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RESEARCH ARTICLE

The Concept of Originality and Creativity in the Humanities, the Social Sciences and the Natural Sciences

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Abstract: The study was conducted to determine how 21 experts in the discipline clusters of humanities, the social sciences and the natural sciences defined originality and creativity in terms of how these concepts are understood and realized in the production of works in their respective disciplines, what related copyright issues emerge related to these concepts, and how these two concepts are related. Through thematic qualitative analysis of in-depth interview data, findings suggest that while there may be converging ideas about originality and creativity among the discipline clusters, the way this concept is operationalized by each discipline significantly vary. The study is deemed useful because apart from clarifying vague notions about original works, the study can serve as reference for legislators in amending the Copyright law, and for law practitioners in contextualizing cases involving original and derivative works, plagiarism and other related concepts. In this connection, the study provides the implications for the evaluation of the originality and creativity in works produced from the various discipline clusters.

Keywords: originality, creativity, copyright protection

Introduction

Under the Intellectual Property Code of the Philippines, literary and artistic works are protected by copyright. Unlike patents and trademarks, copyright protection is vested from the moment of creation – no formalities are necessary. In many countries, there are only two elements required for copyright protection of works: (1) Fixation; and (2) Originality. “Fixation” means that the idea must be expressed or fixed in some tangible form (e.g. recorded). On the other

hand, “originality” means that the work was produced as result of the independent work of the creator or author. However, this concept of “originality” has not been clearly defined in the IP Code. Moreover, other countries add “creativity” to the concept of originality. Should a work be protected by copyright on the sole basis of its creation by the author or should there be an element of creativity to make it original? If originality requires creativity, how then does one define creativity?

Relevance of the Research

Under the present law, a work is protected from the moment of creation regardless of the quality of the work (with or without creativity). However, majority of the countries now subscribe to the idea that originality requires some element of creativity (e.g. US). For these countries, it is not enough that a work was created independently by the author. Should the Philippines follow suit or should it retain its original concept? Under the Berne Convention for the Protection of Artistic and Literary Works, the individual countries have the discretion to define the concept of originality. Under this backdrop, IP Philippines embarked on this study to determine, among others, if there is a need to amend the IP Code to include “creativity” in the concept of originality. To this end, there is a need to determine the criteria used in judging whether an output is original or not. There is likewise a need to determine the role creativity plays in the production of works judged to be original. To be able to achieve these objectives, the present study was designed to find out how originality, or an original work, is characterized by experts in various disciplinary clusters where originality is a valued characteristic of important outputs in their respective fields within the disciplinary clusters of the humanities, the social sciences and the natural sciences.

Review of the Literature

This section offers a review of the literature related to definitions of originality and creativity, how these two concepts have been found to be related, and what issues have emerged in copyright law associated with these concepts as documented court decisions on the creativity and originality of works.

What is originality?

The word “original” is borne of the Latin word *origo* meaning “to arise.” (Groom, 2001, p. 6). The definitions of originality all denote the importance of innovation and novelty in the creation of original works. In the New Princeton Encyclopedia of Poetry and Poetics, originality is ascribed to works that meet a non-exhaustive set of criteria as follows:

“[Originality] is attributed to a work if it reflects novelty in diction, imagery, prosody, rhet., style,

or technical or structural devices; if it modifies an existing genre or establishes a new genre; if it treats of some aspect of nature or human life that had hitherto escaped literary treatment; if it describes a make-believe world, wonderland or nightmare, with little or no relation to reality; if it re-evaluates a historical, mythological, or fictional person, object, or event; if it reflects the individuality of the author, esp. by presenting an interpretation of life (or some aspect of it) from a fresh perspective; if it is designed to evoke novel effects in the reader; or if it uses language to create a unique structure of organically interrelated meanings independent of any immediate external reference.” (Preminger, Brogan, & Warnke, 1993, pp. 869-870)

It is this aspect of innovation that makes an original work surprising, unique, and unconventional. Originality is here a tribute to individual genius and creativity. However, innovation is done on a familiar template. Winston & Baker (1985) contend that originality occurs when variations are introduced into a work already familiar to those belonging to a field of expertise.

Against the backdrop of familiarity, the original work should furthermore have been produced through the application of a new set of rules. Winston & Baker explained that, by definition, work is not judged to be original if it is imitative or controlled by some explicit set of stimuli. Ideas are therefore judged to be original when their construction did not entail following a set of rigid rules. This implies that, more than the output, the process by which work is produced is important in determining originality.

Clearly, the crowning mark of an original work is its element of innovation. It is in this sense that originality means having a “temporal priority in the statement of an idea” (Stigler, 1955, p. 293). However, ideal innovation faces an inexorable problem. Innovation owes its inspiration to the influence of those that have come before. Like in the sciences, innovation in the arts is constantly strained against the pull of influence. This is the issue that makes judgments of originality so difficult—the task of extricating originality and innovation from its enmeshed context and influence.

