ISBN 978-88-548-4716-3 – ISSN 2036-542X-11002
DOI 10.4399/97888548471635 – pp. 65-86

On Attributing Artistic Creativity

Erkki Huovinen
University of Minnesota

Abstract: This article argues that conceptions of artistic creativity and thus the practices of the artworld are centrally regulated by an ideal of an artist who personally undergoes experiences of novelty, originality, uniqueness, or surprise. Such subjective creativity responses arise largely due to the artistic media that invariably defy complete control by the artist – a fact that is not only accepted by many artists themselves but also often regarded by them as highly desirable. Consequently, at the heart of artistic creativity there lies an opposition to a fluent 'extension of the mind into the medium,' unlike in other fields of expertise where mastery is indicated by automatism and increasing transparency of tools. This provides a counterargument to theories that see the criterion of art status in successfully realized artistic intentions. Further, it is argued that the belief in artists' subjective creativity responses differentiates artistic creativity from creative problem solving in general. This constitutes a sincerity requirement for artistic creativity that also seems highly resistant to challenges by individual artists. The crucial role of artistic media in eliciting artists' creativity responses, and thus in grounding attributions of artistic creativity, is not duly recognized by theories which see the gist of artistic creativity in conceptual restructuring or innovation.

Keywords: Creativity, art, aesthetics, medium, sincerity.

1. The Mind and the Medium

According to a commonly held assumption, creative work is essentially mental activity. In the history of aesthetic thought, we have seen this spelled out in idealist theories of art like that of Collingwood (1958: 134), who believed that when a composer makes a tune, this is something that "goes on in his head, and nowhere else." Such views of absolutely internal creation are sometimes embraced by artists themselves as well, if not for other reasons than for the subjective sense of active agency they may offer. When Pushkin wrote, "I am sweetly lulled by my imagination, and poetry awakens within me" (translated in Cooke 1998: 12), his attitude also clearly reflected the romantic ideal of artists' inward emotions as a source for creation. In a

wider perspective, however, artists are at least equally often heard to emphasize that creative work crucially relies on the artistic medium, residing outside of the head. In 20th century art, this was indeed a commonplace view. Painter Robert Motherwell, as one of the more articulate adherents of such an externalistic position, even claimed that there is a general "ignorance" of creativity that is, in part, due to "vastly underrating the role of the medium." Motherwell described the artist's interaction with a medium as a "living collaboration" in which the medium has the same potential for responding to feelings of love as another human being might have (Ashton, Banach 2007: 214-215). In this view, what is created could not be created simply in the head, but only comes about in and through the interactive relationship with the artistic medium.

In the philosophy of art, the constitutive role of the interaction with a medium for art making was famously emphasized by John Dewey. For Dewey, the "act of expression is not something which supervenes upon an inspiration already complete" (Dewey 1980: 68). Instead, the mark of artistic creativity can be seen in the ability to "build up simultaneously the idea and its objective embodiment" (Dewey 1980: 53) which leads to an "intimate union of doing and undergoing" (Dewey 1980: 54). The artist can only realize her individuality in producing a work of art "in interaction with surrounding conditions," by encountering the "resistances" that they offer (Dewey 1980: 293). Consequently, aesthetic experience (including the experiences of a creative artist) is uniquely characterized by a lack of distinction between the self and the object (Dewey 1980: 259). To the extent that such "complete interpenetration of self and the world of objects and events" (Dewey 1980: 18) is subjectively experienced in artistic creativity, an outside observer might be tempted to ask if this is because some aspects of the environment genuinely participate in the artist's mental activity. Does the artist really 'think in the medium,' and if so, does this mean that her mind somehow extends to the medium?

Here one may recall what is perhaps the best-known argument concerning the extended mind, the Otto case presented by Clark and Chalmers (1998). Briefly, Otto is an Alzheimer patient who uses a notebook to record important information in order to retrieve it from there when needed, substituting this tool for the fully operational memory of a healthy person. On hearing about an exhibition at the Museum of Modern Art, Otto consults the notebook, finds the previously recorded information that the museum is on 53rd Street, and sets off to see the exhibition. Whereas a healthy person could retrieve the same address information from her biological memory, Otto thus stores his long-term beliefs in the notebook, outside of his head.

Clark and Chalmers treat such examples referring to a *parity principle*: "If, as we confront some task, a part of the world functions as a process which, *were it done in the head*, we would have no hesitation in recognizing as part of the cognitive process, then that part of the world *is* [...] part of the cognitive process" (Clark and Chalmers 1998: 8, emphases in the original). Otto's notebook, then, turns out to be a part of his cognitive process, and hence part of his mind. Now, can a similar argument be made to work in the case of artistic creativity?

A crucial factor in the Otto case is that his notebook use is taken to have become so automatic that he can rely on it as 'transparently' as another person would use her biological memory. Such images of transparency are also well ingrained in conceptions concerning master artists who present virtuosity in handling their equipment without detailed thought of the mechanics involved – indeed, as if the thought process would take place within the larger system extending from the artist's head into the medium employed. From this perspective, one might perhaps want to say that to the extent that Olivia, a painter, is a master of her artistic medium, her situation is on par with the Otto case. Both Olivia and Otto operate external equipment as transparent parts of their cognitive processes. If so, then the extent to which the artist's external equipment participates in a truly mental process would presumably depend on the degree of transparency involved. Less capable artists might fall short of achieving a truly extended mind to the same extent that, for instance, my clumsiness with notebooks prevents notebooks from being qualified as genuine parts of my cognitive machinery. The extended mind theorist might also claim that the function that a painter's canvas has in storing visual configurations, and thus aiding recall and planning of further actions, simply expedites the work for someone who is not a master artist. If so – if all of the planning required for the painting might conceivably take place in Olivia's head – then by the parity principle Olivia's possible use of the external canvas to aid planning would be a contingent aspect of her truly mental process.

