on the appropriative creative practices of the immortal bard. A digital project called Shakespeare His Contemporaries focused on promoting corpus-wide inquiries into Early Modern Drama. This body of work includes five hundred or so non-Shakespearean plays or play-like texts printed before 1660. In 2013, 493 plays written between 1576 and 1642 were completely transcribed and mapped to create a virtual corpus to allow new forms of

exploration on the whole body of text. It is aimed at promoting research on intertextual parallels, patterns, and themes as well as the historical and social contexts of Early Modern Drama.⁹⁸

Borrowing flourished in sixteenth century England to such an extent that Sir Sidney Lee noted: "[t]he full story of the Elizabethan sonnet is, for the most part, a suggestive chapter in the literary records of plagiarism." As Harold White noted: "[n]ot only were Englishmen from 1500 to 1625 without any feeling analogous to the modern attitude toward plagiarism; they even lacked the word until the very end of that period." 100

In the seventeenth and early eighteenth century, plagiarism was also a consequence of the manuscript culture that still resisted a definitive surrender to print.¹⁰¹ The late Renaissance and the early Enlightenment were the ages of the commonplace book, manuscript miscellanies, and coterie circulation. Particularly in England, the practice of any aspiring authors or scholars of copying and arranging passages from one's reading so called "commonplacing"—in a "commonplace book" still promoted a cultural environment of considerably open and unacknowledged reuse. 102 In this regard, the Commonplace Cultures project is meant to study and explore the intertextuality and intellectual relationships of eighteenth century and pre-eighteenth century texts by searching over forty million instances of shared passages.¹⁰³ The art of commonplacing allowed individuals to master a collective literary culture and "the 18th century can be seen as one of the last in a long line of 'commonplace cultures' extending from Antiquity through the Renaissance and Early Modern periods."104 The Commonplace Cultures project uncovers this nexus of intertextual activities through the use of sequence alignment algorithms to compile a database of potential commonplaces drawn from the massive ECCO (Eighteenth Century Collections Online) collection. 105

Struggling with the "construction of a new sense of self-identity, defined through the dialectic of memory (tradition) and autonomy (originality),"106 Jonson, Pope, Dryden, and Milton all had to face accusations of plagiarism. In his *Timber*, Ben Johnson is borrowing heavily from the ancients, with twenty-five excerpts from Quintilian, twentyone from the younger Seneca, eleven from the elder Seneca, and several others from Horace, Plutarch, the younger Pliny, Aristotle, and Plato. 107 Voltaire found that Milton's *Paradise Lost* had reproduced more than two hundred verses from the *Sarcotis* of the Jesuit Masenius, though he concluded that Milton "imitated only what was worthy of being imitated." 108 The paternity of *Paradise Lost* has long been under scrutiny. An extensive monograph of an Italian researcher, Zicari, purported to show that Milton's epic was sired by *Adam Caduto*, a tragedy written by the Calabrian monk, Serafino della Salandra. 109

The Romantic Sunset of Remix Culture

Targeting Dryden and many at the end of the seventeenth century, Gerard Langbaine published a comprehensive account of plagiarism in English drama, showing how widespread the practice was.¹¹⁰ As Paulina Kewes argued, since Langbaine's publication, the insisted accusations of plagiarism that spared few authors marked a changing cultural paradigm.¹¹¹

The imitative, cumulative, and collaborative nature of creativity persisted well into the Romantic period, as British authors were repeatedly accused of alleged plagiarism. In the early nineteenth century, appropriation strategies had been most famously

associated with Samuel Taylor Coleridge, ¹¹² but Wordsworth, Shelley, and Byron also collected their share of accusations. According to a study of Tilar Mazzeo, *Plagiarism and Literary Property in the Romantic Period*, early nineteenth century British authors: "consistently privileged strategies of textual appropriation even as they emphasized the value of originality." Mazzeo concludes: "[t]he almost exclusive association of Romanticism with self-origination is largely a belated critical invention." ¹¹⁴

As Mazzeo noted: "the cultural conventions of Georgian Britain privileged as literary achievements those novels, dramas, and especially poems that demonstrated mastery over a range of sources, and writers were given broad license to borrow from the works of other authors so long as the appropriations satisfied particular aesthetic objectives and norms." In sharp contrast with modern cultural conventions and legal provisions, these norms included borrowing from familiar and well-known sources, improvements and unconscious borrowing among those creative practices that did not constitute plagiarism. In this context, trying to accommodate the tension between originality, appropriation, and plagiarism, so powerfully lacerating in his authorial persona, Coleridge justified one notorious accusation of plagiarism from Schelling by claiming: "I regard the Truth as a divine Ventriloquist: I care not from whose mouth the sounds are supposed to proceed, if only the words are audible and intelligible." ¹¹⁶