Authors and creators are acutely aware of the tension between innovation and influence. Authors and creators fear judgments of their work as unoriginal and

derivative (Lewis, 2005). Scientists are not immune to the pressure of influence either. However, in the case of the social sciences, the influence of previous work needs to be well-documented. Stigler (1955) mentioned that original ideas are evaluated against the knowledge of the author's contemporaries. If a scientist succeeds in introducing a new perspective on old ideas, and manages, in the process, to change the beliefs and interests of his or her peers, the scientist is seen to have produced an original work. Stigler was careful to point out however that scientific originality means "a difference", not necessarily an improvement, since original ideas need to pass through the "process of scientific fermentation," or "a working over from many directions by many men" to achieve completeness and to decisively influence scientific thinking (p. 301).

Guetzkow, Lamont, and Mallard (2004), in their interviews of with evaluators of scientific output, find that unoriginal work, when perceived to have chosen "the path of least resistance", was regarded a mark of scientific and scholastic laziness (p. 204). Their resource persons expressed admonitions of scholars whose works were rehashes of their doctoral dissertation or whose works were strongly derivative of their advisors' works. Scholars and authors who cannot escape the pull of influence are doomed to obscurity and failure. The same is true for the works in the humanities. Lewis, for instance, notes that there is no greater insult to a poet's work than to call it "derivative" (2005, p. 369). However, derivative work plays a legitimate role in the creative process and in the development of aesthetic mastery and scientific aptitude.

The crucial point to be made here is that imitation is arguably a necessary step in the development of the artistic and scholarly mastery that eventually yields original works. Copying and influence play a central role in the development of leaders in the arts, humanities, and sciences—however, this only continues until their skills have matured. Once they have mastered their skills, they can put these in the service of their artistic and scholarly visions. Skillful, masterful originality can only come after imbibing and incubating influence.

In sum, the originality of a work is best understood with innovation in the foreground and influence in the background. Original work harnesses influence as leverage towards the achievement of artistic and scholarly vision. We now turn to that component that

transforms influence into something unmistakably new – the component of creativity.

What is creativity?

Creativity is borne of the Greek word *create* meaning to make or to craft (Götz, 1981). The implications of *create* were always concrete and physical—here in the present world—not hidden in a world of abstractions and ideas. Indeed, the creativity is associated with applying solutions to both immediate and a wide array of problems influencing broad areas of thought and activity: "The creative scientist often appears to stumble across new problems. To do this he must start by noting the need for looking at data in a fresh way for a given purpose." (Mackworth, 1965, p. 58).

Mackworth made a distinction between a problem solver and problem finder. The creative individual is a problem finder who devises new "mental programs and plans" that are more suitable to tying up present facts in place of existing mental rules (p. 58). Ang & Low (2000) document the definitions of creativity in the literature. Creativity is associated with novelty, which is determined by a divergence from the norm. Creativity has also been made synonymous with originality and with meaningfulness. Meaningfulness refers to the relevance of an output. Creative work turns "a new thinking to something useful and real" (p. 838).

Creativity has been an important topic of research in psychology for many years. Runco (2004) notes three dominant perspectives to creativity borne from past studies. The behavioral perspective is one among the most influential, but investigations using this perspective have come to realize that creativity cannot be judged through overt behaviors alone. Studies have instead looked into the behavioral correlates of creativity. The correlates of insight and novelty have found to be most significant, with insight resulting from previous learned behaviors. Another perspective is the biological perspective which views creativity in terms of brain activities. A more recently significant perspective, one that is more relevant to the present study, is the cognitive perspective. In this perspective, attention is given to the cognitive processes associated with creative actions. The cognitive aspect that has so far been found relevant in the creative process is divergent thinking or the lessened reliance on procedural knowledge. Other aspects include intuition,

imagination and the ability to simultaneously consider several perspectives.

Indeed, the creative scientist sees problems and attempts to solve these in new ways. Because solutions are offered, the creative product is therefore socially valuable and is recognized as an achievement by the social world of which the author or artist is a part of (Barron & Arrington, 1981). E. Paul Torrance, whose tests on creative thinking, according to Sternberg (2006), remain to be the mostly widely used, defined creativity as:

“A process of becoming sensitive to a problem, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on; identifying the difficulty; searching for solutions, making guesses, or formulating hypothesis about these deficiencies; testing and retesting these hypotheses and possibly modifying and retesting them; and finally communicating the results.” (Baker, Rudd & Pomeroy, 2001, p. 6).

Nakamura & Csikszentmihalyi (2001) took the case of the 1954 Nobel prize laureate in Chemistry, Linus Pauling, to illustrate creativity. The authors contend that Pauling’s creativity was evident in his ability to internalize and to apply the evaluative criteria of his field in his work. Pauling was also said to be able to discard bad ideas, as well as apply a multidisciplinary perspective in the development of new theory. By integrating various disciplinary perspectives, he was able to successfully introduce a new science. Referring to Pauling’s most important 1939 publication on the nature of the chemical bond, Nakamura & Csikszentmihalyi noted that “its clear and intuitive exposition made a new science accessible to chemists without Pauling’s training in physics and math, enabling them to use valence-bond theory in the solution of chemical structures” (p. 340).