The role of the medium in this story does seem to accord with the idea of a vehicle, as Menary (2007: 15) uses it in a general definition of cognitive process: a "process is cognitive when it aims at completing a cognitive task; and it is constituted by manipulating a vehicle." As demonstrated by the Otto case, the role of such a vehicle might not appreciably depend on whether it is inside or outside the head. However, Menary's definition also highlights another obvious aspect of what it takes for something to be a cognitive process: it has to aim at completing a *cognitive task*. This is indeed the problem that the extended mind view would have with artistic creativ-

ity. The artistically creative task is not merely a cognitive task, as would be the case with many forms of creative problem solving. It is also and primarily a task of producing something extra-cognitive – in the simple sense that artworks are usually taken to endure even after the demise of the artist unlike such paradigmatically cognitive entities as thoughts or memories. For all the insight inherent in observations about 'thinking in a medium,' then, the artist's task is never really completed by something irreducibly cognitive. While the artist's mind may conceivably be taken to extend to the medium through her cognitive processes that rely on external vehicles, reducing artistic creativity to nothing but a mental process would do injustice to the poietic nature of art-making.

The notion that artistic creativity is not merely a cognitive process but necessarily includes producing something that is external to cognition sounds trivial, but it does direct our attention to the fact that the artist herself may be surprised at her own creation. This is because, first, all artistic media are capable of supporting virtually infinitely complex relational networks of items and, second, any cognitive approach to such a medium is necessarily perspectival by nature and thus limited in its scope. For present purposes, the items in question might equally well be defined in atomistic terms ('this blue circle,' 'the word "girl",' 'the middle C'), in some formal-syntactic manner ('golden section,' 'opening paragraph,' 'cadential dominant prolongation'), by focusing on emotionally interpreted gestures ('graceful posture,' 'the shocking farewell scene,' 'the energizing surge of the violins'), using cultural interpretations ('utopian image,' 'psychoanalytic depth,' 'militaristic precision'), and so on. In any event, while concentrating to balance, juxtapose, or perhaps offset some such items with respect to one another, the artist cannot but ignore a huge number of other relational considerations afforded by the work. The medium will always be richer in the understandings it affords than may be covered by the artist's own perspectival view. What this means is, in effect, that the artist cannot completely control all that happens in the medium. The artistic medium remains irreducibly recalcitrant. In the following, I will claim that such uncontrollability, far from being a defect in the artist's competence, is actually at the heart of what is expected of artistic creativity.

2. Subjective Creativity Responses

Accounts of creativity often involve a list of attributes that are shared by creative products and/or creative behavior. Typically, these include such at-

tributes as novelty, originality, uniqueness, and surprisingness. However, there appears to be no clear agreement between different accounts about how exactly such attributes are related to artistic creativity or value (see Vermazen 1991). One reason for the lack of consensus might be that the wide variety of experiences elicited by creative actions, products, and ideas does not fall into natural categories. Responses to observed novelty, originality, uniqueness, or surprisingness may dovetail one another, making the exact name given to such responses somewhat arbitrary and less consequential than is the fact that we recognize the general orientation of these responses. For now, it will be enough to refer to all such responses as *creativity responses*, or *C-responses*, for short. Such responses are, of course, exemplified by explicit attributions of creativity to actions, products, and ideas. Even more often, C-responses are implicit reactions to what is experienced as inventive, saliently new, surprisingly revealing, or strikingly alluring, or reactions to the way in which some entity suggests a new way of seeing, hearing, or understanding. Examples may include being astonished or surprised at – or simply being drawn to focus one's attention on – some previously unencountered features in otherwise familiar objects. Apart from cases of bewilderment or surprise, C-responses might also include making the cool judgment that a certain idea presents an unlikely but fortuitously helpful perspective to some field of thought. A C-response is, then, any reaction by a human observer or evaluator to an action, product, or idea due to some novel, unique, original, or surprising feature observed in it.

From the history of science we know that the subjective, sudden 'sense of understanding' that researchers sometimes feel in breakthrough moments of creative problem solving may be a rather unreliable indicator of the final worth of the ideas in question (Trout 2002). The same evidently pertains to artists' subjective C-responses, should these come to be treated as criteria for later interpretation and evaluation of artistic products. As the poet W.B. Yeats (1961: 314) suggested, the "delight in what is unforeseen" may sometimes be but "intellectual innocence." An anguished teenager may feel amazing revelations in creating his first heart-broken attempts at poetry, but no critic would take the magnitude of the youngster's feeling as a reliable guide to how good or creative the composed poem should be judged in some historical sense. It is well understood, then, that C-responses always emerge relative to an observer's prior familiarity with and understanding of the domain of action or thought in question. Attributions of novelty to an idea may differ between the originator of the idea herself, the public at large, and the community of experts customarily dealing with similar ideas; hence the distinction often made between subjective or psychological nov-

elty (experienced by an individual creative person) and historical novelty which requires the absolute newness of the idea with a view to the whole human history (e.g., Boden 1991).

If the bias in psychological creativity research often tends to fall on the latter aspect of historical novelty, it must largely be for methodological purposes. To get started, such research typically requires some consensus as to which human products are creative ones in the first place. The logic is straightforward: if we want to know whether condition A or condition B will better engender creative thinking or action, we have to assess the products from these conditions for their observed degree of novelty or originality. For such assessments, the psychologist usually relies on expert opinion, standardized tests, or the judgment of history. It is then ultimately the reception of products and social consensus among appropriate observers that determine whether some activities are judged to have been creative in the first place (cf. Amabile 1983). In this general approach, theories of creativity tend to become theories of "creative contributions to a domain" – theories of what "moves a field forward" or what "changes a domain" (see, e.g., Lubart, Sternberg 1995; Csikszentmihalyi 1996; Sternberg 1999; Sternberg 2006). Consequently, the degree of creativity of artistic products easily gets equated with the respective artists' canonical status. Taken to its logical conclusion, the approach leads to the view that an action which was not creative when it appeared might become one after its author's death (e.g., Csikszentmihalyi, Rich 1997: 56).