The fundamental change in premodern and modern perceptions of creativity—and construction of plagiarism—takes place at around the time Edward Young in the Conjectures on Original Composition writes: "[t]he mind of a man of Genius [...] enjoys a perpetual Spring. Of that Spring, Originals are the fairest flowers: Imitations are of quicker growth, but fainter bloom."¹¹⁷ Plagiarism became a "sordid Theft" to be ruled out altogether. Soon thereafter, Kant will state: "originality must be [the] first property [of aesthetics]."¹¹⁹ By the beginning of the nineteenth century, Hegel would note: "an ingenious and trivial idea, and a change in external form, is rated so highly as originality and a product of independent thinking that the thought of plagiarism becomes wholly insufferable."¹²⁰ From this time on, Groom writes: "the severity of the accusation [of plagiarism] indicates an anxiety of originality becoming an obsession, with the concomitant fears that the sacred well of individual genius can be poisoned or simply drawn dry by intruders."¹²¹

It is worth noting that, from a historical perspective, the issue in plagiarism is not one of intentionality but of originality vs. imitation. This reflects in copyright standards as well. Arguably, copyright law would contradict a construction of plagiarism as an intentionally deceitful and dishonest act as copyright infringement is a strict liability offense that does not depend on any mental condition. 122 In addition, copyright law knows of "subconscious infringement" according to which innocent copying is not an excuse for infringement as "intention to infringe is not essential to the [copyright] act." Or, again, as Judge Learned Hand puts it, it is "no excuse that memory played a trick."

The Return of (Digital) Remix

For millennia, we have created under a paradigm that promoted creativity through appropriation and the art of rewriting. Yet somehow, the post-Romantic individualistic view emphasized absolute originality and sidelined imitation, collaboration, cumulative creativity, and what we commonly call "remix" today in the discourse on creativity. This theoretical view influenced policy discourse with the emergence of increasingly

restrictive exclusive intellectual property rights.¹²⁶ Today, however, in an era of networked mass collaboration; ubiquitous online fan communities; user-based creativity; and digital memes, appropriation, reuse, and collaboration are reemerging in creative practices.

A growing percentage of the creative material being produced in the digital environment is generated by users. Those formally known as the audience have become active participants in their own culture. ¹²⁷ In this Digital Renaissance—as Lawrence Lessig explained in *Remix*—a read/write culture displaced a read-only culture. ¹²⁸ In its post-modern reinterpretation of authorship, remix seems to respond to newly reinvigorated ethics of collaboration, and sharing that closely resemble those of pre-copyright creative production.

According to Brett Gaylor's *Remix Manifesto*: "a media literate generation emerged, able to download the world's culture and transform it into something different that we call our new language: remix." Reuse, remix, mashup, and appropriation are at the core of the digital creative process. Remix creativity has emerged as a new cultural motif. Remix is not only a cultural revolution, it is a linguistic revolution or better, it is a "revolutionary" language. In cyberspace, language has evolved and become more complex to include all media. Remix is an advanced metalinguistic device to express meaning, but it is also intrinsically a form of political speech.

Numerous new and old forms of creativity—such as fanfiction, fanvids, mashup, machinima, or trackjacking—are flourishing in online remix communities.¹³¹ Digital technology and networked distribution transformed isolated practices into a globally diverse phenomenon.¹³²

The Internet may be a privileged venue for reproducing the mechanics of the oral tradition as also highlighted by the Pathways Project, an early exercise in digital humanities research that built an open access suite of chapter-nodes, linked website, and multimedia meant to explore the relationship between oral tradition and networked communication.¹³³ It is difficult to overlook the special connection that the mechanics of premodern creativity shares with post-modern forms of digital creativity.

Sampling corresponds to the oral tradition's formula. The formula, the single unit to be used and reused, worked, and reworked, is the inspiring paradigm of remix culture. Moreover, digital creativity re-implements the same mechanics of pre-copyright creativity that conceptualized borrowing and copying as a necessary tribute to previous works. As in the premodern tradition, digital creativity deploys appropriation and borrowing as imitative and emulative instruments. From fanfiction to machinima and fangames, from thematic "sims" in virtual worlds to vidding or musical mashups, modern digital creativity is made of appropriation, borrowing, and imitation that creates new meanings and finds new inferences; they are intended to pay tribute to commercial popular culture's iconography as well as to challenge, deconstruct, and overcome it.