Csikszentmihalyi and Getzels (1971) emphasized the centrality of the problem discovery process in creativity. Their research with creative artists has demonstrated that a concern for discovery was significantly related to the originality of solutions produced by their respondents. Sternberg (2006), on the other hand, emphasized the role of context in creative contributions, that is, judgments of creativity should be made relative to the environmental context within which the work is produced. In the light of possible

contextual differences, Sternberg offers eight types of creative contributions. These types, summarized in the table below, illustrate the influence of a contribution to existing paradigms, or predominant frameworks with which reality is viewed and understood.

If one were to use the classificatory system developed by Sternberg for creative works, Linus Pauling’s contribution to his field would exemplify the Integration type. As evaluated by Nakamura and Csikszentmihalyi (2001), Pauling’s creativity was nourished by “scientists working at the border of physical chemistry and quantum theory ... (who) shaped his integrative aspirations, multidisciplinary skills, and scientific judgment...” (p. 339).

In summary, creativity involves a discovery of new problems spurred by the adoption of new ways of viewing the organization of elements in reality. The solving of newly discovered problems would necessarily entail the application of new perspectives or of an integration of existing perspectives. Runco (2001) points out that creativity is associated with original behavior. In the next section, this relationship will be further explored.

The Relationship between Originality and Creativity

Innovation is widely considered to be a central characteristic of creative and original works (Preminger, Brogan, & Warnke, 1993; Craig, 2005; Niu & Sternberg, 2001). Because of this link, definitions of creativity invariably contain notions of “originality” (Winston & Baker, 1985). Götz (1981) described the relation between creativity and originality as that between a quality and the substrate in which it manifests. While some writers would refer to “creative concepts” as constituting original work (Dorst & Cross, 2001); others would give stress to the presence of “original behaviors” for something to be creative (Charyton & Snelbecker, 2007; Winston & Baker, 1985; Csikszentmihalyi & Getzels, 1971). Runco (2004) contends that “originality is usually tied with original behavior, and indeed, originality is necessary for creativity, but is not sufficient” (p. 658). There also seems to be a need for original ideas to be useful and influential before they can be considered to be creative (Ang & Low, 2000; Barron & Harrington, 1981).

The inextricable nature of the relationship between originality and creativity has made it difficult to examine the nature of this relationship. It may help

Table 1*Types of Creativity*

	Type of Creativity	Description
Creativity that accepts and extends current Paradigms	Replication	The creative work demonstrates that the field is in its proper place. There is no attempt to move it forward.
	Redefinition	The creative work attempts to view the field from different perspectives. The creative work leads back to where the field is, but with a different perspective
	Forward implementation	The creative work attempts to move the field forward in the direction it is already heading.
	Advance forward incrementation	The creative work attempts to move the field forward in the direction it is already going, but too far ahead for other workers in the field are ready to go. There is therefore an advance beyond the expected rate of progress.
Creativity that rejects current paradigms and attempts to replace them	Redirection	The creative work advances the field in a direction that diverges from the path the field is progressing.
	Reconstruction	The creative work brings the field back to some point in the past and then redirects the progression from that point in time onwards.
	Reinitiation	The creative work attempts to bring the field to a new starting point and directs progress from that point onwards
Creativity that synthesizes different paradigms	Integration	The creative work attempts to synthesize two diverse ways of thinking in the single viewpoint. The attempt links together differing perspectives.

Source: Sternberg (2006), pp. 96-97.

to re-examine the definitions previously given. Originality, simply defined, is the “temporal priority” of an idea (Stigler, 1955, p. 293). Creativity, on the other hand, is defined beyond novelty as “divergent from the norm, unique” Ang & Low, 2000, p. 836). The critical issue relates to how one can ascertain that an idea is indeed the first statement. Stigler (1955) argued that determining whether a statement is the first is not without problems since new ideas can usually be traced to earlier statements. Original scientific work must therefore also have a component of the creative in production of new findings and new theories (Guetzkow, Lamont & Mallard, 2004). An examination

into the complex nature of the relationship between the two constructs is prompted by the legal discourse on copyright.

Originality in the law

The concept of originality is one of the most contentious issues in copyright law. This is so because copyright protection depends, for the most part, on whether a work is original or not. The next question to ask then is, “What is original under copyright law?”

Many researchers and scholars have attempted to discuss the history, rationale and nature of originality as it pertains to copyright. In the article “Originality”

published by the Harvard Law Review Association, it was emphasized that “Originality is the touchstone of copyright law”. It then proceeds by stating the three contexts in which lawyers grapple with originality: (1) in Copyright law; (2) in precedent-based reasoning; and (3) Law review publishing.

It cannot be denied that most of the works in the literary arena are repetitions of previous works – rewriting. For this reason, there is an increased risk of infringement in re-writing. The Harvard Law Review article then discussed the case of “Gone with the Wind” and the subsequent work “Wind done gone”. When a case was filed for infringement of copyright against the author of the “Wind done gone”, the court held that there was no infringement because the second work was a parody and exempted under “fair use”. It should be noted, however, that most of re-written works are not parodies. Thus, this ruling might just encourage less original writings and suppress original ones. The article then concluded by stating that in order to avoid infringement, the author must not be too original in order to be within the ambit of parody and be exempted under fair use. However, this is not the intention of copyright law. The goal of copyright is to encourage original works, but this might be stifled because of the parody ruling.

