Habitual creativity: revising habit, reconceptualizing creativity.

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Habitual creativity: Revising habit, reconceptualising creativity

Vlad Glăveanu

London School of Economics

Abstract

Current psychological scholarship is based on a dichotomy between habit, associated with automatic reflex behaviour, and creativity, which involves deliberation, purpose and heuristic procedures. However, this account is problematic and contradicts everyday experience where mastery, for instance, is one of the highest levels of creative performance achieved within a habitual practice. This article argues that such a separation misrepresents both habit and creativity with important theoretical and practical consequences. A first step towards reconciling the two terms is made by revisiting a series of foundational strands of theory from psychology and related disciplines. In light of these sources, habit is reformulated as a social, situated and open system and habitual creativity defined as the intrinsically creative nature of customary action, reflected in the way habits adjust to dynamic contexts, the way they are used, combined and ultimately perfected. Further distinctions are then made between habit, improvisation and innovation. Both improvisational and innovative creativity are embedded in habitual forms and this is well illustrated by craftwork: a practiced type of activity on the basis of which artisans improvise, whenever obstacles or difficulties are encountered, and even get to innovate, when their intention is to generate novel artefacts or work techniques.

Keywords: creativity, habit, improvisation, innovation, pragmatism, folk art.

> "We may borrow words from a context less technical than that of biology, and convey the same idea by saying that *habits are arts*. They involve skill of sensory and motor organs, cunning or craft, and objective materials. They assimilate objective energies, and eventuate in command of environment. They require order, discipline, and manifest technique. They have a beginning, middle and end. Each stage marks progress in dealing with materials and tools, advance in converting material to active use" (Dewey, 1922, p. 15; emphasis added)

The present article aims to address the enduring dichotomy between creative and habitual behaviour. This dichotomy stands at the core of thinking not only about creativity but about human action in general and human society; it articulates greater philosophical concerns for understanding continuity and change, and the relationship between the "old" and the "new". What is attempted here is the elaboration of an account that transcends such oppositional categories and reveals the *co-constitutive* nature of creativity and habit, change and continuity, the new and the old. The notion of "habitual creativity", developed in this context, argues simultaneously for the creativity of habitual action and the habitual nature of creativity. It is a concept that can find applicability in theorising creativity as a whole, from more "minor" forms to "celebrated" creative achievements. However, the greatest contribution this notion makes is arguably towards our understanding of everyday life creativity, with the help of which "we adapt flexibly, we improvise, and we try different options" (Richards, 2007, p. 26) in our day to day existence. Many of the examples in this discussion therefore come from studies of folk art, conducted by the author, but are not limited to these. Fruitful parallels are also made with other forms of artistic expression, to music and jazz performances in particular, and any other everyday activities that require practice and mastery in execution. To achieve this broad aim, the article both reviews several

strands of current empirical work and aims to recuperate theoretical insights from foundational scholarship in psychology and related disciplines in order to develop a more comprehensive, cross-disciplinary perspective on both habit and creativity.

An apparent paradox: Creativity as mastery

The inquiry into the relationship between creativity and habit was prompted by a set of empirical investigations of craft activities, in particular Easter egg decoration in Romanian communities (AUTHOR REFERENCES). This folk art can be considered habitual at many levels, starting from cataloguing the whole of it as a custom, a "social or community habit", to looking at its inner organisation of action where different techniques of decoration require different habits (for example decoration with leaves, with wax, etc.) and ending, at a more micro-level, with the exercised and habitual depiction of motifs and patterns. At all these levels one can see the expression of creativity. Decorators do not only reproduce the tradition, but "intelligently adapt customs to conditions, and thereby remake them" (Dewey, 1934, p. 75). The repetition of a pattern itself is not essentially a routine or mechanical process, and can "also be an opportunity for personal interpretation of that pattern" (Weiner, 2000, p. 153). Finally, just like in music where "spontaneity in performance is not an illusion" and "repeated performances generally differ in small but musically significant ways" (Chaffin, Lemieux & Chen, 2006, p. 200), each presentation of a motif is at the same time a re-presentation of it, a re-creation. Most importantly, higher levels of creativity in this craft (as appreciated by both artisans themselves and their customers) are associated with the continuous efforts to perfect the work, to achieve mastery over the technique. The "remarkable intuitive sensitivity" (Dobbins, 1980, p. 38) that describes folk artists in any domain is the outcome of years of practice – of working at least a first "thousand eggs", as commented by one of the decorators. It is the nature and characteristics of this mastery that need to be unpacked for a better understanding of both habit and creativity.

In light of the above, mastery can be defined as *the uppermost expression of habitual practice, at which action has been so well exercised and internalised that it often becomes associated with advanced forms of creative expression*. The fundamental question to be asked here is similar to Caffin, Lemieux and Chen's (2006) interrogation concerning the activity of musicians: "how can performance be both creative and highly automatic at the same time?" or, in other words, how can mastery involve both routinised habit and creativity of the highest degree? This relationship can be visually represented by an almost perfect circle, like the one depicted in Figure 1. In this representation habit and creativity are positioned on a continuum that, at all points, involves an integrated manifestation of *both*. Often, when the habit is still not fully formed, outcomes appear to be more novel in relation to conventional ways of work. Conversely, a powerful habit might reduce variation at a surface level while encouraging micro-changes and necessary adjustments of the technique. However, to assume that, as habit grows stronger, the (perceived) creative quality diminishes would be incorrect and this is reflected by the "extremities" of the continuum in Figure 1 not being opposed to one another but coming together in what is called mastery: the highest level of habitual action associated with the highest level of creative expression. In order to become more creative one needs *not* to "break" with habit, as commonly thought, but to advance in mastering it.

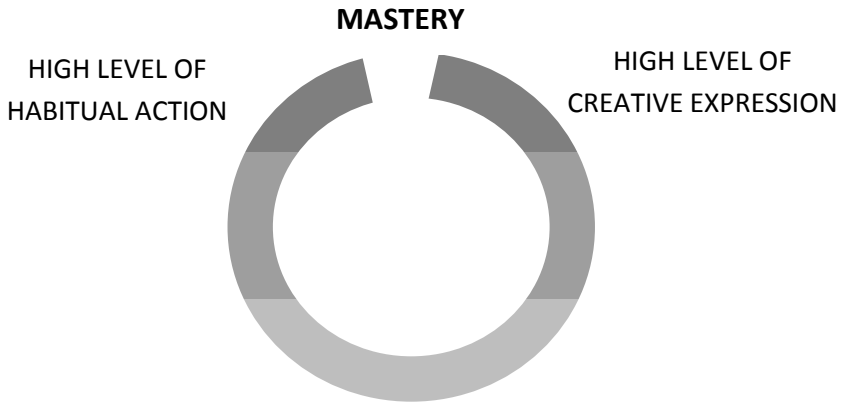

Figure 1. A schematic representation of mastery

In the psychological literature to date this concern for how repetition and practice contribute to higher achievement and creativity has been considered in studies on *expertise*. Again a central concern for this kind of investigations is to challenge the "widespread belief that all types of practice involve mere drill that is designed to attain rapid and effortless automaticity" (Ericsson, 1998, p. 89). In other terms, how can novices move to an expert level in their practice without levelling off their performance after automatisation? This question has been answered by Ericsson (1998, 1999, 2003) in a theory of expertise that centres around "deliberate practice". In summary, an improvement in performance is not an automatic consequence of additional practice (the mere repetition of the same activity day after day) but the result of constantly raising the difficulty of the exercise and thus engaging in activities that require incremental development. The key element here, in Ericsson's view, is that such exercise needs to be deliberate, intentionally designed and carried out. In other words, the learner, sometimes assisted by a teacher or coach, needs to find suitable training tasks and master them sequentially (Ericsson, 2006, p. 692). In his work Ericsson (2003, 2006) presented numerous examples of successful deliberate practice activities (in sports, chess, typing, etc.) and thus built a picture of mastery and expertise acquisition that revolves around concentration and awareness rather than mindless repetition of the task. Far from falling prey to routines, the path to mastery "involves problem-solving, iterative refinement, and at higher levels of skill the development of internal representations for planning, evaluating and monitoring mental representations" (Ericsson, Roring & Nandagopal, 2007, pp. 21-22). This resonates with the usual practice of expert craftsmen, whose work necessarily requires concentration and rhythm, a coordination between hand and eye that balances "repetition and anticipation" (Sennett, 2008, p. 176). Easter egg decorators for instance, make regular changes in their work, commonly in relation to the motifs they depict and sometimes even the work technique they use. Learning the craft does not involve

reproducing the same motif endlessly but passing from simpler to more complex ornaments in an effort to create novel, more "beautiful" patterns (AUTHOR REFERENCE). What Ericsson's theoretical framework shows, and these empirical examples argue for as well, is that it is not only preferable but *vitally important* for novices and experts alike "to avoid mindless memorization and automatization of skilled performance in order to continue improving and increasing control over their performance" (Ericsson, 1998, p. 94).