However, an interesting fact about C-responses is that having them is by no means only valued by the audience, but also by the artists themselves. As noted above, there are good reasons to believe that the artistic medium is, in principle, always capable of functioning as a major source of surprise for the artist herself. Noticing this, artists sometimes willingly admit the lack of total control over their results. Writer Annie Dillard (2001), for instance, points out that the finished work is not the author's previous "vision filled in" but rather its "replacement:" in the creative act, the page "always wins" over the author trying to tame her vision to it. Apart from accepting the resistance of their media, artists may come to consider the "victory of the page" as the mark of artistic success. Thus, in discussing creative writers' descriptions of writing that they had considered especially successful, Doyle (1998: 32) mentions that "they no longer spoke of themselves as active agents," but rather "described their experience in much more passive terms, as if the fictionworld were acting on them."

It is not surprising, then, that artists may in fact even actively seek ways to loosen their immediate grip of the medium. For example, the jazz trum-

peter Don Cherry reportedly changed his mouthpiece size every once in a while in order to remain alert in the creative improvisatory situation – something that from a technocratic expert perspective would make no sense at all, as such changes in the physical tools will easily lead to technical mistakes. Similarly, whatever critics may say of the control and mastery that the painter Jackson Pollock undoubtedly exerted over his drip paintings, it is inevitable that the choice of separating the paintbrush from physical contact with the canvas must also have relatively speaking loosened his grip on the medium. Such choices bespeak the willingness to relinquish some of the detailed control over the medium, perhaps exactly in favor of engendering fresh subjective experiences in the interaction with it. In less professional art-making, a befitting analogy is found in how practitioners of expressive arts therapy sometimes give their clients pre-moistened paper for use with watercolors: the somewhat unpredictable behavior of the color on the moistened paper is considered to free the client's imagination and lessen unwanted control by thoroughly thought-out intentions.

One way to understand such attitudes is to say that some artists may favor subjective C-responses over perfect technical expertise and achievement of ever more detailed control over the medium. For this reason, I suspect there to be at least a grain of truth in the 'tension view' expressed in expertise research wherein some tenets of expertise are seen to be counterproductive to creativity (cf. Weisberg 2006). Instead of exceedingly relying on the past by increased knowledge and habit, as experts in various fields typically do, the artist may value breaking her own habits, for instance by deliberate modifications of her tools. Instead of relying more and more on automatic modes of responding – another common trait of expertise – the artist may seek situations in which any automatisms are disrupted by surprises from the medium. In all this, the artist thus willfully obstructs the transparency of her tools, in effect working *against* a fluid extension of her mind into the medium. While there is no reason to claim universality for such a tendency in all art making, when it does appear in professional artists' work it speaks against interpreting the transparency of tools – or, accordingly, the purported extension of the artist's mind into the medium – as a consistent marker of artistic competence.

The fact that artists may value subjective C-responses over and above personal control over the medium provides a simple counterargument to any aesthetic theory that sees the criterion of art status in successfully realized artistic intentions. In this vein, Nick Zangwill has claimed that success in realizing artistic intentions ultimately decides between art and non-art: "in artistic activity, there is an intention that by creating an object or event

with certain nonaesthetic properties, certain dependent aesthetic properties will be produced" (Zangwill 2007: 40). The assumption is that artworks must have their origins in an insight into the dependency between aesthetic and nonaesthetic properties. Furthermore, such insight is based on the artist's "vision of a *non-actual* thing with the aesthetic/nonaesthetic property combination or of an actual thing that lacks these properties" (Zangwill 2007: 43). In other words, the artist envisions certain aesthetic-properties-supervenient-on-certain-non-aesthetic-properties, and goes on to produce actions that bring these preconceived properties into being. Theories such as Zangwill's do not require the whole artwork to appear as a potentiality in the artist's mind before its actualization, but nevertheless – despite unavoidable concessions in passing to the possibility of "thinking in acting and making" (Zangwill 2007: 45) – they see the real engine of art-making in the artists' veridical insight into what each of their actions will result in. Given many an artist's willingness to experience surprises in the medium and even to seek them by relinquishing some of one's own control, an emphasis of the artist's prior insight to some aesthetic/nonaesthetic dependencies as the fundamental tenet of art-making appears rather unrealistic to say the least.

3. Belief in the Sincere Artist

Above, it was seen that psychological research on creativity typically determines the degree of creativity of human products and actions with reference to interpersonal consensus concerning what has been novel or original, thus at least superficially downplaying the originator's own C-responses. Such relative de-emphasis of the originator's views might seem to parallel the well-known anti-intentionalist tradition in humanities in which the intentions of an author were discredited as being criterial for reaching acceptable interpretations of literary artworks. Indeed, supposing that the range of suitable interpretations concerning the content of artworks is not bound by the artist's own intentions, these works' creativity status is also likely to remain independent of such intentions. However, the reasonings in the two argumentative traditions are in fact almost opposite. Whereas in literary studies the anti-intentionalistic 'death of the author' movement was fueled by the wish to liberate the written text to a multiplicity of interpretations, the creativity psychologists' tendency to dismiss the author's views rather follows from the wish to restrict the possible interpretations concerning the creativity status of the product in question. What is assumed is that for each product, at a given time, there exists a more or less correct view concerning

its degree of creativity, and that for this view, the originator of the product might not always be a very reliable informant.