If there is any case that helped define the concept of originality, it is the Feist case. In 1991, the US Supreme Court in the case of *Feist Publications, Inc. v. Rural Telephone Service Co.*, denied copyright protection to work consisting of a compilation of telephone company’s listings. Stating that a mere compilation is not original, it stated that there is a need for creativity before a work can be adjudged as original. Abrams (1992) examined in detail the doctrines prior to the Feist case and its impact for the present and future cases. Abrams discussed that prior to the Feist case, the rule was the “sweat and brow” – that the time, money and effort in making a work would justify copyright protection. With the Feist case, copyright protection is now limited to works where there is a “minimal degree of creativity” and effectively debunked the “sweat and brow” doctrine. In other words, creativity is very much part of originality. This landmark case had greatly influenced future cases on the determination of originality. While the Feist case did not expressly define originality, it declared that mere selection without creativity is not protected. Abrams concluded that the Feist case resolved the prior conflicts and discarded the

“sweat and brow” doctrine. Instead, there are now two elements before a work can be protected by copyright: (1) independent work; and (2) minimum creativity. According to Abrams, the greatest contribution of the Feist case is that it prevents copyright to be used as a bar to public access to data and facts per se.

Continuing with the Feist case, the work Gervais (2002) may be considered a comprehensive treatise on the Feist case and its effect on the issue of creativity and originality. Just like the work of Abrams, Gervais emphasized the ruling in the Feist case that there is a need for “*creative choices*” in the selection and arrangement of data to generate originality to warrant copyright protection. He goes on by posing this question: What should be rewarded, mere work or creativity? For Gervais, it should be creativity.

Gervais then goes on by saying that the Feist standard may soon emerge as the controlling doctrine in the concept of originality in both common law and civil law systems. While some may see this as pro-author, Gervais believes that, on the contrary, it is for the benefit of the public since not all “works” will be protected – only those which have creativity. He then discussed the specific cases in Canada, Australia and France. He argued that in these countries, the Feist case is already gaining ground. In his analysis, there are two schools of thought: (1) Objectivist (skill and labor); and (2) Subjectivist (author’s personality).

To his credit, Gervais did not stop with the Feist case. He went on with his analysis and made his own formula for originality that is compatible with the Feist case, international treaties and cases decided by different countries: The Creative Choice. He then defined creative choice as “one made by the author that is not dictated by the function of the work, the method or technique used, or by applicable standards, or relevant good practice. Conversely, a purely arbitrary or insignificant selection is insufficient. A conscious, human choice must have been made, even though it may be irrational.” (p. 950).

In summary, the documented court decisions on copyright have joined the concept of originality with creativity. The issue of independent ownership for original works is seen to be not as difficult to ascertain as what would constitute “creative authorship.” According to Gervais (2002), the key point “is to determine whether they display creative choices, even when other copyrighted works may well exceed by far that minimum line” (p. 961). There is therefore

the need to determine when creativity is present for a work to be judged as original to earn copyright protection. The present study seeks to contribute to the determination of a definition of originality and creativity by exploring standards of both among the disciplines in the humanities, social sciences and the natural sciences.

Definitional differences across the disciplines

Sternberg (1985) posits that implicit theories are constructions residing in the minds of individuals, which eventually guide their actions and shape their judgments about a given psychological construct. Creativity is an example of a construct for which individuals, such as scientists and artists, may have implicit theories for. Sternberg argues that explicit theories or standards by which creativity is judged originate from the implicit theories about creativity held by scientists and artists. Following Sternberg's argument, to obtain explicit standards about whether a particular output is original or creative, it is useful to determine implicit theories of creativity and originality held by those who value these in their work and those of others.

Charyton & Snelbecker (2007) note that previous studies have shown a consensus among those in the sciences and the arts in viewing creativity as a problem-solving activity; however, differences are found in how the problem-solving is undertaken. In the sciences, the activity is described to be more externally focused; while in the arts, creativity is characterized more of an internalized, introspective experience (Feist, 1999 in Charyton & Snelbecker, 2007). Runco & Bahleda (1987 in Runco, 2004) found scientific creativity from the artist's viewpoint, to be thorough and patient; while artistic creativity was described to be involving emotions, imagination, and was generally expressive.

The research closely related to the present study is that undertaken by Guetzkow, Lamont & Mallard (2004). Guetzkow and his colleagues interviewed members of funding panels who were responsible to make judgments about the quality of research outputs. The researchers analyzed their respondents' descriptions of originality in the humanities and the social sciences. The results of the study showed that respondents' statements on originality presented a broader characterization of the construct than was found in the literature. The researchers also found that humanists and historians are likely to consider

originality in terms of approach (i.e. bringing a new perspective), with the humanists also emphasizing the importance of originality in terms of data used. The social scientists, on the other hand, had more diverse conceptions about originality, including, for example, originality in data, in approach, and in topic. The social scientists, however, were found to give more emphasis on originality in method.