If we understand expertise as related to constant change and self-challenge then we can legitimately ask whether creativity is the same as expertise or, to put it differently, whether creativity always requires expertise. There are many authors today who are ready to highlight the deep connections between them; Sternberg (1998, 2001), for instance, famously advocated for a view of giftedness (and abilities more generally) as forms of developing expertise. However, alternative explanations of the creative process have also been put forward, most notably Simonton's (2007) perspective of creativity defined in terms of a Darwinian process of blind-variation (although this "chance model" generally received until now limited empirical support, see Kozbelt, 2008). Furthermore, a "tension" between creativity and expertise (see Weisberg, 2006, p. 766) is often postulated based on several accounts, among them the pervasive association between expertise and an automatic way of responding to a situation, anchored in the past, while creativity intentionally breaks with past experience. Taking several cases studies of creative achievement, both Weisberg (2006) and Simonton (2003a) reached the similar conclusion that expertise may very well be a necessary but not sufficient condition for creativity. Indeed, mastery of a specific domain helps creative performance in that area but leaves unexplained all those instances in which people are creative without being experts (the classic example being when they answer much more general creativity tests). This reinforces componential models of creativity (see Amabile, 1996), postulating the interaction between both domain-general and domain-specific skills in

creative action. Returning to the tension view though we can also find arguments for why "too much expertise" may be detrimental for creative activity (see Simonton, 2003a, p. 229). This line of thought is supported by a frequent connection between expertise and increased inflexibility and narrowness in thinking and action. Exploring further the notion of "cognitive entrenchment", Dane (2010) came to the conclusion that there might be a trade-off between mastery and flexibility or even creativity but this is not necessarily always the case. In fact Ericsson has offered a well-grounded rebuttal of the tension view and presented evidence suggesting that experts "generate better actions than their less skilled peers even in situations they have never directly experienced" (Ericsson, 1999, p. 331) and are also capable of adjusting their performance to changing contexts both *before* and *during* the competition (Ericsson, 1998), thus disputing the idea that mastery is inflexible and fully automated.

What can be concluded from the above is the fact that expertise is certainly an important condition for higher level creative achievement but this does not imply that all experts are extremely creative or that beginners necessarily show little or no creativity. The question remains of how exactly mastery, acquired through deliberate practice, facilitates creative expression? As alluded to before, for Ericsson the key to understanding expertise lies in the "refined mental representations" expert performers develop, representations able to "maintain accessibility to relevant information and to support more extensive and flexible reasoning about an encountered task or situation" (Ericsson, 1998, p. 91). Indeed, automatization of action comes with a series of benefits, among them the fact that it frees mental resources and helps us focus on other aspects of the task while performing it. In the words of Sternberg, Kaufman and Grigorenko (2008, p. 309), "in general, automatization lets people take in more of the world, and learn more" and, we would continue, become more creative in engaging with the world. What is the mechanism behind this accomplishment? Perhaps one of the most interesting attempts to explain this process comes from Caffin,

Lemieux and Chen (2006) who dealt specifically with musical performances. Their premise is simple: "if the musician is not paying attention to the music, then a performance can easily be automatic and lack the important qualities of vitality and spontaneity" (p. 201). On the other hand, focusing too much on pitfalls and mistakes can make the outcome equally uncreative. What increases creativity is in fact thinking about *interpretative and expressive goals* while playing and detecting the cues that are associated with these particular qualities. Rehearsals of the composition ensure that performance cues "come to mind automatically and effortlessly as the piece unfolds, eliciting the highly practiced movements" (p. 202). It is only through practice that such prompts can become an integral part of the recital and only so can the musician free him/herself from monitoring each and every movement and perfect those particular elements which give the whole performance its creative value. "Use of performance cues is", in fact, "an attention strategy that maintains conscious control of a highly automated performance" (p. 215). The authors proposed a hierarchical classification of cues in the case of music: basic, interpretative and expressive. Mastery is achieved after considerable practice when basic and interpretative aspects of the performance have been fully integrated and the artist can focus entirely on expressive prompts. Examples from Easter egg decoration offer further support for the explanation above. In this craft the performance cues that most non-expert decorators attend to have to do with how straight the lines are, if the model is symmetric, if colours have the proper shade, etc. On the contrary, experienced artisans who mastered the habit of drawing on the egg can "free" their attention from technical details, focus on aesthetic qualities and thus seize all opportunities for adding a personal element to the model being depicted.

In conclusion, understanding the apparent mastery–creativity "paradox" requires us to think about the dynamic between *attachment or immersion* into a domain of practice and *detachment*, the capacity to creatively transgress its current state and envision its future

dimensions. Unfortunately however, this reality has rarely been theorised as such in mainstream psychology, and mainstream creativity research. Moreover, as argued above, the concepts of habit, practice, exercise, repetition, etc. have notoriously been treated with suspicion when it came to performance and creativity due to their assumed association with automated and mindless routines. If the work of Ericsson and others managed to "rescue" practice and exercise (in their deliberate versions) from this harmful conceptualisation, very little has been discussed until now about habit, itself an outcome of and a powerful drive behind exercised forms of practice. Several reasons for this are explored as follows.

Theoretical difficulties: Creativity *versus* habit in psychology

It is a working assumption in psychology and beyond that human behaviour has a "dual tendency", one leading towards innovation and creation, the other towards habituation (Crossley, 2001, p. 129). This *either/o*r type of relationship is widespread not only in scientific theory (where habit is considered "the most obvious barrier to creative thinking and innovation"; Davis, 1999, p. 166) but also common sense and, on the whole, "any discussion of creativity or innovation necessarily introduces a general opposed concept of habit" (Dalton, 2004, p. 604). This dualistic view has of course important consequences since it fundamentally ends up segmenting human experience into creative and uncreative or habitual. Such a distinction makes creativity a rare and unique moment in our existence – given the old formulated view that habits cover a very large part of life (James, 1890) – an exception rather than the rule of behaviour. Our modern-day mythologies of genius and the gap between creativity and everyday life (see Glăveanu, 2010a) steam from a difference like this and contribute to isolating and disconnecting creative expression from lived experience. It is thus important to understand what the bases for the presumed dichotomy are and, in order to do this, we need to consider the psychological interpretation of habit.

The term habit largely derives from the Latin verb *habere* meaning "to have" or "hold" and its meaning in psychology has been relatively constant throughout the last century. William James (1890, p. 107) for example equated habit with "sequences of behaviors, usually simple (...) that have become virtually automatic". Automaticity as a central characteristic of habit makes it both a useful and desired process and a potential threat in our interactions with others. James himself encouraged the formation of habits out of "useful actions" and warned against turning unfavourable behaviours into habits; on the whole he considered that "the more of the details of our daily life we can hand over to the guard effortless custody of automatism, the more our higher powers of mind will be set free for their own proper work" (p. 122). This kind of assertions, frequently found in the writings of prominent thinkers, helped psychologists separate habitual from reflexive action, consciousness from habit (despite empirical examples that argue for a closer unity between thinking and doing, see Sutton, 2007). Indeed, it became common knowledge that "the things we have learned to do best, (...) require least thought, direction, feeling, consciousness" (Baldwin, 1900, p. 168). The "breaking" of habit tends to take place when the relation between organism and environment is "ill-defined and subject to frequent and profound alterations" (MacDougall, 1911, p. 327) since in these cases automatic responses become inadequate. Habit thus ends up being reflected upon and changed accordingly and often these changes are themselves practiced and integrated in future behavioural routines. A circular picture of human development is therefore painted, going, in the words of MacDougall, "from pre-existing habit through accommodation to later modified habit" (p. 326).