Now, in anti-intentionalist theories of interpretation, the author easily got thrown over the board once and for all even when this might really not have been required. Consider Beardsley's (1965: 301) claim that the value of artistic products is "independent of the manner of production, even of whether the work was produced by an animal or by a computer or by a volcano or by a falling slop-bucket." What should have been of primary importance to Beardsley is the first claim – that artistic value is independent of the manner of production – but this might also be articulated without opening the door to falling slop-buckets. Even if the artistic value of a work be independent of the exact manner of how the artist produced it, this by no means implies that the value of the object as art would be unaffected by the consideration that we *take* it to be produced by a human being (or a relevantly similar creature) rather than by a falling slop-bucket. Hence, when psychological creativity research makes statements about the degree of creativity in some object, the rationality of such discussion seems to involve a presupposition – albeit not a proof – that the object's coming into what it is has involved a human agent. I think that this must be so because, outside of theological contexts, attributing creativity to a product only really makes sense against the assumption that there has been some originator with a relevant concern for producing C-responses. Let us look more closely at this claim in the cases of creative problem solving and artistic creativity, respectively.

To understand something as a problem is, *ipso facto*, to understand that it involves potential to be resolved in a way that can be appreciated as bringing something new and valuable to the view. In other words, problems involve potential for producing C-responses. Our belief that Susan has been creative in solving a mathematical problem entails that we assume Susan to have identified the problem as such, and thus (at least implicitly) to have understood its solution to potentially elicit C-responses in those who see it as a problem.[1] However, even if our belief in Susan's problem-solving creativity implies that we believe her to have understood the problem as such (and thus to have had an interest in producing C-responses), it does not necessitate a belief that Susan herself has shown a C-response. This is because the significance of problems as problems does not depend on the contingent human psychology of the person who happens to come up with a solution. To see this, consider that Susan is in fact an author of self-help books on

[1] If Mary does not see any problem there but, say, just happens to embody or represent its solution in her activity, it would typically be some other person noticing the key to the solution in Mary's activity that would be credited for exemplifying creative problem solving.

creative thinking. She has some tried and true methods of developing logical puzzles, visual paradoxes and mathematical problems which she knows to require creative insights by the readers to be solved. In crafting her brain teasers, Susan also works out the solutions for herself, but with her years of experience in the domain these solutions stimulate no C-responses in her herself. Despite this, we might want to credit Susan with creativity in working out her highly original puzzles, well knowing her to be sensitive to the C-responses elicited by the solutions in most readers. Attributing creative problem solving to a person implies that she has some relevant interest in producing C-responses, though not necessarily ones of her own.

As regards artistic creativity, things appear to be different. Too much calculation on the audience's C-responses by the artist is often treated with suspicion, which is well demonstrated in how visual advertisements, regardless of aesthetic qualities, are typically not quite appreciated like gallery art. This is probably not because it would be supposed that it is wrong for an artist to care about others' C-responses. Rather, just because such responses *can* be produced by mere calculation – without the producer showing C-responses oneself – observers may sometimes be careful not to attribute high levels of artistic creativity to processes that are known to be directed by instrumental concerns. Seen from this perspective, the distinction between art and craft would be, then, not so much a matter of creative and non-creative domains of activity, but a distinction between domains of creative activity which are and are not dominated by an implicit belief that what we are made to experience is selected into this role on the basis of someone else's C-responses. In short, attributing artistic creativity to an object is reasonably taken to imply a belief that the object has been sincerely presented by an artist as valuable due, at least in part, to her own C-responses to it. This could be called the *sincerity requirement* for artistic creativity.

When Marcel Duchamp's readymade *Fountain* was first rejected from the show of the Society of Independent Artists in 1917, it could well have been because of the suspicion that the artist had not been sincere in this sense. Today, such institutionally established art movements as readymade art should indeed have taught us to be careful in *defining* art with recourse to such criteria as artists' C-responses. Just as it is possible for an artist to work against the established ethical or other codes of her art form, it is, of course, possible for her to work against the assumption that the work of art will have evoked some C-responses in the artist herself. In fact, this is not even very difficult to achieve in individual cases. That the art world modifies its conceptions of what art can be in response to such challenges is well known. However, I would think that the sincerity requirement presents an intuition which

is much more resistant to intentional violations by working artists than are any intuitions concerning the subject matter, materials and techniques, or, say, moral underpinnings appropriate to and expected of artworks. Without the implicit ideal of a sincere, authentic, personal artist who will have herself experienced some tensions, surprises, and revelations in response to her own work, the art world as we know it would probably cease to exist.

Notice, however, that the sincerity requirement is also loose enough to accommodate shifts of value judgment across individuals, institutional frameworks, and time. In particular, such 'problematic' movements as ready-made art or minimal art appear much less problematic against a loose sincerity requirement than they might appear against some more definite expectations of, say, interesting originality. For example, when exhibitions of minimal art in the 1960s appeared 'boring' to some observers, raising questions of whether something that totally seems to lack human interest can be a work of art at all, there was still no question of these phenomena being of a new kind (Colpitt 1990: 116–117). Even if it might have sometimes been unclear to the audience *what* it exactly was that artists such as Frank Stella or Andy Warhol saw in their own work, I don't think it was unclear that they did see something in it themselves, and wanted to present their work on this account. Understanding artworks as creative products does not require, say, replicating the artist's own imaginative experience (as in Collingwood 1958: 308), but it does require what I take to have been the valuable core in even such unrealistic claims: the fallibilistic belief that there is *some* analogy between the artist's response to her work and the way the audience may come to experience it.

