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Creativity as a travelling concept: from Alexander Gerard to Richard Florida

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The article describes creativity as a travelling concept. It is written from an interdisciplinary and historical perspective. The point of departure is the 18th century, when Alexander Gerard and William Duff, two Scottish thinkers, laid the foundation for modern understanding of creativity. The next destination is the second part of the 19th century, when Francis Galton published a seminal book about genius which strongly influenced the early 20th century theory of intelligence. After that Joy P. Guilford's proposal of 1950 is discussed to study creativity as a separate problem. In the last part of the article recently developed approaches to creativity are summarized, inter alia everyday creativity and creative industries. Additionally, the article presents the evolution of the terms related to creativity and highlights the continuity between the Scottish thinkers' writings and modern concepts.

Keywords: creativity, imagination, intelligence, travelling concept, Alexander Gerard.

Kreatywność jako wędrujące pojęcie: od Alexandra Gerarda do Richarda Floridy

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Artykuł opisuje kreatywność jako wędrujące pojęcie. Napisany jest z perspektywy interdyscyplinarnej i historycznej. Za punkt wyjścia stuży XVIII wiek, w którym Alexander Gerard i William Duff, dwóch szkockich myślicieli, położyło fundamenty pod nowoczesne rozumienie kreatywności. Następnym celem jest druga połowa XIX wieku, w której Francis Galton opublikował ważną książkę na temat geniuszu, która znacząco wpłynęła na teorię inteligencji z początku XX wieku. Później omówiona została propozycja Joya P. Guilforda z 1950 roku, żeby badać kreatywność jako osobne zagadnienie. W ostatniej części artykułu opisano najnowsze ujęcia kreatywności, między innymi codziennej twórczości oraz przemysłów kreatywnych.

Słowa kluczowe: kreatywność, wyobraźnia, inteligencja, wędrujące pojęcie, Alexander Gerard.

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1. Introduction

Creativity is a relatively young western idea. It was "discovered" for the first time in the eighteenth century in Scotland and since then it has been reinvented a few times. Recently, in 1997, the British Government "discovered" the ideological potential of creativity and implemented a creative industries policy. In this article I will take a critical approach towards the history of creativity. Instead of drawing mental pictures of the great future based on creativity, I will consider the history of this idea. Inspired by Mieke Bal, I invite you to travel across time and disciplines to see how the concept of creativity has evolved during the last three hundred years. This article 'looks at the concept of' CREATIVITY 'not as a clear-cut methodological legislation, but as a territory to be travelled, in a spirit of adventure' (Bal, 2002, p. 23). Although this type of an intellectual adventure does not solve fundamental scientific problems, according to an English saying, it broadens the mind.

During the last two decades numerous books and articles about creativity have been published. Among them a few are devoted partly or fully to the history of the idea (Murray, 1989; Cocking, 1991; Weiner, 2000; Eysenck, 1995; Simonton, 1999, p. 1–23; Simonton 2009, p. 1–10; Runco and Albert, 2010; Runco and Jaeger, 2012, p. 92). They offer various approaches to the history of creativity. Some of them reveal the influence of ancient philosophy on Western culture. Others concentrate on the history of psychological studies of creativity and genius. Most of them underestimate the fact that creative thinking started to be recognized as a separate issue at a particular historical moment – in the second half of the 18th century (Engell, 1981, p. viii; Reckwitz, 2012, p. 13). My ambition is to identify the place and time of birth of this concept in an even more precise way. The foundations for scientific investigation of creativity were laid by the thinkers of the Scottish Enlightenment, Alexander Gerard and William Duff, in the third quarter of the eighteenth century.

In this article I will describe the history of creativity in chronological order. I will concentrate on two aspects of the development of this idea. First, I will analyze the evolution of the terms related to creativity. I will prove that there is a direct link between the eighteenth-century concept of creative imagination, the nineteenth-century concept of genius, the early twentieth-century concept of intelligence, the late twentieth-century concept of creativity and the recently developed concept of creative industries. Second, I will compare scientific theories of creativity with Gerard's and Duff's writings in order to identify new and old elements. As I will show, the history of the concept of creativity is full of adventures.

2. The Scottish foundation

The modern concepts of creativity and creative imagination arose in the eighteenth century. To explain why they were novel, I need to recall earlier authors. Broadly speaking, in classical Greece valuable art had to be based on imitation. Imagination was understood as something that allows us to create images in our minds without seeing an object (Aristotle, 1996, p. {428a}). For art which had to imitate the real world, actual perception was more useful as a starting point than imagination. The exception to this rule, according to Plato, was divine madness which could be the source of poetry (Plato, 1925, p. {534}). In that case the inspiration comes from the Muses, not from nature. Imagination was mentioned by a number of classical and medieval authors (Cocking, 1991). However, these were short remarks which established neither an elaborate concept of imagination nor that of creative thinking. It will not be far from the truth to say that in the Antiquity and the Middle Ages there was no such idea as creative imagination.