Our contemporary understanding of habit however is largely shaped by an even narrower reading of the phenomenon imposed by behaviourism (see Wozniak, 1994). While this school made habit the centrepiece of psychological research, it also reduced it to reflexes and grounded it in human biology, glossing over its psychological and cultural aspects. For

John B. Watson (1914, 1919) habit is a system of acquired reflexes related to muscular and glandular changes whenever the organism is exposed to a specific stimulus. Advocating an image of the human being as a "sum of instincts and habits", Watson achieved not only to do away with consciousness as a psychological topic, but also to lower habits to the level of simple repeated reactions and nothing else. What followed was an impressive programme of behavioural research into the laws and manifestation of habit. Hull (1943, 1951) for instance concluded, based on his studies on humans and animals, that the automaticity of habit increases steadily with each repetition until it reaches a plateau, in a kind of asymptotic curve. Research like the above normally included physiological indicators and the neurology of habit continues to attract attention to the present day (see Graybiel, 2008). Indebted to the behaviourist legacy, recent scholarship takes habit to be an automatic gesture (Lally, van Jaarsveld, Potts & Wardle, 2010) based on the association between a cue and a response (Orbell & Verplanken, 2010). Habits are said to be "learned through a process in which repetition incrementally tunes cognitive processors in procedural memory (i.e., the memory system that supports the minimally conscious control of skilled action)" (Neal, Wood & Quinn, 2006, p. 198). Considering the advantages of habits for human functioning, Wood, Quinn and Kashy (2002, p. 1259) refer to aspects such as cognitive economy, performance efficiency and greater feeling of control. However, on the down side, the authors mention ineffective repetition and the general view of people that habits are relatively uninformative about the self and so they end up being negatively evaluated. This can be partially explained also by the opposition between habit and creativity.

Unlike habit, creativity is largely appreciated as a social value (Mason, 2003), and its value accentuated by the fact that creativity "involves going beyond the habituated. It moves beyond the standard, repeated routines of everyday life" (Borofsky, 2001, p. 66). Consequently, creative products are more "esteemed" and expressive of self. Shattering "the

rule of law and regularity of mind" is considered the core of creative processes (Barron, 1990, p. 249) and there are deep and meaningful associations being made between creativity and personal and societal progress. Indeed, in the Western world it is not uncommon to consider tradition as "backward" and repetition as "uncreative" (Weiner, 2000, p. 153), and this pushes habit further away from creation and its "forward", progressive moments. Why is there a gap between creativity and habit? To answer this question one only needs to look at basic definitions of creativity which link creative action to situations where "a person has no learned or practiced solution to a problem" (Torrance, 1988, p. 57). The reverse of habit thus becomes a definition for creativity. Adding to the above, Amabile (1996, p. 35) included the heuristic nature of the task as part of the creative process. Unlike algorithms, heuristic paths might not have a clearly defined goal and do not unfold in a straightforward manner. This contrasts largely with the routine ways of doing things associated with habit. Finally, Gruber and Wallace (1999), as well as Weisberg (1993), insisted on making purposeful behaviour a condition for creativity. The postulate of intentionality not only safeguards creative expression from mere accidental discoveries but it also distinguishes it from habitual, automatic responses. Such distinctions are paralleled by common-sense thinking on the topic where, as noticed by Baldwin (1906, p. 100) early on, phrases like "divine creation" and "slavish imitation" depict a very clear hierarchy of values.

The opposition between creativity and habit or tradition however is not only misplaced but highly problematic and detrimental for our understanding of both phenomena. With reference to this, Negus and Pickering (2004, p. 68) discussed the "beguiling but misleading view" that equates creativity with "freedom, agency and the unshackling of constraints". This assumption ignores the crucial role of conventions and repeated practices for creative expression while at the same time supporting the claim that "tradition stultifies innovation and stupefies creativity" (Wilson, 1984, p. viii). Oppositions like these cannot be

sustained in the face of theoretical and practical arguments. To support the split between creativity and habit or tradition would be as illogical as arguing that fantasy is the opposite of memory (Vygotsky, 2004). Moreover, this dichotomy poses some conceptual dilemmas for many performance arts like music whenever a forceful distinction is imposed between creativity and technical mastery (Graham, 1998). It becomes thus important to acknowledge that all the above difficulties in conceptualisation derive from a particular understanding of habit as mindless and uncreative routine. However, this is not the only understanding available and there are vigorous strands of scholarship both in psychology and sociology that directly address this deep-seated dichotomy and aim to transcend it. It is to these critical approaches that we turn to next.

Recovering the meaning of habitual behaviour

The concept of habit has a very long history (longer than the term "creativity"), being used by Greek and medieval thinkers, major figures of the Enlightenment, and finding a place also in the philosophy of Kant, Mill and Hegel. Reviewing the historical trajectory of the term, Charles Camic (1986) noted that, despite centuries of moderately similar usage, the notion was radically transformed from the 19th century onwards by the physiological literature that reduced it to acquired reflexes, and the psychological approach that cemented this meaning. Kilpinen (2009) more recently distinguished between two different definitions: a "Humean" variant considering habits to be routine-like behaviours outside of consciousness, rationality and intentionality, and a more "pragmatist" conception understanding habits as open to reflection during the course of action. It is this second meaning we are aiming to recuperate, a meaning that transpires clearly from the important contributions of James Mark Baldwin, John Dewey, Hans Joas and Pierre Bourdieu.

For Baldwin habit, referred to more broadly as the principle of habit, "expresses the tendency of the organism to secure and retain its vital stimulations" (Baldwin, 1900, p. 216).

This principle is complementary to that of accommodation or the learning of new adjustments. Accommodation here leads to invention and it would be easy to fall prey to a dichotomy between habit and invention. However, Baldwin specifically rejects such a view when he states that "accommodation is in each case simply the result and fruit of the habit itself which is exercised" (p. 217) or, in other words, "accommodation is reached simply in the ordinary routine of habit, and is its outcome" (p. 218). Baldwin's writings also offer of a very good example of how the notion of imitation can be placed at the centre of a theory of human psychology and development. His thesis in this regard can be summarised as follows: "In the individual, invention is as natural as imitation. Indeed normal imitation is rarely free from invention!" (pp. 149-150). Baldwin's conception thus starts from the premise that imitation (especially what he calls "persistent imitation", an expression of will) requires invention and this allowed him to regard imitation as the law of *progressive interaction* between the organism and environment (Baldwin, 1894, 1903). According to him:

> "In all the processes of social absorption and imitation, therefore, we find that the individual thinks and imagines in his own way. He cannot give back unaltered what he gets, as the parrot does. He is not a repeating machine. His mental creations are much more vital and transforming. Try as he will he cannot exactly reproduce; and when he comes near to it his self-love protests and claims its right to do its own thinking" (Baldwin, 1911, pp. 151-152).

The above vision can be related to the American philosophical tradition of pragmatism, a system of thinking that intended to challenge many of the deep-seated dichotomies ingrained in much of Western philosophy. John Dewey, as one of the leading figures of this orientation, based his psychological and philosophical writings on a "principle

of continuity" in order to counteract dualistic paradigms (see Alexander, 2006, p. 189). And one of the many oppositions Dewey was eager to transcend was the one between habit, seen as necessarily conservative, and thought, understood as the origin of progress (and thus creativity). For Dewey, "thought which does not exist within ordinary habits of action lacks means of execution" and thus condemns our actions to becoming "clumsy, forced" (Dewey, 1922, p. 67). Sadly though, this insight has been largely overlooked in the decades that followed, especially during the age of behaviourism.

The starting point of Dewey's theoretical construction of habits rests in the fact that habits, like all other psychological and behavioural functions, require the cooperation of *organism and environment* (Dewey, 1922, p. 14). They are not foreign elements of our psychological system but form an intimate part of ourselves, which comes to explain the power some habits can have over us (p. 24). As a working definition, we can think of them in terms of a human activity which is influenced by prior activity (acquired), contains an ordering of elements of action, is projective and dynamic in quality and remains operative even when not in explicit use. Most importantly, Dewey encouraged us to "protest against the tendency in psychological literature to limit [habit's] meaning to repetition" and clearly stated that "repetition is in no sense the essence of habit" (pp. 41-42) and neither is "mechanization" (p. 70); in contrast: "Habit means special sensitiveness or accessibility to certain classes of stimuli, standing predilections and aversions, rather than bare recurrence of specific acts. It means will" (p. 42). The assertions above are very much representative of the pragmatist position for which "intentionality (or rationality) without habituality is empty, whereas habituality without intentionality and rationality of course is blind" (Kilpinen, 2009, p. 105).