In this perspective, what we learn from institutional theories of art is that the art world is a system in which the displaying function will always provide a safety net against possible lack of C-responses on the artist's part. Consider a situation in which a typewritten poem that Ben submits for publication in a poetry journal strikes the editor as hilariously original in its unheard-of associations and its curiously novel, distorted language – until it is revealed that what the editor had received in fact represents a lucky accident in Ben's monkey's activity of entertaining himself by making sounds on a typewriter. Rather than typing at random (as in the notorious case of an ideal monkey producing the works of Shakespeare in the course of an infinite succession of random typings), Ben's monkey might even have shown C-responses to the sounds produced, being nevertheless indifferent to the scattered visual marks concurrently appearing on the paper, and incapable of entertaining any interest in them or imagining that others would either. As a literary achievement, these marks would most likely strike any

real-time observer of the monkey's activities as utterly non-creative. However, even after hearing about the true origin of the 'poem,' it would still be open for the journal editor to see it as a creative product of poetry, but this could only be because of his belief in *Ben's* understanding of the game and sincerity in wishing to display an item such as this as a poem. It does not matter much whether we think of Ben as a Duchampian displayer (perhaps initially fooling the editor) or whether we think of him as an artist working in a relatively loose medium – using the monkey-typewriter setup as a rather non-transparent tool (in which case he would not have fooled the editor). The point is that even if we may sometimes make mistakes in treating the products of slop-buckets or monkeys as valuable products of artistic creativity, such valuations would not make much sense without the general expectation of C-responses on the part of some producing agent, and that the art world has found and probably will in the foreseeable future find ways of keeping this assumption in force.

4. An Alternative View: Conceptual Restructuring

But surely, the critic may now argue, the artist's actual C-responses may sometimes also fail to pick exactly those objects that would *merit* such responses. If we want a subject-relative conception of creativity, wouldn't it nevertheless be better to construct it with some more objective criteria in view? For example, Margaret Boden suggests that to be psychologically creative, an idea has to be fundamentally novel with respect to the individual mind which had the idea. She explains that whether or not others have had the same idea before, a person's idea is psychologically creative if she could not have had it before (Boden 1990: 32). Remarkably, such a view allows even computers to be 'psychologically' creative, given that their novel outputs are not simply results of, say, following some pre-existing rule system. Indeed, the crucial question for Boden is not the novelty value of the outputs *per se*, but rather "whether the output was generated by processes that explore, test, map and/or transform the conceptual space inhabited by the program concerned" (Boden 1990: 135). In Boden's analysis, then, an idea is psychologically creative to you when it is new to your mind in the sense that you couldn't have had it before for the reason that getting this idea involved some degree of restructuring your relevant conceptual spaces.

Admittedly, such a view is difficult to argue against, because of the well-entrenched role of conceptual restructuring – or 'bisociation' of hitherto disparate frames of reference (Koestler 1964) – in notions of problem-

solving creativity. The literature on creativity is brimming with accounts of sudden insights in which an inventor transformed the field in question in some dramatic conceptual manner by seeing a connection that hadn't been recognized before. There is, of course, no reason whatsoever to deny that such conceptual shifts represent truly creative achievements. Hence, if comparable forms of innovation or conceptual restructuring are also found in artists' work, these should evidently enjoy pride of place in our accounts of artistic creativity. It follows that given any suitable counterexample to Boden's account ("See: here we do not see a modification of conceptual spaces, and still this artwork seems creative!"), she could retort that we are simply lowering the bar for what counts as creative, and claim that the cases with reorganization of conceptual space are nevertheless *more* creative.

Let us, however, review the kinds of examples of artistic creativity that best fit the bill for modifying, restructuring or transforming conceptual spaces. Composer Arnold Schoenberg starts to compose music using twelve-tone rows that regulate the pitch classes of the twelve-tone equal temperament system by serializing their order of appearance. Film director Sergei Eisenstein formulates his montage technique, involving violations of spatial and temporal continuity. Painter Jackson Pollock lays his canvas horizontally on the floor, starting to drip paint on it without touching it directly with the brush. Each of these cases involves a strong innovative turn – a paradigm shift, if you will. All of them are conceptual innovations concerning the handling of the medium. Such innovations function as suggested solutions to the artist's perennial problem of what to do with the medium. This is the rationale of remarks such as Eisenstein's "[t]o determine the essence of montage is to solve the problem of film as such" (Taylor 1998: 95).

Nonetheless, as artistic achievements, none of these ideas would have been worth much without the subsequent work carried out in the respective artistic media, the successful processes of exploring the possibilities inherent in the suggested techniques. Accordingly, when Schoenberg famously claimed to have made a discovery which would "secure dominance for the German music for the next hundred years" (Rufer 1959: 26), he was of course wrong in his prediction but quite right in seeing that the discovery was just a technical innovation, leaving the actual artistic work to be done during the years to come. Similarly, the great majority of Pollock's works did *not* for their execution require any new conceptual restructuring of the kind that Boden's account calls for. By a work such as *Autumn Rhythm* (1950), the major technical innovation mentioned above was already some years behind. Hence, a theory emphasizing conceptual innovation or paradigm shift would be likely to classify such an artwork merely as what Sternberg

(1999) calls 'replication' – something that "solidifies the current state of the field," thus making less of a creative contribution than individual works which at the moment of their conception truly "propel the field forward." Pollock's case is especially illustrative here, because it might be reasonably argued that during the years after his technical innovation, and up until his death, he never managed to carry out another comparable "transformation of conceptual space" in his work. And of course, there is nothing extraordinary about this: countless other artists work in a similar manner, working longer periods of time within the bounds of more or less stable practices or methods that they have once established for themselves.