Like the Guetzkow et al. study, the present research looks into the notions of creativity using qualitative interviews with experts. However, the present research extends the Guetzkow et al. study by exploring the definitions of creativity as well. Moreover, whereas the Guetzkow et al. study looked into notions of originality in the humanities and in the social sciences, the present study also included the natural sciences as an area from which notions of both creativity and originality may be derived. The present research is similar to the Sternberg (1985) study on implicit theories of creativity and intelligence since it also entails the analysis of definitions of the relevant constructs provided by respondents. However, unlike the Sternberg study, the present research does not focus on behaviors that are characteristics of those who are creative. Instead, this research explores the definitions of originality and creativity by asking critics and experts in various disciplines to characterize what would constitute an original and a creative output in their respective fields.

Methodology

Materials and Method

The present study was commissioned by the Intellectual Property Office, Philippines (IPO-Phils) in June 2011 with the goal of determining whether there can be common grounds or basis by which to define original works. This article presents part of the results from a series of in-depth interviews with experts in the social sciences, natural sciences and the humanities on their assessment as to how originality and creativity are achieved in the outputs produced in their respective disciplines. In the study, an *expert* was defined as an individual who served as a judge in evaluating works in his or her field of expertise, who has consistently produced published works, or have been attained national or international recognition for their scientific or creative works. Table 2 shows a breakdown of the experts for each field and their respective disciplines.

Table 2*Field and Discipline Breakdown of Experts*

Field	Discipline	Number of Experts
Humanities	Literature	5
	Film	1
	Philosophy	1
	Photography	1
	Theater	1
Social Sciences	Psychology	3
	Economics	1
	History	1
	Sociology	1
Natural Sciences	Mechanical Engineering	2
	Chemistry	2
	Biology	1
	Manufacturing Engineering	1
Total		21

In the analysis of interview responses, codes were assigned to interview segments in order to encompass all possible definitions of originality and creativity. To ensure interpretive validity, the principal researcher and two other research team members initially analysed the segments independently. The final code for each segment was a result of a consensus from at least two researchers. After a consensus was reached for all of the data segments, the codes were grouped into overarching themes. How these themes were applied to each field and across all three fields were identified.

Results

Definition of Originality

For the concept of originality, there were at least four recurring themes that emerged. These themes suggest that works are judged to be original if these **contribute to existing knowledge**, either by applying a different perspective, or by exploring a new area of study. The work should also have social validation through the **recognition by others as original**, and must not have been done previously, that is, it is

pioneering. A fourth theme lends the idea that for a work to be judged as original there has to be a **new coherence developed** in the work that is not found in any existing work. The emphasis is placed primarily on the process of applying new values, assumptions, or principles that do not conform to existing ones. Here, the author is seen to source this novelty from his or her own subjective experience or knowledge. The most consistent theme across the three discipline clusters is “pioneering work.” The theme “contributing to existing knowledge” is a recurring theme across the 3 discipline clusters; however, this is given more value/priority in the Social Sciences and Natural Sciences. “Recognition by others” and “new coherence developed”, on the other hand, are consistent only in the Arts & Humanities and the Social Sciences.

Although the results may indicate converging ideas on how originality is viewed by the different disciplines, these are too simplistic because it does not really tell how ‘originality’ is actually operationalized in each discipline. A close reading of the interview segments reveals the uniqueness in the way ‘originality’ is conceived by each discipline.

Contribution to existing knowledge

From the point of view of our sample from the Natural Sciences, a work is considered to be original if it either explains something that is yet articulated in the literature, or it offers something ‘new’. Like the Social Sciences, disciplines under the Natural Sciences make their evaluation on the basis on what is already known and existing in the field. However, the idea of ‘new’ has several dimensions, wherein the focus is centered on the methodology (process) and the outputs (results). the work creates an impact in the society such that it gives new direction to the way things are done. For our sample from the Social Sciences, a work is almost always judged according to what is existing, or what is already known in the field. Thus, for a work to be considered as significantly contributing to the field, its contributions should be seen as advancing the field (in terms of the status or level of knowledge). From the point of view of our sample from the Natural Sciences, a work is considered to be original if it either explains something that is yet articulated in the literature, or it offers something ‘new’. Like the Social Sciences, disciplines under the Natural

Sciences make their evaluation on the basis on what is already known and existing in the field.

From the point of view of our sample from the Humanities, a work is said to be original if it exhibits any of the three qualities: 1) new expressions in the work are evident, be it in terms of the ordering of words, use of new words/syntax, 2) new approach or perspective is applied. However, ‘approach’ in literature refers to a method of interpreting texts, while in theater arts, ‘approach’ refers to a perspective by means of which the output takes on a new form, 3) the work creates an impact in the society such that it gives new direction to the way things are done.

Pioneering work

The theme on pioneering work is the most consistent across the discipline clusters, understandably because this theme refers to works which have not been done in the past. Here, a pioneering work is seen like a provenance; something that nobody has ever seen or heard of before. The theme had been the most consistent from the start of the coding process (without alteration), so that the results were obtained with high degree of certainty.

Recognition by others

This theme suggests that for a work to be judged as original, other people will have to recognize the work as original. This code is salient to Arts & Humanities and the Social Sciences, albeit it emerged once in the Natural Sciences.