Moreover, this philosophical orientation has given us a clear description not only of the relationship between habit and thought, but also between habit, action and creativity. For instance, in a more recent elaboration, Hans Joas (1996) advocates for a vision of creativity

as an analytical dimension of *all* human action. In this view creativity is not a different type of action in itself, alongside "rational", "normative" or "impulsive" behaviour, but permeates all of our manifestations and therefore needs to have a central role in a discussion of human agency. We should also note here the two main tasks mind performs in relation to action, in light of a pragmatist philosophy: "it *monitors* or *supervises* the ongoing action process, and it *reconstructs* that process if it fails" (Joas & Kilpinen, 2006, p. 325). The idea of action failure is in fact central for pragmatists and one of the most important ways in which creativity is manifested in the course of activity – reflecting on the outcome and on the possible means to overcome the difficulty. This association between obstacles and creativity needs to be remembered since, as we shall see, it was scrutinised by later scholarship (Dalton, 2004).

For the moment we can note as well the fact that Joas's critique of rational or normative action resonates with the tenets of Pierre Bourdieu's genetic sociology. In order to understand "how can behaviour be regulated without being the product of obedience to rules?" (Bourdieu, 1990a, p. 65), Bourdieu proposed the notion of habitus. Often referred to as a "feel for the game" or a "practical sense", the habitus is a system of dispositions in the sense that individuals are disposed, not determined, to act in a certain way based on previous experience (Bourdieu, 1990b). These dispositions are said to be durable (once formed, they last throughout the lifetime) and transportable or able to generate similar practices in different domains. Importantly, they are structures of perception and appreciation simultaneously structured by objective social conditions and structuring these conditions through the generation of flexible practices. The habitus is therefore marked by its historicity: "a product of history, produces individual and collective practices – more history – in accordance with the schemes generated by history" (Bourdieu, 1990b, p. 54). In contrast to the more psychological or physiological reflex-based definitions of habits, for Bourdieu habitus is a thoroughly social construction, "the social embodied" (Bourdieu & Wacquant, 1992, p. 128).

It is acquired through socialisation, especially in early childhood, and related to particular and long lasting experiences of a social position in society (Bourdieu, 1990a). It can be easily seen in consequence how habitus reflects the social hierarchy and is greatly shaped by the act of belonging to a certain social class (see Bourdieu, 1984).

From the above what clearly transpires is the sophisticated way in which Pierre Bourdieu managed to bridge the traditional gap between habit and creativity. Habitus is simultaneously firm and supple, "an *open system of dispositions* that is constantly subjected to experiences, and therefore constantly affected by them in a way that either reinforces or modifies its structures" (Bourdieu & Wacquant, 1992, p. 133). Habitus may be durable, but it is also "endlessly transformed" (Bourdieu, 1990a, p. 116), an authentic "art of inventing" (Bourdieu, 1990b, p. 55). There is no one-to-one link between a habitus and a single type of unchanging practice. Neither is habitus a form of social norm or a law people have to obey unwillingly. On the contrary, this "feel of the game (...) enables an infinite number of 'moves' to be made, adapted to the infinite number of possible situations which no rule, however complex, can foresee" (Bourdieu, 1990a, p. 9). As such, "*the habitus goes hand in glove with vagueness and indeterminacy*" (p. 77), obeying a "practical logic" defined by every new interaction with the world. However, there are also limits to the creativity of habitus and these "limits are set by the historically and socially situated conditions of its production" (Bourdieu, 1990b, p. 55). What the habitus produces in fact are "all the 'reasonable', 'common-sense' behaviours (and only these) which are possible within the limits of these regularities, and which are likely to be positively sanctioned" by society (pp. 55-56). Concrete circumstances have the capacity to change the expression of habitus but even here Bourdieu reminds us that most experiences we have tend to confirm our habitus, since people generally look for / encounter familiar situations (Bourdieu & Wacquant, 1992).

In conclusion, Baldwin's acts of imitation, Dewey's and Joas's habitual action and Bourdieu's habitus all acknowledge the relative stability of repeated behaviour but couple it with a significant potential for change, reflection and even will (within personal, social and historical limits). Their perspectives are therefore ultimately in agreement about habits and their role for the individual and for society as a whole. It is this unitary vision that will be taken in the present article as a starting point for a new elaboration of the notion of creativity.

Defining and locating habitual creativity

In the previous section foundational perspectives from psychology, philosophy and sociology were recovered in thinking about habit, habitual action and creativity. For Baldwin, Dewey, Joas and Bourdieu conceptualising habit is not possible outside of creativity and a comprehensive image of human action unattainable without both. In the remainder of this article a theory of creativity based on habit will be proposed, a theory that builds on all the accounts presented above. What brings together the four authors is precisely an understanding of habit as *a social, situated and open system*. For all of them, without exception, habits are social in nature. Mainstream psychological literature claims the acquired or learned nature of habit but it largely fails to do justice to the social interaction behind it, little less the societal dynamic intrinsic to the formation and expression of habits. Pierre Bourdieu's perspective is perhaps the most illuminating in this regard since for him every habitus embodies a history of social relations. Second, habits are very much situated in their manifestation and require, as stated by Dewey, the relation between organism and the environment. All three terms – the person, the environment, and their relationship – are equally dynamic and so habitual action can never be mechanical and deterministic. It needs to be open and generative in order to allow for processes of adaptation and growth. The acts of imitation mentioned by Baldwin, either "persistent" or not, never duplicate a model of behaviour but re-construct it according to changing circumstances. At the same time habits do

predispose persons towards particular processes and outcomes, however they should not be mistook for simple reflexes that link a narrow "stimulus" to a narrow "response". This reformulation of habit would not only place it back on the agenda of social theorists but it could also resolve long-standing arguments over the lack of consciousness, will and creativity from habitual action. The degree of automatisation of any one habit varies on the whole with its degree of specificity but it never reaches an absolute level of mindless, uncreative routine or it would not qualify as a habit. In the words of Küpers (2011, p. 109), "habits can also be *reflexive*" and, as such, a person can take on new habits, change existing ones, de- and re-habitualise behaviour in a dynamic and creative way. What remains to be theorised here is precisely this relationship between creativity and habit and its implications.

In essence there are two broad options when it comes to conceptualising this relation: either creativity and habit are kept as *distinct processes*, for as inter-connected as they may be, or conceived of as a *single type of action*. If the first path is taken then "moments" of creativity can be distinguished from "moments" of habit and a theory of creativity built on how and when creative processes "intervene" in the course of habitual action. On the other hand, if creativity and habit concurrently describe action then their separation, even for analytical purposes, becomes questionable. This is, in short, the critique raised by Dalton (2004) and others (Kilpinen, 1998; Del Mar, 2010) in relation to Joas's formulation of creative action and its pragmatist sources: it maintains creativity and habit as complementary phases and thus conserves the dualism between the two. The problem with pragmatism is that, despite its willingness to transcend dichotomic thinking, it nevertheless hypothesised an unbreakable link between problems or obstacles and conscious or "creative" thought (see Dewey, 1903, 1910). For Mead (1964, p. 7) for instance, "analytical thought commences with the presence of problems and the conflict between different lines of activity". Even Baldwin (1903), by referring to a "two-fold factor" of organic activity, kept the distinction between his

principle of accommodation and principle of habit. For Dalton this makes creativity "episodically" involved in habit, especially when difficulties occur that need creative solutions and adaptations. In his view Bourdieu achieved with the notion of habitus a much better conceptual integration, although he gave a relatively secondary role to creative achievements and restricted them greatly vis-à-vis social constraints. Aiming to reconcile and retain the best from both theories, Dalton (2004, p. 604) asserted the "simultaneous presence of habitual and creative elements in all moments of action" where actors, in the course of habitual acts, "implement contingent techniques suited to the moment" and where "the perfection of habit can lead to creative action" (p. 609).