Social textuality and intertextuality, which are dominating features of premodern creativity, play a pivotal role in the digital domain as well. On one hand, the intertextual nature of medieval literary culture, as a constant reference to authority and tradition to which the textile metaphor of the word "text" evokes, shows an affinity with the hypertextuality of digital culture and creativity. Linking is a built-in feature of creativity produced in a digital environment. On the other hand, the social malleability of the text in premodern manuscript culture finds a parallel in mass-collaborative projects in the digital environment, such as Wikipedia.

Finally, the networked society sets preconditions for a social and collaborative idea of authorship that resembles the premodern collectivistic idea of creativity. Digital creativity is deeply intertwined with communitarian actions and reactions. In the digital environment, creativity returns to be an inclusive, rather than exclusive, medium. This may suggest that, in the networked information ecosystem, we are witnessing the demise of the individualistic idea of authorship that gave birth to our copyright system.

The parallels between formula, remix, and mashup, social textuality and mass-collaboration in the manuscript and digital culture may suggest an emerging inconsistency between the post-Romantic paradigm of authorship and the present cultural and creative landscape. It suggests that the communal, collaborative role of creativity should be emphasized and promoted. The emergence of a digital participatory culture may offer an opportunity to realign creativity with its original participatory nature. In particular, the Digital Revolution's collaborative nature may reinforce arguments challenging the commodification of information and culture. As in premodern culture, inclusivity in the discourse over creativity has regained momentum with the digital environment's emphasis on community, participation, and cumulative production. Re-emerging social consciousness indicates that creativity must serve as an instrument to empower the individual to be part of a community, rather than stand outside of it. Creativity in the digital environment tends toward inclusivity rather than exclusivity.

An evidentiary basis for challenging maximalist copyright approaches, and for devising alternative solutions, may thus be found in the premodern mechanics and economics of creativity. In this search, digital humanities can be of great aid. Research and scholarship in history, literature, and the arts is changing by using high-performance computers and vast stores of digitized materials. "Culturomics," as the new field of study has been termed, should extend "the boundaries of rigorous quantitative inquiry to a wide array of new phenomena spanning the social sciences and the humanities." ¹³⁴

Digital humanities can reveal unexplored patterns and trends by analyzing unprecedented amounts of data. Since 2009, Google has made a gigantic database from millions of digitized books available to the public for free online searches.¹³⁵ The general principle behind this and other projects is digitally researching through large libraries of books and text to see how ideas first appeared and spread. Researchers are using databases of thousands of jam sessions to track how musical collaborations influenced jazz, 136 building web applications to visualize the list and distribution of Dante's primary sources, ¹³⁷ or coding plays to understand the evolution of performances of early modern travelling theatre. 138 Obviously, digital humanities research can make it more than clear that people have always borrowed and built on the work of others. It can even enable the detection of correlations not necessarily perceivable to a human observer. For example, a comparison using the newly developed DIAS/DENDRON ART (DDA) software of fifty-five oil paintings by Paul Cézanne suggests that Cézanne's Baigneuse debout, s'essuyant les cheveux, is highly related to Veronese's Les Noces de Cana, in color, saturation, brightness, and complexity.¹³⁹ Further computer-assisted analysis suggests that Cézanne drew from Veronese a "hidden" compositional structure to organize his Bather paintings. 140 Empirical data collection and processing through advanced computational tools—that define research in digital humanities—may empower a discourse about the complex matrix of influence, borrowing, and reuse that characterizes creativity at large as "remix" creativity, while defying entrenched modern assumptions on the immutable, individualistic nature of creativity.