The common emphasis of conceptual and/or technical achievements as the core of artistic creativity – whether in the psychology of creativity or in the historiography of the arts – has its mundane roots in the relative ease with which these aspects may be discursively scrutinized. Such an emphasis nevertheless easily leads to what Motherwell described as "vastly underrating the role of the medium." An emphasis on conceptual shifts in artistic style and technique diverts our focus from the artist's interaction with her medium – the principal basis for her own C-responses – and thus from the key to the artistically creative character of her work. I take it that many of Pollock's paintings do, indeed, represent tremendous documents of creative activity, but that this has much less to do with the art-historical innovation of drip painting as such (influenced by a workshop by David Alfaro Siqueiros already in 1936; see Naifeh, Smith 1989: 287) than with the way in which Pollock managed to keep himself motivated to use this method in his continuing work. In intuitively coming to understand the speed of the movements which brought about *Autumn Rhythm*, one is persuaded to believe that as selected for display by the artist, it must have included aspects which most certainly were not calculated to the detail, and that it therefore must have provoked genuine C-responses in the artist himself at the moments of its conception. In the absence of a belief in an artist's personal evaluative selection based on subjective experiences of uniqueness, interest, novelty and their kin, any conceptual innovations behind the work would remain inconsequential for our understanding of it as artistically creative.

Indeed, mere evidence of conceptual restructuring in an art maker's cognition would not alone suffice to recommend attributing artistic creativity to her, or to her products. This is easy to see by considering a scenario in which such conceptual progress appears to be involved in the production of a work, but – by analogy to the above monkey case – any adherence to the appropriate medium is lacking. A possible scenario might be one in which a person playing a problem-solving game on a computer would be unaware

that the key combinations pressed on the keyboard are also simultaneously used to calculate the coordinates for lines and colors for a series of computer-aided paintings. Here, we may suppose that persistent and continuing activity on the game would transform or restructure the person's conceptual spaces for this activity, gradually allowing her to achieve results on the problem-solving tasks that she wasn't capable of achieving before. Concurrently, due to the increasing structuredness of the pressed combinations of keys, the paintings generated by the computer would likewise show an increasingly coherent 'style.' I assume it to be rather obvious that one would nonetheless hesitate attributing artistic creativity to the player, and that this is because the player, being completely unaware of the generation and existence of the paintings, would neither have displayed any subjective responses to them, nor could she then have selected them to be presented as artworks on the basis of such responses.

Such counterexamples to Boden's view may seem unfair – after all, no one would seriously suspect that a theorist of creativity would want to attribute painterly creativity to a person who is not even aware that she is painting! However, the point is that as long as creative achievement is defined in terms of conceptual restructuring, artistic creativity remains essentially realizable without an intentional adherence to a medium. Such a definition of artistic creativity relegates the medium to the role of a conduit transferring the results of the creator's problem-solving activity to the outside reality. Identifying the highest degrees of creative achievement in the history of the arts with the most apparent technical paradigm shifts has the danger of reducing the creative activity to a cognitive process that is wholly under the artist's control. This is to overlook the constitutive role of the medium both in shaping the creative products and in giving impulses to the artists that fundamentally ground our attributions of creativity to them and their works.

5. Non-Improvisatory Processes, Precompositional Rules, and Conceptual Plans

Examples such as Pollock might seem tendentious. It may, indeed, be conceivable that the artist undergoes subjective experiences of novelty, surprise, or originality while engaging in freely improvisatory works executed without precise goals, plans, rules, or recipes. However, in what sense does it make sense to require that *all* artistic activity would ideally involve artists' subjective C-responses? What about art that does not result from rapid

sequences of improvisatory action but rather from lengthy processes of honing and polishing, correction and revision? What about art that results from manipulating materials according to precompositionally fixed rules? What about art in which work in the medium is reduced to completely teleological execution of already finished plans or ideas? In responding to these three questions, I will argue that improvisation indeed forms a paradigm case for the view of creativity outlined above, but that the gist of this view is independent from the question of precompositional rules, and presupposed as an evaluative standard even in teleological art-making processes.

First, on the question concerning long processes of improvement, modification and amendment, it is of course to be expected that making something slowly, with a lot of conscious consideration, tends to take away some of the surprise element arising in quick, improvisatory situations. However, it should be remarked that the value of experiencing revelation – and thus novelty or surprise – in a process of artistic inquiry has also sometimes been presented as the reason why the making of artworks should *not* be improvisatory. The poet Mark Doty (2010), for example, espouses lengthy processes of investigation into the "charged complexities lying within" the poem, evading too early resolutions. Despite thus distinguishing sharply between the finished work and the poet's process of uncertainty preceding its finalization, he believes that the resulting work can "involve us in a replication of the writer's struggle of coming to understand" (Doty 2010: 78). Here, experiences of sudden resolution of conflict or feelings of revealing discovery that the artist may encounter while making the work are not at all taken to be diminished by prolonging the process, but perhaps even strengthened by it. Furthermore, Doty seems to imply that some of the effectiveness of the work lies in the audience's ability to grasp both the artist's struggle and the way this has yielded to subjective experiences of insight. Such an attitude clashes with the suggestion that our belief in the artist's own C-responses should necessarily depend on whether or not an artwork suggests improvisatoriness or speed of composition.

Perhaps what should be said here is that improvisation, in the general sense of continuing poietic action in real time without corrections, simply offers one of the most feasible ways to make it almost self-evident that the artist invites subjective C-responses. These responses may occur in non-improvisatory poietic processes as well, but here the emphasis may gradually tend to shift – by analogy to what happens in problem-solving creativity – from the artist's own subjective C-responses to her interest in ones shown by the audience. In this respect, real-time improvisation in a medium does

provide a useful model situation for distinguishing artistic creativity from problem-solving creativity.

Second, with regard to precompositionally set rules it should be noted that such rules not only regulate certain aspects of the work, but that they also typically cause unexpected situations challenging the artist amidst the art-making process. As an example one could again evoke Schoenberg's method of twelve-tone composition. Any student of musical composition will know that preordering the twelve pitch-classes of the western tone system and more or less adhering to this row while actually writing out the composition (with all due allowances for transposition, inversion, and retroversion), presents the composer with a continuous series of small problem-solving situations. These situations may well be rather surprising, apart from of course requiring solutions that should in some sense be new to the composer who wants to write new music. Indeed, the mere fact that an external row table has to be consulted for designing a continuation for a given musical passage guarantees that at the moment of consultation the composer receives an impulse that is foreign to what she is already musically presented with in the passage just finished. The process of composition thus turns out to be a continuous series of fruitful states of conflict in which some balance has to be struck between the dictates of the precompositionally selected guidelines and what appeals to the composer's musical sense. If so, the work requires openness to solutions that resolve such conflict situations in fresh and original ways – that is, it requires sensitivity to one's own C-responses.