Building on this preliminary insight, we can now introduce and define the notion of ***habitual creativity*** as a further attempt, from a psychological perspective, to overcome the dichotomy between habit on the one side and creativity on the other. In a tentative formulation, *habitual creativity defines the ways in which novelties form an intrinsic part of habitual action by constantly adjusting it to dynamic contexts, allowing for transitions between and combination of different "routines" and finally perfecting practices, thus resulting in mastery*. Habitual creativity is, in this regard, the conceptual pair of habitus, theorising the same phenomenon but from its "creative end"; the focus on "novelties" in behaviour does not override its socially conditioned character but addresses Dalton's critique of overemphasising structural elements. Habitual creativity is a microgenetic phenomenon (with potential sociogenetic effects) and the definition above stresses, without exhausting, the many ways in which its dynamics takes place. By far the most agreed upon form of novelty emergence in habitual action has to do with the "adjustment to dynamic contexts" mentioned at the beginning, a feature that was equally acknowledged by Baldwin, Dewey, Joas and Bourdieu as well as many other authors. At a macro level, Weiner (2000, p. 158) asserts that "the process of adapting tradition to changed circumstances will always involve some degrees

of problem-solving, inventiveness, and/or imaginative expression". Considering the more concrete example of music performance, Caffin, Lemieux and Chen (2006, p. 200) state: "Performers adjust to the idiosyncratic demands and opportunities of each occasion. (...) The creativity involved in this kind of spontaneous micro-adjustment of a highly prepared interpretation makes each performance a creative activity". And the examples could continue. The other two possibilities of combining (interpolating "stretches of previously rehearsed behavior", Bateson, 1999, p. 157) and perfecting habits are on the other hand most clearly illustrated by craft activities such as Easter egg decoration and the idea of mastery was introduced from the beginning of this article. In the following sections it is important to elaborate on the implications of this notion of habitual creativity, principally the grand claim that "all creativity is habitual". Some distinctions will be made afterwards between habit, improvisation and innovation *without* introducing any further dichotomies and oppositions. An interesting appendix to this discussion is represented by a brief overview of why psychology tended to neglect habit and improvisation for the benefit of innovative behaviour.

Creativity as habitual

Previously the argument was made that all habit is, by definition, creative. The notion of habitual creativity is concerned with the reciprocal statement that all creativity is, itself, habitual. What this means is that creativity in all instances relies on the existence of habits, of known and exercised ways of interacting with the world. Since proposing the creativity of habit idea implies the habitual nature of creativity, it is not surprising to find supporting statements in this regard within the writings of Baldwin and Dewey. In addressing the issue, Baldwin summarised his view as follows: "Let us say, once and for all, that every new thing is an adaptation, and every adaptation arises right out of the bosom of old processes and is filled with old matter" (Baldwin, 1903, p. 218). Dewey (1934), starting from the premise that each great cultural tradition is "an organized *habit* of vision and of methods of ordering and

conveying material" (p. 276, emphasis added), concluded: "[Just like the artist] The scientific inquirer, the philosopher, the technologist, also derive their substance from the stream of culture. This dependence is an essential factor in original vision and creative expression" (pp. 276-277). For both authors then the habits formed by taking part in the culture and traditions of a society and its different communities are a *sine qua non* of creative achievement, and this is equally valid for all creative domains. Creativity is never "free" from tradition and habit and its central characteristic is not to contradict them, but to work from within and continue them in new and significant ways. In the words of Feldman (1974, p. 68): "all creative thought springs from a base of cultural knowledge and is therefore, by definition, part of a cultural tradition – even when it breaks with tradition".

If these assertions are correct, two implications can be derived: first, creators need some time to incorporate the "habits of vision and action" of their cultures and master them, and second, as cultures and traditions are so diverse creative expression will be channelled and manifest itself differently around the world. Both these ideas are supported by the psychological literature in which it has long been established that "the human act of creation, basically, is a personal reshaping of given materials, whether physical or mental" (Barron, 1995, p. 313). There is not a hiatus but a continuation between the "new" and the "old" and this makes the generation of novelty dependent on processes of socialisation and acculturation. Csikszentmihalyi's (1999, p. 332) systemic model of creativity emphasised this by relating the creator and creation to an existing field and domain: "In order to function well within the creative system, one must internalize the rules of the domain and the opinions of the field". This premise is corroborated by research findings suggesting that, usually, big creative breakthroughs happen within a decade after mastering the rules of the domain (see Gardner, 1994). What is known as the "ten-year rule" originates from the work of Chase and Simon (1973) on expert performance in chess and their discovery that players need

approximately a decade of practice before great achievement. This rule has been later on confirmed in terms of creative activity in several domains (see Hayes, 1989) and, more recently, arguments put forward that another ten years might very well be needed after achieving expertise in order to reach the level of "creative greatness" (Kaufman & Kaufman, 2007). Regarding the second assumption, cultural traditions shape not only the mechanisms of recognition in cases of such notable breakthroughs but also orient the creative energies of individuals and groups. Different talents may well be fostered in different cultural contexts (Runco, 2007a, p. 273; also Westwood & Low, 2003), defining the Ortgesit and Zeitgeist of different cultural-historical positions in the world (see Simonton, 2003b). As an example, the Indian culture has long favoured innovations in the field of spirituality compared to other domains (for a review of this see Bhawuk, 2003).

The claim that creativity is habitual however goes beyond illustrations of celebrated creations and reflects a much deeper, *existential* dimension. A "habit of being creative" (conceptually close to Kilpinen's, 2009, notion of "reflexive habituality") can be hypothesised in relation to each and every individual, something akin to what Baldwin (1903, p. 220) suggested when he considered "the very fact of accommodation itself the great deep-seated *habit* of organic life". Outside of these biological roots there are also strong cultural imperatives to create and Wilson (1984, p. 101) refers in this case to innovation becoming "a *tradition*" in contemporary societies. In her empirical research for instance, Stokes (2001, p. 356) mentions "Monet's high habitual variability level", thus implying that artists may very well habitually impose on themselves the constraint of varying their style, work technique and themes. The premise that human life is inherently creative resonates also with the psychology of Donald Winnicott (1971, p. 67) who was primarily interested in a universal type of creativity, one that "belongs to being alive". For him being creative means being able to use one's whole personality in acts of self expression and is associated with healthy living

and functioning. Creativity reveals itself as the rule rather than the exception of human existence if we come to think about the continuous, moment to moment, meaning and linguistic production of the self and world. As Josephs and Valsiner (2007, p. 55) remind us, "semiotic construction is constant and overabundant: the creativity of human *psyche* is generating new meanings while living one's life is hyper-productive" (see also Barrett, 1999). This basic capacity for creativity we all possess has more recently been conceptualised by Beghetto and Kaufman (2007, p. 73) under the term "mini-c", or the "*novel and personally meaningful interpretation of experiences, actions, and events*". It doesn't matter from this perspective if the creative constructions are ephemeral and do not leave a lasting mark on human society; as a form of ordinary creativity, they become indispensable and "weave new meaning in [individuals'] lives and relationships" (Bateson, 1999, p. 170).

For as appealing as this approach to creativity is, there are also several authors who voice their concerns over equating creative action with all human (habitual) action. Negus and Pickering (2004, p. 45) for instance warn that "we cannot collapse creativity into everyday life, as if they are indistinguishable". In a similar vein, Hausman (1979, p. 240) worries that universalising creativity makes the meaning of the concept "too broad" and leaves us incapable of discriminating between creations. However, the notion of habitual creativity does not aim to cover all forms of human action in the everyday, since not all action is in fact habitual, and it does allow for differentiations in creative expression. Let us take these in turn. Human action is habitual but it can also be normative, impulsive, etc. The habitual mode of action is certainly pervasive but it doesn't exclude other forms of manifestation. Bourdieu (1990a, p. 108) acknowledged this when he mentioned that "habitus is one principle of production of practices among others and although it is undoubtedly more frequent in play than any other (...) one cannot rule out that it may be superseded under certain circumstances (...) by other principles, such as rational and conscious computation". It

is for this reason that habitus can be "controlled" and, at times, consciously analysed and modified (p. 116). Equally, habitual creativity is "persistent" but also differentiated. To understand this we need to consider habits in their relation to improvisation and innovation.