Notes

- I wish to thank my RA, Varnita Singh, for valuable assistance given in preparing this chapter. Please note that this chapter is a remix of plenty of miscellaneous previous writings, including Giancarlo Frosio, Reconciling Copyright with Cumulative Creativity: The Third Paradigm (Cheltenham: Edward Elgar, 2018); Giancarlo Frosio, "A History of Aesthetics from Homer to Digital Mashups: Cumulative Creativity and the Demise of Copyright Exclusivity," Law and Humanities 9, no. 2 (2015):262–96; Giancarlo Frosio, "Rediscovering Cumulative Creativity from the Oral-Formulaic Tradition to Digital Remix: Can I Get a Witness?," The John Marshall Review of Intellectual Property Law 13, no. 2 (2014):341–95.
- 2 I am aware of the fact that the use of the word "remix," as we understand it today, did not exist prior to modernism, and the term remix itself was not really used extensively until the twentieth century. The use of the word remix in a premodern context is an approximation.
- 3 The research in this chapter predominantly focuses on Western cultural history, appropriation, reuse, and remix practices. It does so for obvious reasons related to the origins and cultural background of the author but also because the paradigm shift that this chapter describes has been inherently a Western experience. Exclusive rights over creativity are an Enlightenment and Romantic construction. The same cultural transformation has not taken place in the rest of the world. Western countries have finally forcefully imposed on the rest of the world their post-Romantic creative paradigm—and regulatory framework—as part of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the General Agreement on Tariffs and Trade (GATT), where developing and emerging economies have signed on expansive intellectual property rights in exchange of better terms on tariffs on essential goods.
- 4 In this chapter, I assume that unauthorized remix infringes copyright, both the right of reproduction, the right to make derivative works or adaptations and the right of display/performance/communication to the public, whichever is relevant depending on legal frameworks that differ from jurisdiction to jurisdiction.
- 5 Norbert Aujoulat, Lascaux: Movement, Space, and Time (New York: H N Abrams, 2005); Mario Ruspoli, The Cave of Lascaux: the Final Photographs (New York: H N Abrams, 1987).
- 6 Jean-Marie Chauvet, Eliette Brunel Deschamps, and Christian Hillaire, Chauvet Cave: The Discovery of the World's Oldest Paintings (London: Thames & Hudson, 2001) (1996); Jean Clottes, Chauvet Cave: The Art of Earliest Times (Salt Lake City: University of Utah Press, 2003); Jean Clottes, Cave Art (New York: Phaidon Press, 2008).
- 7 Hannah Devlin, "Earliest Known Cave Art by Modern Humans Found in Indonesia" (*The Guardian*, December 11, 2019), https://www.theguardian.com/science/2019/dec/11/earliest-known-cave-art-by-modern-humans-found-in-indonesia.
- 8 Henri Breuil, Four Hundred Centuries of Cave Art (New York: Hacker Art Books, 1979) (1952), 22–3. See also Arnold Hauser, The Social History of Art (London: Routledge, 1999) (1951), 3–8.
- 9 Xiangtangshan Caves Project, https://xts.uchicago.edu.
- 10 Plato, "Cratylus" [423cd] in XII Plato in Twelve Volumes, trans. Harold Fowler (Cambridge: Harvard University Press, 1921). See also, e.g., Willem Verdenius, Mimesis: Plato's Doctrine of Artistic Imitation and Its Meaning to Us (Leiden: Brill Archive, 1972).
- 11 Aristotle, "Poetics" [1448b] in XXIII Aristotle in 23 Volumes, trans. WH Fyfe (Cambridge: Harvard University Press, 1932).
- 12 Eusebious Pamphili, Evangelicae Preparationis, 465d, in ed. Edwin Hamilton Gifford (Oxford: Typographeo Academico, 1903); See George Putnam, Authors and Their Public in Ancient Times: A Sketch of Literary Conditions and of the Relations with the Public of Literary Producers, from the Earliest Times to the Fall of the Roman Empire (New York: GP Putnam's Sons, 1893), 69–70.
- 13 Milman Parry, The Making of Homeric Verse (New York: Arno Press, 1980) (1971), 272.
- 14 The Chicago Homer, https://homer.library.northwestern.edu/.
- 15 Albert Bates Lord, The Singer of Tales (Cambridge: Harvard University Press, 2000) (1960), 36.
- 16 Jan de Vries, Heroic Song and Heroic Legend (Oxford: OUP, 1963), 10–1 (noting that "Homer is the crowning end of a long development").
- 17 Hauser, The Social History of Art, 57.
- 18 Barry Powell, Homer (Hoboken, NJ: Blackwell Publishing, 2007), 30.
- 19 Henry Wade-Gery, The Poet of the Iliad (Cambridge: CUP, 1952), 38–9.
- 20 Nagy, Homeric Questions, 41–3 (positing at least five distinct consecutive periods of Homeric transmission).