In nuancing the data segments, there are apparently 2 crucial points that distinguished originality (seen in the process of recognition by others) in the Arts & Humanities and in the Social Sciences: (i) the act of recognition and (ii) the ‘others’ who make the judgment. In Humanities, experts are quite explicit and clear about intersubjectivity in the sense that they see judgment and (the act of) recognition of the work as ‘relational’ and a highly subjective practice. But this aspect of recognition becomes more problematic when one considers the ‘others’ who actually make the judgment, for it matters how and from whose perspective the work is to be judged. Between an expert in the field and a lay person judging a work, the expert in the field can make a more objective critique of the work given that s/he knows exactly the rules of the craft or discipline. He/she can therefore base his/her judgment on some objective criteria or standards. Whereas a lay person is likely to approach and judge the work based on some aesthetic value or from his/her

personal appreciation of the work. But while this may be so, one cannot simply invalidate the judgment of lay people for in practice there are works that are given more worth by lay people (society), even if these are not recognized by experts (ex. Appreciation of films).

It is a totally new story when it comes to the Social Sciences because the act of recognition is determined by a community of experts through a process called peer review. This view is in fact common in the sciences—Social Sciences and the Natural Sciences—quite understandably because the disciplines are bound by strict/rigid conventions of scientific practice; and part of this convention dictates that all work goes through the scrutiny of peers (the academic community) before they become accepted.

New Coherence

This theme, which is salient in Arts & Humanities and the Social Sciences, places emphasis on the process of putting things and combining elements together in order to produce a new expression of a work or an idea.

Nuancing the data in the Humanities, words or phrases used need not be new. Sometimes, it only takes re-ordering (altering the sequence/chronology) of the words or phrases to come up with a new expression or new idea, thus a new coherence in the work. Copying of lines from various texts is also not an issue in Humanities provided that in the process of putting (all) these lines together, a new expression of a literary piece is produced; hence, the work may still be considered as original. The same holds true in the films. In the process of editing the same footage or story, a new expression of the work is developed. Thus, in photography and visual arts, new coherence is achieved by combining different elements together or by applying different techniques on the same subject.

In the Social Sciences, new coherence is synonymous to synthesis or the creative weaving of ideas together. Here, emphasis is placed in reinforcing an undeveloped argument, advancing a new thought or idea, or simply providing a new perspective by which to view things.

In the Natural Sciences, although this theme is not too salient, new coherence can still be achieved if in the process of combining (old) elements together, the result would yield to a new output (ex. new product, technology, species or compound).

It is important to note that while it was said that the sciences are bound by norms or conventions of scientific practice; similarly, disciplines under the

Arts & Humanities are guided by traditions, which are like perspectives and paradigms that guide artists in ‘imagining’ and viewing things. But unlike the sciences where originality of an idea is usually evaluated against prevailing conventions or standards, in Humanities, originality is evaluated against the new values offered by the work, and in the ability of the one producing the work to move his/her way in and out of the established traditions. Versatility and the ability of the individual to move in and out of tradition(s) in this regard presumes that the individual should also have the mastery of the rules of the discipline/craft, which is in essence the overarching theme and the underlying message brought forward by the findings of the study.

Definition of Creativity

There were three recurring themes that emerged in definitions of creativity: 1) **acknowledgement from others that the work is creative**, 2) **new order, coherence and arrangement created in the work** and 3) **deliberate act on the person or entity producing the work**. The second theme is the most consistent, though this is weighed differently across the discipline clusters. The first theme is common to Arts & Humanities and the Social Sciences; while the third theme is common to the science clusters only.

Acknowledgement from others

This theme appears to be salient in the Social Sciences and in the Humanities, albeit it recurred less frequently in the latter. The theme has in it the elements of subjectivity and intersubjectivity in the sense that the acknowledgement described here is one that is borne from the subjective impact the work has on the viewer/audience, and that the viewer/audience usually recognizes the aesthetic value of the creative output. Our sample of experts in the Social Sciences recognize that insofar as creativity is concerned, the audience need not necessarily refer to the community of experts, but may also refer to the larger community of laypeople (the public) who may have a different valuation/appreciation of beauty and art.

In Humanities where art is obviously the stronghold of the discipline, experts do acknowledge the subjectivity and intersubjectivity of a creative work and that laypeople may have their own appreciation of the creative work, but at the end of the day, it will still be the experts who have the upper hand in judging the work as creative simply because they know exactly

the rules of the discipline/craft. When comparing these positions taken by experts in Arts & Humanities in recognizing laypeople’s judgment on originality and creativity, there seems to be more leeway in recognizing laypeople’s judgment on original works than on creative works. This is also suggestive why despite conflicting views on issues of authorship, there is a greater tendency for scholars and experts from these fields to favor creative works over original works.

New order or coherence

This theme recurs in all three discipline clusters; however, this is given more value/worth in the Arts & Humanities and Natural Sciences than in the Social Sciences. To nuance further this result, there are main notions in which the idea of ‘creating new coherence in the work’ is associated with. The first notion views new coherence to be achieved by putting or combining ideas, things or elements together—a notion quite common to the science clusters. In fact, creative weaving of ideas is the only idea associated with this notion in the Social Sciences; whereas in the Natural Sciences, the emphasis is placed in the process of combining elements and yielding with a new output or result. The second notion views new coherence to be achieved by either following a new set of rules, or by having no discernible set of rules. This idea is common to the discipline clusters of Arts & Humanities and the Natural Sciences. In the Arts & Humanities, because creativity is weighed in terms of the ability of the creator to move in and out of established traditions; in the Social Sciences, because creativity is seen as a permutation of arts and analytical interpretation. According to one respondent, “Creativity does not even consider science. It is a mix of arts and analytical.”