Habit, improvisation, innovation

The psychological theorising of creativity has a long tradition of establishing "types" and making distinctions between different "forms" of creative work. Often these come in a hierarchy, for example the classical typology by Irvine Taylor (1959), ranging from the expressive creativity displayed in spontaneous self-expression up to emergenative creativity that constitutes the basis for the formation of new schools of thought. More recent approaches refer to a "continuum" of creativity and Cohen and Ambrose (1999, pp. 18-21) for instance segmented this range into seven levels: learning something new (universal novelty) – making connections that are rare compared to peers – developing talents – developing heuristics – producing information – creating by extending a field – creating by transforming a field. What can be noted from the above is that usually classifications of creativity tend to be formulated around outcome criteria and especially consider the "value" and "novelty" of the outcome. To simplify things, many authors employ a straightforward dichotomy between *big C*, mature creativity or H-creativity (historical creativity) on the one hand, and *little c*, mundane creativity or P-creativity (personal creativity) on the other (see Craft, 2001; Cohen & Ambrose, 1999; Boden, 1994). The common view behind such distinctions was metaphorically summarised by John Liep (2001, p. 12) when he said: "If 'conventional creativity' spreads like an ocean on the surface of the world, 'true creativity' rises like islands here and there". There are many assumptions packed into formulations such as these, the most obvious being the existence of a "true" creativity that is both very rare and noticeable. However, separating true or exceptional and conventional or everyday creativity soon runs into conceptual problems since "one confers on the term a rarefied and occasionally mystical

air, the other can make the word seem commonplace and even banal. Rarely have the links between both these senses of the term creativity been retained and explored" (Negus & Pickering, 2004, p. 1). It is precisely this exploration of links between different manifestations of creativity that is attempted here. Moreover, in light of our previous discussion, the different types of creative expression mentioned next will not be considered as separate, thus resulting in "distinct forms" of creativity, or hierarchical, thus reflecting an organisation based on value of outcome.

The three types proposed are those of *habitual, improvisational and innovative creativity*. Of these habitual creative processes has been addressed already and the earlier section supported a strong claim that saw all creativity as ultimately based on the expression of habit. This raises the question of how is it then possible to postulate other types of creativity without contradicting this premise. To begin with, there surely are some differences between the emergence of novelty resulting out of the practice of habitual action and the emergence of novelty resulting from dealing with obstacles (sometimes) faced during this action. The latter is specifically what Joas (1996) and the pragmatists consider to be creativity in the strict sense of the word. This dilemma can be solved if we envision habit, improvisation and innovation not as separate "entities" ordered in any kind of continuum, but as *embedded within each other*. As a result, the difference between the three is not that improvisation and innovation "break" with habit, they are still grounded in forms of habitual action (see the section before), but the processes they denote show particularities equally due to the external and internal-psychological circumstances of the creator. To be more explicit, it is argued that we can talk about improvisational creativity when there is an *obstacle or difficulty* in the course of habitual action that requires some form of interruption and deliberation. Further, we can call innovative creativity the process of dealing with such obstacle or difficulty when there is a clear *intention* on the part of the actor to generate novel

solutions (in the purest form, the intention to "create"). These features are summarised in Figure 2. Before analysing further this classification it should be mentioned that the meaning of improvisation and especially innovation, as used below, may differ from a series of "standard" definitions. Second, and this is vastly important, the three forms of creativity deal in a sense with "ideal types" and, in practice, they often glide into one another and can be analytically hard to distinguish for several reasons, many of them discussed as follows.

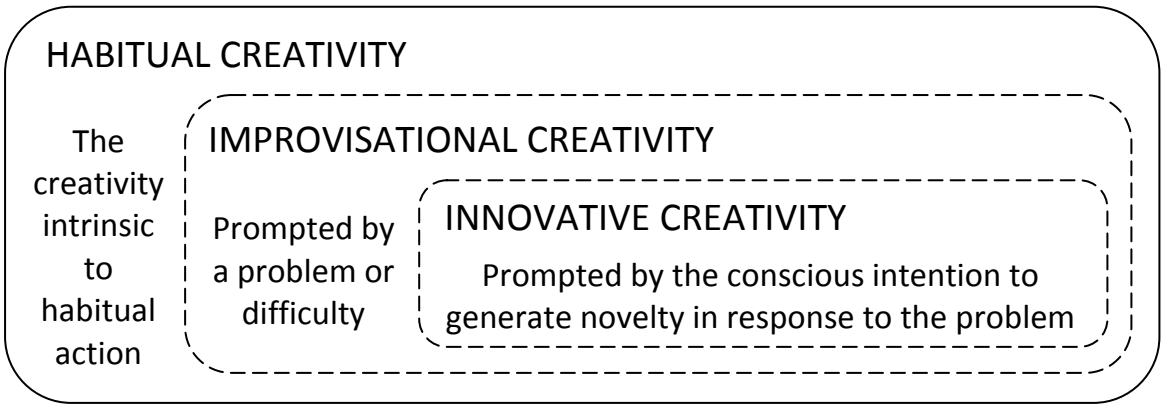

Figure 2. The "nested" depiction of creative expression

The notion of ***improvisation*** commonly designates "something that was done to face some unforeseen circumstances" (Montuori, 2003, p. 245). It is this basic meaning that we employ here as well and, from this perspective, a person improvises when his or her (habitual) action is faced with an obstacle or difficulty. In the words of Bateson (1999, p. 154), improvisation is "a way for individuals to bridge discontinuity". Problems disrupt the "regular" ways we have of doing things and are thus calling for creative or novel forms of behaviour. This relationship between problems and creativity has deep historical roots and is reflected in current cognitive approaches defining creativity in problem-solving terms. However, despite this association, improvisational creativity as such has rarely constituted the focus of mainstream research. This is explained by authors like Sawyer (2000) as a

consequence of the nature of improvisation which, unlike product-based forms of creativity, is usually manifested in "performances". In the case of improvisational creativity, on many occasions, "the process is the product" (Sawyer, 2000, p. 150) and improvised performances are characterised by contingency, emergence and participatory learning (Sawyer, 1997, p. 4). For Ingold and Hallam (2007, p. 3) improvisation is generative, relational, temporal, and expresses "the way we work". This last feature already raises an interesting point of connection between habitual and improvisational creativity and comes to argue for the continuity between the two. In the words of Liep (2001, p. 2), "improvisation indicates a more conventional exploration of possibilities within a certain framework of rules" (also a framework of habits we could say, to use our terminology).

Improvised jazz sessions constitute a prototypical example of improvisational activity, one that is very much able to shed light not only on the processes of improvisation itself but also on their connection to habitual forms of behaviour. To begin with, it is important to note that jazz sessions, for as spontaneous as they may be, always occur "in a context, and [are] performed by someone with a history, with cultural, economic, political, and philosophical contexts, with perspectives, habits, and eccentricities, with the ability to make *choices* in context, which choices in turn affect the context" (Montuori, 2003, p. 246). Inherently taking place in collaborations, jazz improvisation relies on two kinds of processes, as distinguished by Setton (2005): a sympathetic type of attunement, based on collectively sharing a stock of musical knowledge and experience, and, more importantly, an empathetic kind of attunement, relying on decentration and introspection in order to generate an atmosphere of trust, conducive for creative risk-taking and spontaneous expression. This does not mean that the repertoire of shared cultural knowledge is less significant, on the contrary, Sawyer (2003, p. 114) makes the clear point that "improvisation always occurs within a structure, and all improvisers draw on ready-mades, short motifs or clichés – as they create their novel

performance". Moreover, stressing even further the link between habitually acquired motifs and practices and the generation of novel performances, Sawyer continues by saying that jazz musicians "practice and perform the same songs repeatedly, and can often express themselves more effectively when they have a predeveloped set of musical ideas available". Repetition and exercise may introduce a certain regularity and predictability in any performance but, at the same time, there would be no performance in their absence. What to an outsider could seem improvised on the spot is often the result of hours and hours of practice, an outcome resulting our of "snippets the players had played hundreds of times before" (Becker, 2000, p. 171). The notions of "rehearsed spontaneity" and "planned serendipity" (Mirvis, 1998; see also Vera & Crossan, 2005) might sound oxymoronic but are very much fitting with the vision of mastery presented at the beginning of this article (see Figure 1).