Described on this level, the serial composer's predicament is in fact quite similar to what takes place in numerous traditions of improvised music that are based on embellishing or varying previously existing 'models' such as traditional melodies or chord progressions. As suggested by ethnomusicologist Bruno Nettl (1974), it is in fact conceivable that traditional cultures of musical improvisation might be comparatively analyzed by way of examining how creative musicians add improvised elements to the 'non-improvised' parts provided by their respective models. For understanding the creativity in play, however, the task presented by the models to the creative musician does not simply consist in adding some elements to what is already fixed, but rather in resolving the constantly shifting subjective tensions between her current musical statements and the dictates of a given model. The core of the creative dynamics is not therefore completely revealed by analyzing the finalized musical products with a view to how the previously given elements end up being spread in the musical texture or mixed with other materials. Far from only representing what is 'predictable' in the music, the model invigorates the creative situation by providing hurdles that have to

be overcome, constraints against which the artist's real-time actions rub and have to be coordinated. As improbable as the comparison may seem, the creative artists in many of world's improvisatory music cultures are faced with a situation not unlike the one found in the most constructive traditions of 20th century modernist composition: in both cases, it is exactly the previously given rules or materials that guarantee a continuing affordance for the artist's subjective C-responses. What is suggested by such examples, then, is that whether or not some artistic activity is usually conceptualized as improvisation, the presence of precompositionally determined materials or rules should not in principle diminish the expectation concerning artists' subjective C-responses.

Third, and finally, what about art making in which the process of producing the work of art is strictly teleological, following a finished plan? In such cases, what is previously given does not confine itself to materials or rules constraining an open-ended art-making process, but the end result itself is in some important sense already given in the plan. Many examples could be given especially from conceptual art, but let us consider Alfredo Jaar's *One Million Finnish Passports* in which he perceptively commented Finland's stringent immigration policy by exhibiting the said number of empty Finnish passports that could have belonged to new immigrants but didn't. As presented in the Museum of Contemporary Art in Helsinki in 1995, the work simply consisted of a pile of one million passports. Now, there is no need to deny the importance of statements made through such works or their place in the art world, but it is no less clear that the artist's political statement did not so much emerge from the final installation than it was simply announced through it. A work such as this gives the artistic medium the role of realizing or communicating an antecedently finished conception, statement, or question, quite like a factory gives a realization to an inventor's idea. Imagining artistic institutions erected merely on such practices is to imagine that they would function on the model of a science museum, a church, or an exhibition of political emblems.

All this is well known and not very controversial. Importantly, however, not only is there a sense in which the audience can equally get the message of *One Million Finnish Passports* whether or not they actually see the work, but the same must pertain to the artist himself. As the idea of the work eclipses the medium through which it is projected, the work's execution is relegated to an instrumental role in conveying the message. This challenges the sincerity requirement, because it is not clear that *what is actually presented* is what the artist has experienced as valuable due to his own C-responses. For all we know, his message does not really inhere in the medium. I assume,

however, that conceptual artists are much better aware of this tension, using it to their effect, than some creativity researchers may be. In locating artistic creativity in conceptual achievement, a creativity researcher may seem to be well fitted to recognize the worth of works such as *One Million Finnish Passports*. I would argue, however, that even the conceptual achievement of a conceptual artist couldn't be appropriately evaluated except against the background of the general expectation of a sincere artist working in a medium.

In articulating the sincerity requirement I am thus observing that despite the "crisis in [the] medium-based conception of the artwork" (Osborne 1999: 49) that critics sometimes have seen in conceptual art, the crisis has not really been very severe: judging by the amounts of medium-based art (novels, paintings, compositions, films etc.) produced during the outbreak of conceptual art, there was never a very good reason to fear that the art world would come to forsake the idea of a sincere artist working in a medium. Indeed, the 'crisis' in question seems to have been not quite unlike the notorious 'crisis of tonality' in music history that generations of musicologists have been taught to associate with the music of Schoenberg and other modernist composers of the early 20th century – a description only feasible today by disregarding the very real possibility that most of world's tonal compositions might actually have been written after that time, and the fact that most music heard by most people today is, for all practical purposes, tonal. The role of the medium in artistic creativity is, I think, not a tendency or vogue that is easily overthrown by 'crises' achieved through conceptual reorganization.

6. Conclusion

In this article, the view of a sincere, medium-attacking artist has not been advanced as a criterion for the definition of art, but rather as a regulative ideal that is multifariously grounded in artists' own attitudes, audiences' reactions, the practices of the art world(s), as well as – one might add – in the human animal's natural interest in forming and organizing his world. Belief in the sincere human being presenting her puzzlement in the face of the world as she encounters it in her chosen medium is an important reason for our interest in art, inviting us to open ourselves to the same challenge.

The view developed here acknowledges the problem-solving aspects inherent in artistic developments, but gives them only a subsidiary role in accounting for what is most characteristic to creativity in art. Understanding the conceptual rationale or the technical underpinnings of an artwork may,

of course, be of huge importance for understanding the artist's approach as a response to an art-historical problem situation. However, artistic creativity as we know and value it is as non-reducible to holistic solutions to the problem of approaching the artistic materials as it is to concepts or ideas that the artist sets out to convey through the artwork. The relative ease of identifying, labeling, and discursively scrutinizing such aspects makes them tempting reference points for attributions of creativity, but the danger is to reduce artworks to translatable propositional contents or solutions to problems. Creative breakthroughs in overall artistic approach may certainly resemble scientific breakthroughs in that they often represent novel 'bisociations' between hitherto separate ideas, techniques, or frames of reference (cf. Koestler 1964). What really drives artistic creativity forward, however, is the friction experienced on a smaller scale – the simultaneous 'bisociation' of any single gesture or idea both with the artist's subjective sensibility and experience as well as with the constraints set and surprises provided by her objective medium.