Deliberation in the act of producing creativity

This theme is salient to the Science clusters than in Arts & Humanities. However, the way that this theme is operationalized by the discipline clusters varies significantly. For instance, in the Arts & Humanities, the act of producing creative work is seen as a conscious act in which the individual is aware of his/her intention or motivation in the producing the work (the reason for producing the work). Experts in the Social Sciences on the other hand acknowledge that the act of producing creative work should also be a conscious act but mainly because the creator must organize his/her thoughts to be able to present clearly the ideas

that the work would like to purport. Conversely in the Natural Sciences, deliberate and conscious act signifies the conscious effort given by the creator in response/reaction to something (ex. event or phenomenon). Creativity is expressed in works that give effort in reacting to unexpected events or taken granted things.

Related Copyright Issues

There were four themes which emerged in the analysis of interviews with experts across the discipline clusters. These themes summarize the respondents' ideas about when an output should be assigned copyright. The first theme refers to an **identified author**—whether the person is the source of the idea

or the one who produced the work. This theme means that a work should be copyrighted when there is the author of the work can be identified. Theme 2 refers to the **minimum quality required** in determining works to be protected; Theme 3 refers to **tangible proof** as an important criterion in determining works to be protected. The last theme, theme 4, refers to the **author's willingness and accountability** in having his/her work protected.

For each theme, several issues were raised by the respondents (across the disciplines). Table 3 below summarizes the issues covering the codes/themes mentioned above:

Table 3

Issues associated with each theme on Copyright

Arts & Humanities	Social Sciences	Natural Sciences
Theme 1: Identified author		
Primarily concerned with authorship of work, but at the same time acknowledge the difficulty in determining who should get the credit (source of idea vs one who produced the work)	Concerned with authorship to a certain extent. Between the source of idea and the one who produced the work, there is a tendency to favor the one who produced the work over the source of the idea	Concerned with authorship Protection should be given to both the source of idea and the one who created the output
Conflicting views concerning authorship.		
Theme 2: Minimum quality required		
Acknowledge the difficulty in determining the minimum substance (problematic)	Sees the importance of minimum quality, which should consider the following: Effort, skill in creating and producing the output Resources used to produce the work Acknowledge the difficulty in determining the minimum substance	Sees the importance of minimum quality/substance, which should consider the following: Quality of the product, and its usefulness (utility) Contribution in terms of the analysis and interpretation Between original and creative work, tendency to favor originality more than creativity
Theme 3: Tangible proof		
Published Article	Published article	Published article
Any creation or output regardless of the source of idea or quality (because it is an expression of the self after all)	Any creation expressed as concrete output	Any creation expressed as concrete output regardless of the quality (because it is an expression of the self)
Works which people can attest to anything that is already in public domain/realm (overlapping issue on authorship or ownership)		
Theme 4: Author's willingness		
Personal accountability; personal decision of the individual (regardless that he/she is the producer of the work or the source of idea)	Personal accountability; personal decision of the individual (regardless that he/she is the producer of the work of the source of idea) Proper compensation for the one who produced the work	Personal accountability; personal decision of the individual (regardless that he/she is the producer of the work of the source of idea) Copyright can constrain growth and knowledge

The relationship between Originality and Creativity

From the analysis of the interview data, there emerged three ways by which originality and creativity are related. These are **equivalence, mutually exclusivity, but complementary, and constituency**. The theme equivalence represents the view that original works are also necessarily creative. This characterization of the relationship between originality and creativity were most often expressed by our sample representing the Social Sciences and the Humanities.

The theme “mutual exclusivity but complementary” refers to idea that original works need not be creative, and creative works need not be original. However, an original work can be enhanced by creative elements, and a creative work can be improved by originality. In this theme, creativity is viewed as a tool to enhance an original work, but it is not necessary for a work to be judged as original. The main criterion for originality here is provenance. This characterization of the relationship is observed among some respondents from the Natural Sciences and the Social Sciences.

The third theme “constituency” refers to original works having the component of creativity.

This also is used to describe creative works that have original elements. This theme was common across all disciplinary clusters.

The first and third themes are consistent with the notion of originality consisting of creativity. Creativity here is sometimes seen in terms of the act of putting elements together in a new way that will now result in an original output. Sometimes, the ideas are original, and creativity comes in the way these ideas are put together. There is a general notion of creativity as process, while originality as the resulting ideas or elements that are worked out in the process.

Discussion, Conclusion and Recommendations

The findings of this study show that original and creative works share similar definitions from among our respondents, that is, these works should be socially validated, and must present a new order or perspective to reality. The promise of providing new frames by which to view and interpret reality is consistent with the literature previously reviewed on both these constructs. The notion of social validation or the need to be recognized by others, usually experts, for a work to be considered original or creative, is also consistent

with more recent understanding that creativity, and thus originality, is embedded in social systems, and are thus dependent on social processes.