Improvisation thus draws from habit and succeeds in shaping it, "compelled" by the fact that "no system of codes, rules and norms can anticipate every possible circumstance" (Ingold & Hallam, 2007, p. 2). One can never create or improvise something from noting (Lemons, 2005; Kamoche & Cunha, 2001; Mirvis, 1998) and "improvisational freedom is only possible against a well-defined (and often simple) backdrop of rules and roles" (Eisenberg, 1990, p. 154). This is how we can conclude, together with Küpers (2011, p. 115), that "spontaneity and improvisation must be anchored in habitual patterns of behaviour". This is necessarily so because habits play a multitude of roles in relation to improvised expression: they are the generator and organiser of such practices, offer them structure and consistency over time, and remove the possibility of totally chaotic creation (Slutskaya, 2006, p. 154). On the other hand, "during improvisation the in-habited 'world' and its habitual realities or practices are *reconfigured*, and the order and meaning established by given conventional procedures are disrupted" (Kupers, 2011, p. 117). For these reasons, the distinction between habitual and improvisational creativity can become blurred and expose their fundamental

intertwining: habitual action generally presupposes micro-improvisational acts since, as Dalton (2004, p. 615) rightfully remarked, "the problem is a general difficulty in all moments of action". There is an important overlap between habit and improvisation and, based on our definition of "problem" (see Dewey, 1910, p. 9), we can more easily or not observe the differences between the two. It is argued in this article however that improvisational forms of creativity, working from *within* habitual action, can be distinguished for both analytical and practical purposes and a valuable indicator in this regard is, for instance, when activity stops because of encountered difficulties or when, just as in the case of jazz or improvised theatre performances, responses are contingent on moment to moment inputs received from the play of others; improvised "solutions" in these circumstances re-use, alter or combine habitual forms and, when they are successful, become a constitutive part of future habitual action.

Unlike habitual and improvisational creativity, ***innovative expressions*** of the phenomenon have constituted the central theme of creativity research in psychology for decades. Our definition of the term here is in line with the conception of several other authors, for example Weisberg (2006, p. 761) who claimed that an innovation "emerges when an individual intentionally produces something new in attempting to meet some goal" and Kaufman and Kaufman (2004, p. 148), for whom the ability to innovate means creative something that is new and different "with the specific understanding that is new and different". While sometimes the process of innovation is conceptualised as "the practical application of creative ideas" (Westwood & Law, 2003, p. 236), the notion is not used now with such applied connotations. Innovative creativity is considered in our context simply as the act of addressing a difficulty or problem with the intention not only of "solving" it, but solving it in a creative or novel way. As an "intentionally creative" type of action, innovative creativity normally leads to physical products which can be more easily observed and evaluated. The great works of art, inventions and scientific theories are to a large extent the

outcome of this particular form of expression. The mere presence of a creative intention, it seems, can make a significant difference in how people respond to a task and can, in most circumstances, increase the level of creativity. This observation is supported by a series of studies that made use of explicit instructions to "be creative" when answering different creativity tests (Harrington, 1975; Runco & Okuda, 1991), an effect tested on several populations, including children (Lee, Bain & McCallum, 2007), as well as participants from different cultures (Chen, Kasof, Himsel, Dmitrieva, Dong & Gui, 2005).

However, truly innovative acts performed outside of the laboratory or testing rooms and studied by creativity researchers are normally Big C type of achievements. From this perspective one can conclude that traditional models of the creative process in psychology are meant to explain first and foremost innovative behaviours: for example Wallas's (1926) succession of preparation – incubation – illumination – verification applies very well to deliberate, medium or long-term creative work. Even typologies of the creative outcome favour innovation and we can take here the example of the Propulsion model (see Sternberg, 1999; Sternberg, Kaufman & Pretz, 2002), discriminating eight different ways of being creative, all requiring an awareness of the field one is working in and as well as a more or less conscious decision to position and express oneself in a particular way, in relation to existing paradigms (either accepting, rejecting or trying to integrate them). Conceptually close to this typology, the investment theory of creativity (Sternberg & Lubart, 1995a&b) starts from the clear premise that creativity is basically a decision (see also Sternberg, Kaufman & Grigorenko, 2008). According to this account, creative persons buy low when they present a unique idea and try to convince others of its value. Once gaining recognition for their innovation, they sell high by leaving the idea to others and moving on to another neglected area they can invest it and exploit further. This hypothesised trajectory seems to apply well in the case of established creators (such as Matisse, Monet, Beckmann and

Guston) who remained creative over the course of their entire career because of their capacity to deliberately "select novel goal constrains and second, to strategically select source, task, and subject constraints to help realize them" (Stokes & Fisher, 2005, p. 291). To be sure, inventive creativity is not by any means portrayed in this context as an inherently "superior" type of creativity (reproducing a common bias in both scientific theory and lay thinking on the topic) since, as we argued before, extremely valuable creations can come out of habitual and/or improvisational processes alone. The intention to create doesn't guarantee the "quality" of the work, and its absence doesn't make the outcome any less "creative" (especially since creativity itself is a matter of social agreement; Glăveanu, 2010b).

At the same time, we should keep in mind that innovative creativity here is considered to be a particular case embedded within improvisational and habitual fields of action. Habit and invention are continuous since, as mentioned by Baldwin (1906, p. 180), "effective invention is always rooted in the knowledge already possessed by society" and "no effective invention ever makes an absolute break with the culture, tradition, fund of knowledge treasured up from the past". On the whole though it is acknowledge that some habits can lead to innovation while others can hinder it (Cavangnoli, 2008), particularly in organisational settings. One way in which managers could capitalise on existing habits and stimulate breakthrough innovation is by harnessing the pool of tacit knowledge possessed by individuals and entire teams (Mascitelli, 2000). In a similar vein, to understand the connection between improvisation and innovation one can think about concrete examples from industry in which teams innovate successfully using an improvisational approach (see Sawyer, 2006; although past research has shown that engaging in improvisation does not necessarily or immediately lead to innovation, Vera & Crossan, 2005). As for the important differences between the two, they have been captured quite well by Lévi-Strauss's (1966) distinction between the bricoleur and the engineer. Improvisational processes are very often a

form of bricolage, of making the best with what is at hand while generally remaining within a set of existing rules; in contrast, "the engineer is always trying to make his way out of and go beyond the constraints imposed by a particular state of civilization" (Lévi-Strauss's, 1966, p. 19; see also Louridas, 1999). Hence, if both improvisation and innovation can be associated with problem solving activities then the later usually reveals a more proactive type of creativity, where problems are not simply encountered but often looked for, anticipated and intentionally formulated (see Runco, 2007b). Having said that, the boundaries between these two phenomena are often blurred by the fact that creative intentions (specific for innovation) tend to exist *among other* motivating factors (e.g., doing a good job, making others happy, enjoying the activity, etc.). This brings back the example of jazz performances, in which "a commonly shared goal is to create within a musical and social context, requiring both control and spontaneity, constraints and possibilities, innovation and tradition, leading and supporting" (Montuori, 2003, p. 239). Furthermore, musicians who improvise retain certain works in their repertoire and perfect them along many years (Dobbins, 1980), thus demonstrating how an act of improvisation can become, in time, one of innovation.

In concluding, habit, improvisation and innovation are not three separate forms of creative expression but refer to three instances of the same basic process. As such, they are sometimes hard to differentiate, especially at a micro-level of analysis, and there are many "grey zones" to be considered between them. However, this classification is necessary as it allows us to appreciate the *simultaneous* diversity and internal unity of creative manifestations. To exemplify it with the case of craft, in traditional Easter egg decoration one can identify all three types while looking at the work of different decorators or of one and the same decorator across time. On the whole, this practice can be said to illustrate best the mechanisms of habitual creativity. This is because decoration activities rely on a strong knowledge base and require the exercise of technique through reproducing and combining a

number of traditional motifs as well as perfecting them. The stages, properties of materials, work procedures, are all learned from early on and this considerably reduces the number of difficulties encountered. To be sure, obstacles are not absent and therefore artisans become improvisers when confronted with "accidents" in drawing or colouring, due to failure of the material support or when they experience "inspiration blocks" (AUTHOR REFERENCE). Inventing (e.g., coming up with a new motif or work technique) is also constant in this folk art but mostly as part of habitual-improvisational forms of expression. Decorators want to express themselves through their work and to continue a tradition they value and not necessarily to "create" or "change" things for the sake of change. Innovation in Easter egg making is mostly led by necessity rather than innovative creativity, in the sense offered here to the term. Still, there are cases of recognised innovators who deliberately search for novelties, mostly in order to respond to the changing needs of customers and expand the market. This is how Christmas eggs or the wax in relief procedure of decoration got "invented" and, rapidly spreading to other decorators in the region and in the country, became part of existing habitual practices and thus subject to continuous re-interpretation and improvisation. In the words of Sennett (2008, p. 9), "Every good craftsman conducts a dialogue between concrete practices and thinking; this dialogue evolves into sustaining habits, and these habits establish a rhythm between problem solving and problem finding".