Roland Barthes (1994: 494) famously claimed that to give a text an author is tantamount to providing it with a final signified, or to 'closing the writing.' However, this is only true if we assume the author to come fully equipped with determinate intentions that impose a 'standard of correctness' (cf. Wollheim 1980: 205) on our subsequent interpretations. In fact, there is no reason to treat the author only that way. In the view developed above, it is exactly the *presence* of the artistically creative author that guarantees an ineliminable non-fixity to works of art. The institutions and practices of art are erected on the expectation that the artist herself will time and again become amazed, attracted, aroused, and awed by what takes place in her medium, and her choice to publicly share the results of being in such a non-closural state is what is often most valued in her work. To find the author stumbling in her irreducibly recalcitrant medium, relying on her own limited perspective, is not to close the writing but to open it to even those understandings that she could never have conceived of.

huovinen@umn.edu

Bibliographical References

Amabile, T.M., 1983, *The Social Psychology of Creativity*, New York, Springer.

Ashton, D., Banach, J. (eds.), 2007, *The Writings of Robert Motherwell*, Berkeley, Los Angeles, London, University of California Press.

Barthes, R., 1994, *La mort de l'auteur*, in *Œuvres complètes, Tome II: 1966–1973*, edited by É. Marty, Paris, Seuil, pp. 491-495.

Beardsley, M.C., 1965, *On the Creation of Art*, "The Journal of Aesthetics and Art Criticism," 23, n. 3, pp. 291-304.

Boden, M.A., 1991, *The Creative Mind: Myths & Mechanisms*, New York, Basic Books.

Clark, A., Chalmers, D., 1998, *The Extended Mind*, "Analysis 58," n.1, pp. 7-19.

Collingwood, R.G., 1958, *The Principles of Art* [1938], New York, Oxford University Press.

Colpitt, F., 1990, *Minimal Art: The Critical Perspective*, London, UMI Research Press.

Cooke, B., 1998, *Pushkin and the Creative Process*, Gainesville (FL), University Press of Florida.

Csikszentmihalyi, M., 1996, *Creativity: Flow and the Psychology of Discovery and Invention*, New York, HarperCollins.

Csikszentmihalyi, M., Rich, G.J., 1997, *Musical Improvisation: A Systems Approach*, in *Creativity in Performance*, edited by K. Sawyer, Greenwich (CT), London, Ablex, pp. 43-66.

Dewey, J., 1980, *Art as Experience* [1934], New York, Pedigree.

Dillard, A., 2001, *Ruining the Page*, in *The Spirit of Writing: Classic and Contemporary Essays Celebrating the Writing Life*, edited by M. R. Waldman, New York, Tarcher, pp. 17-19.

Doty, M., 2010, *In Favor of Uncertainty*, in *Views from the Loft: A Portable Writer's Workshop*, edited by D. Slager, Minneapolis (MN), Milkweed, pp. 75-82.

Doyle, C., 1998, *The Writer Tells: The Creative Process in the Writing of Literary Fiction*, "Creativity Research Journal," 11, n. 1, pp. 29-37.

Koestler, A., 1964, *The Act of Creation*, New York, Macmillan.

Lubart, T.I., Sternberg, R.J., 1995, *An Investment Approach to Creativity: Theory and Data*, in *The Creative Cognition Approach*, edited by S.M. Smith, T.B. Ward, R.A. Finke, Cambridge (MA), MIT Press, pp. 271-302.

Menary, R., 2007, *Cognitive Integration: Mind and Cognition Unbounded*, New York, Palgrave Macmillan.

Naifeh, S., Smith, G.W., 1989, *Jackson Pollock: An American Saga*, Aiken (SC), Woodward/White.

Nettl, B., 1974, *Thoughts on Improvisation: A Comparative Approach*, "The Musical Quarterly," 60, n. 1, pp. 1-19.

Osborne, P., 1999, *Conceptual Art and/as Philosophy*, in *Rewriting Conceptual Art*, edited by M. Newman, J. Bird, London, Reaktion Books, pp. 47-65.

Rufer, J., 1959, *Das Werk Arnold Schönbergs*, Kassel, Bärenreiter.

Sternberg, R.J. 1999, *A Propulsion Model of Types of Creative Contributions*, "Review of General Psychology," 3, n. 2, pp. 83-100.

Sternberg, R.J., 2006, *The Nature of Creativity*, "Creativity Research Journal," 18, n. 1, pp. 87-98.

Taylor, R. (ed.), 1998, *The Eisenstein Reader*, London, British Film Institute.

Trout, J.D., 2002, *Scientific Explanation and the Sense of Understanding*, "Philosophy of Science," 69, n. 2, pp. 212-233.

Vermazen, B., 1991, *The Aesthetic Value of Originality*, "Midwest Studies in Philosophy," 16, pp. 266-279.

Weisberg, R. W. 2006, *Modes of Expertise in Creative Thinking: Evidence from Case Studies*, in K.A. Ericsson, N. Charness, P.J. Feltovich, R.R. Hoffman (eds.), *The Cambridge Handbook of Expertise and Expert Performance*, New York, Cambridge University Press, pp. 761-787.

Wollheim, R., 1980, *Art and Its Objects*, Cambridge, New York, Melbourne, Cambridge University Press.

Yeats, W.B., 1961, *Essays and Introductions*, New York, Macmillan.

Zangwill, N., 2007, *Aesthetic Creation*, Oxford, New York, Oxford University Press.