The differences lie in the requirement for original work to contribute to existing knowledge and to be pioneering. These notions are recurring themes in the previous work on originality, which represent the tension between influence (i.e., existing knowledge) and innovation (i.e., pioneering). This tension is not evident in the definitions for creativity, which emphasizes individual, rather than social processes (e.g., the theme “deliberate act”).

Creativity as defined by the study’s sample of experts is consistent with Sternberg’s (2006) two types of creativity – the replacement of, or the synthesis of paradigms. The experts interviewed were likely to describe creativity and originality in terms of the production of new perspectives and the application of these perspectives to existing issues and problems. It basically involves the offering of new solutions by asking new questions on the basis of a new frame to view reality. Original and creative works therefore seem to have an important function. These works serve to question existing norms. An advocacy and pragmatist spirit may instigate and sustain the development of these works.

Interesting differences are found across the disciplinary clusters in the definitions of originality and creativity. The differences, for example, suggest that the Natural Sciences do not put much emphasis on social validation because perhaps their sources of validation are not decidedly social, but functional, i.e., whether an output successfully works and serves in providing a solution to an identified problem. The disciplinary differences also suggest that the Humanities place less emphasis on existing knowledge than are the Social Sciences and the Natural Sciences, where reports of discoveries need to be contextualized in previous work.

What are the implications of the findings on the definitions of creativity and originality to the goals of scientists and of those working in the Humanities? The findings of the present study suggest that the scientist’s goal is to create new problems so that new solutions may be offered. To be able to do this, one should undertake an active search for new perspectives with which to understand the dynamics of existing conditions. The new perspectives, however, should be framed in consideration of what is already known.

There is that important imperative of demonstrating your work as a progression from the past established to new knowledge. There is also then an impetus to persuade: by contextualizing the new in the already known, the scientist attempts to make a new idea acceptable. This need was earlier described by Stigler (1955) in his account of original works in Economics: "Originality, then, in its scientifically important role, is a matter of subtle unaccustomedness-neither excessive radicalism nor statement of the previously unformulated consensus." (p. 295) The production of original work therefore requires a process of training and mastery which involves the absorption of core principles of the discipline or craft.

For those who produce work in the Humanities, the findings of the present study also point to the importance of mastery as a goal. But, unlike among the scientists, those in the Humanities have an additional goal of self-expression, a process of individuation, while showing one's mastery of craft. This is expressed well by a respondent from the Humanities: "The intention of the work is important to consider. If the intention is self-expression, it is creative and original. Context is important to consider in determining originality."

The validity of the findings of this study should, however, be evaluated in the light of the study's limitations. Initially, the researchers targeted to interview 30 respondents, 10 from each field. However, at the end of the study, only 21 experts were interviewed, most of which were experts from the field Humanities (9). However, despite the fewer number of experts in the Natural Sciences (6) and the Social Sciences (6), the researchers noted that the data was saturated in these fields. That is, towards the end of the data-gathering phase, the Social Science and Natural Science experts responded similarly to one another and no new codes emerged. On the other hand, new codes were still emerging from the experts from the Humanities. This could be due to the diverse nature of the field. Therefore, it is important to take note of the different disciplines covered by this study when attempting to draw conclusions from the results.

These present findings, however, have significant implications for determining how original and creative works can be judged. Initially, the authors offer the following suggestions: 1) works can be judged in terms of how expertise, or knowledge of the field or of the craft is demonstrated in the work, 2) works can

also be evaluated in terms of the new knowledge to discipline is contributed, or in terms of the new form of technology that successfully addresses the needs of a community or society, and 3) works can also be assessed in terms of its being able to provide a new way of viewing reality through the incorporation of a new set of values and norms, while making explicit how the new emerges from, or is derived from the old. An important evaluation criterion would therefore be a successful demonstration of expertise, or competent knowledge of significant previous works. Finally, creativity in original works can be assessed in the following ways: 1) that the work produces an aesthetic impact on the viewer or audience, and 2) that the work does not constitute a reproduction of a previous work, but presents a new arrangement, a new expression from already existing elements.

As a final point, there is a need to re-examine the concept of "*originality*" under the present copyright law (RA 8293) in the light of the present study's findings. It should be noted that under the present law, works are protected "by the sole fact of creation, irrespective of their mode or form of expression, as well as their content, quality and purpose" (Sec. 172.1, RA 8293). This means that there are no legal criteria to judge whether a work is "original". What is important is that the work was produced by the author and was not just copied from another work. With the criteria in determining originality and creativity suggested in the present study, our lawmakers will have to decide whether to retain the present concept or adopt a new one that requires not just mere creation but a minimum level of creativity in the work. Should our lawmakers decide to require a "minimum level of creativity" before protecting a work as original, the findings of the present study may serve as one basis on which these guidelines may be formulated.

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- “The most original of authors are not so because they advance what is new, but more because they know how to say something, as if it had never been said before.”
–Johann Wolfgang Von Goethe
- “Every act of creation is first of all an act of destruction”
–Pablo Picasso