On the neglect of habit and improvisation

Towards the end, it is important to make a few observations about the relative neglect of habitual and improvisational creativity in psychology and its unintended consequences. On the whole we can consider these types of expression as representing the core of "everyday life creativity", the creativity that permeates all dimensions of our existence (Montuori, 2011). However, this is not to say that everyday life is opposed to innovative forms and associate the latter exclusively with achievements in art and science. As the previous sections

strived to argue, "ordinary" creativity can lead to innovation and innovations themselves grow out of a habitual and improvisational basis. And yet, it was often the case for scholars to focus "on eminent or unambiguous rather than everyday creativity" (Runco, 2007a, p. x), which, although a clear sign of our "vibrant symbolic life", unfortunately is "sometimes invisible, looked down on or spurned" (Willis, 1990, p. 1). In agreement with Richards (2007, p. 26), we can assert that "our [everyday] creativity is often underrecognized, underdeveloped, and underrewarded, in schools, at work, and at home". The reasons for this are both theoretical and methodological.

To begin with, contemporary (Western or Westernised) societies are based on a glorification of "big C" creativity, great creations and extraordinary creators. This steams to a large extent from a general vision of the opposition between individuals on the one hand, society and culture on the other (Slater, 1991). The implications of this are widespread, for example, focusing on eminent creative achievement alone "precludes the study and understanding of more common forms of creativity" and can "fuel problematic beliefs and stereotypes about the nature of creativity" (Beghetto & Kaufman, 2007, p. 74). This is especially the case for aspiring creators who, in order to achieve social recognition, frequently feel the pressure of departing from what already exists in radical ways, of "fighting" against convention. Indeed, in the arts, "totally conventional pieces bore everyone and bring the artist few rewards. So artists, to be successful in producing art, must violate standards more or less deeply internalized" (Becker, 2008, p. 204). Habitual creativity is therefore completely excluded by this logic. Improvisation may be more appreciated in art but, for the most part, it can also carry some undesirable associations with "makeshift" and "the next best thing". In the words of Montuori (2003, p. 245), "improvisation is thought of as making the best of things, while awaiting a return to the way things should be done". The oftentimes "ephemeral" nature of its products (Sawyer, 1997) further decreases its value and

makes it “resistant to operationalization and analysis” (Sawyer, 1995, p. 173). In addition, a series of methodological difficulties need to be confronted by those interested in habitual and improvisational creativity, principally the fact that they require a microgenetic and situated approach. To understand the nature of habit and improvisation one has to see them in the broader, social and material context of their emergence, as well as their moment-to-moment dynamics (for a proposal in this regard see AUTHOR REFERENCE).

The neglect of everyday life forms of creativity not only “deprives us of a range of models for the creative process” (Bateson, 1999, p. 153) but, according to the perspective adopted here, it deprives us of some of the most important and basic models of creative processes, those for habitual expression. This is all the more surprising since it has been argued for a while in the psychology of creativity, especially by authors like Weisberg (1993), that “novelty is the norm of all behaviour” and that “ordinary thinking processes” produce novel works of value and “must underlie even the most exalted examples of creative thinking” (p. 11). For Weisberg, “a cornerstone of the concept of ordinary thinking is that it is based on continuity with the past” (p. 21), a definition which is very much in line with the notion of habitual creativity. By reviewing laboratory studies and historical examples, he offered compelling evidence that the processes (e.g. continuity based on near analogies, discontinuities based on reasoning and sensitivity to external events; p. 255) which lead to extraordinary creative achievements are not qualitatively different from the ones we use in our daily activities. In a formulation by Bink and Mash (2000, p. 60), “these processes do not functionally differ between the genius and those who appear (prima facie) less gifted”. In fact, the dominant creative cognition approach (see Ward, Smith & Finke, 1999, p. 189) is founded on the assumption that “creative accomplishments, from the most mundane to the most extraordinary, are based on (...) ordinary mental processes that, at least in principle, are observable”. And yet, despite this similarity of perspective, cognitive studies for the most part

did not inquire into the nature of habit itself and employed a series of laboratory experiments generally remote from the nature and complexities of everyday life action. .

The theoretical perspective put forward in this article makes some simple and yet consequential distinctions between different types of creative expression while emphasising their intrinsic unity as ultimately grounded in habitual forms of activity. In this context habit is understood in more open, flexible and reflective ways than it is specific for mainstream psychological literature. The vision of the embeddedness of "higher" manifestations of creativity in basic action and thought processes is not a novel proposal in itself. In fact, Runco (2007b, p. 103) for instance argued recently that both people who are not usually creative and creative luminaries equally "rely on the same processes and mechanisms for their creativity", essentially a personal creativity expressed in the generation of original interpretations and understandings of one's daily experience. This can easily be connected back to the existential meaning of habitual creativity previously referred to or the idea of "mini-c" type of creations. In fact, Beghetto and Kaufman (2007) already made the claim that little-c and Big-C expressions necessarily have their *genesis* in mini-c interpretations: "in most cases, mini-c can become little-c; in extraordinary cases, little-c may then turn into Big-C" (Beghetto & Kaufman, 2007, p. 76). Parallels can be drawn here to our discussion of habit, improvisation and innovation (without assuming a one-to-one correspondence between these typologies). As for our conception, empirical evidence concerning the relationships between habitual, improvisational and innovative creativity is gradually accumulating. For instance, Chua and Iyengar (2008) examined the effect of prior experience (habitual action in our model) and explicit instruction (initiating the innovative drive to "be creative") on creative performance when respondents have a high degree of choice in how they approach the task (a basic condition for improvisational behaviour). It was found, in two experiments, that superior creative achievement is obtained only in situations in which participants have

both experience in the task domain *and* are prompted to make an effort to innovate. As concluded by the authors, creativity seems to require "a 'perfect storm' of high choice, high prior experience, and explicit creativity instructions" (Chua & Iyengar, 2008, p. 169).

Some concluding remarks

The present article argued against a dichotomic understanding of creativity and habit, rooted in the psycho-physiological vision of habitual action as automatic, almost mindless activity. It was shown here how an alternative conception of habit is not only possible, but was actually preferred by several great psychologists from the beginning of last century, and is also elaborated in related disciplines. Considering the substantial literature on creativity as action developed in sociology, it is bewildering to see that little of this debate has entered psychology or preoccupied creativity researchers. There are various reasons for this, from the general scarcity of interdisciplinary endeavours to the highly experimental and sometimes atheoretical approach cultivated today by many books and journals in the psychology of creativity. Studies that are currently done look at *parts* of the issue, for instance the importance of the knowledge base (Wiseberg, 1999) or the role of self-imposed constraints (Storr, 2001, 2006), but often miss the *whole*, the integrated expression of creativity in human action. It was argued above that, with this tendency, great opportunities are lost, both in terms of theory and practice. The former is exemplified by a strong trend of confining creativity to the mind, almost exclusively to cognition, and therefore losing sight of the co-ordination between thought and action, between the simultaneously "internal" and "external" dynamic of creativity. Creative cognition deals with regularities of thinking and less with regularities of action, and, as such, cannot address alone the complexities of habit, which is grounded in the interaction between person and a social and material environment. This has important consequences, particularly for how we recognise creativity and legitimise who and what is "creative" and hence valuable. Re-evaluating and *re-valuing* habit as an intrinsically creative

manifestation would not only open up a whole new field of inquiry but also direct our attention towards the creativity each of us displays in our everyday contacts with others and with the world. In this regard, making the phenomenon "ordinary" rather than "extra-ordinary", takes nothing away from our appreciation of it in its highest forms, on the contrary, it can inspire our efforts to reach them.

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