The first author who claimed that imagination is the source of pleasure in aesthetic experience was Joseph Addison, an English essayist, poet and playwright (Engell, 1981, p. 33–50). Addison proposed a new way of thinking about imagination and redefined the role of an artist¹. As he wrote, an artist 'makes Additions to Nature, and gives a greater Variety to God's Works' (Addison, July 3, 1712). This meant that not only God who created the universe but also a human being could be a creator. A good artwork, according to Addison, not only imitates nature but also consists of new objects created by the author.

Addison's intuitions expressed in the essay on the pleasures of imagination were developed into an elaborate theory by two Scottish writers: Alexander Gerard (1728–1795) and William Duff (1732–1815). They played the key role in "discovering" (Reckwitz's term, see: Reckwitz, 2012) creativity by writing first comprehensive treaties on creative imagination and genius. One could argue that I exaggerate their role. There were more pioneers in the topic (see: Engel, 1981) among whom the most influential was Immanuel Kant (Kant, 1950 [1790]). However, Gerard's and Duff's works – unlike other essays about creative imagination of that time – resulted in thick books devoted to the topic, of course not as important as Kant's writings, but published 20–30 years before Kant's magnum opus. For those reasons Gerard and Duff should hold a pre-eminent position in the history of the idea of creative thinking.

In 1759 Gerard published "An Essay on Taste", in which he states that the taste derives from the powers of imagination which are based on "internal" senses (Gerard, 1759, p. 1–2). Gerard distinguishes seven such senses: sense of novelty, of sublimity, of beauty, of imitation, of harmony, of ridicule, of virtue. In this list we find elements of the old (the sense of imitation) and of the new (the sense of novelty) aesthetics. Gerard introduces his

groundbreaking idea in an interesting way. He does not contrast imitation with novelty but describes them as complementary characteristics. He argues that an artwork gives more pleasure to the spectator when it is read/performed for the first time because it is to some extent difficult: this leads to the mind's stimulation ('the mind is in a lively and elevated temper', Gerard, 1759, p. 3); well know things are boring and do not stimulate the mind; a new thing must be not only novel but also 'agreeable'; otherwise the artwork is too difficult to be conceived, which is a painful experience (Gerard, 1759, p. 3-10)². In this part of the essay Alexander Gerard introduces the term 'original genius' (Gerard, 1759, p. 10). He states that genius is the power to invent and create a great artwork. As he writes, "The first and leading quality of genius is invention, which consists in a great extent and comprehensiveness of imagination, in a readiness in associating the remotest ideas that are any way related" (Gerard, 1759, p. 163). According to Gerard, the process of creation starts with a brainstorm which is conducted by imagination and based on the process of associating things which do not have ties in the real world. A new thing is built from such a 'confused heap of materials' (Gerard, 1759, p. 164) through other mental processes which design 'a regular and well-proportioned whole' (Gerard, 1759, p. 164). Gerard developed further his theory of imagination and of genius in the "Essay on Genius" published in 1774. But before he did it, another Scottish thinker - William Duff - addressed the same topic³.

William Duff was the first author who devoted a whole book to the topic of genius (Duff, 1767). In the same vein as Gerard, his four years older colleague, he assumes that good art must be novel, that people who create it have an extraordinary genius the most important element of which is productive imagination. What distinguishes his point from Gerard's one is sticking to concrete examples. Duff devotes most parts of his publications to a careful analysis of biographies and writings of great authors such as Homer, Shakespeare, Alexander Pope, etc. This method proved to be useful at the beginning of the twentieth century, when studying biographies of famous people became a scientific standard. In the subtitle of his first book Duff mentions that he will pay special attention to poetry. This point of his argumentation was not highly original but definitely very up-to-date. The extraordinary nature of poetry had already been discussed by pre-romantic philosophers. Duff combines this idea with concepts of imagination and genius in a way which was typical of philosophical treaties written at the beginning of the nineteenth century. Duff's activity inspired Gerard to write his own book on genius.

Alexander Gerard presented a complete theory of genius and productive imagination in the "Essay on Genius" published in 1774. This book played an important role in the history of thought at least for two reasons. Firstly, it influenced strongly German philosophers. A good indicator of the acceptance of his theories was the fact that a German translation of his book was

published in 1776 – only two years after the first English edition. Gerard's essays were an important point of reference for Immanuel Kant (Guyer, 2011, p. 60; Engell, 1981, p. 80, 122–123). Secondly, Gerard describes genius as a key phenomenon for all types of creativity, not only for arts: "Genius is, then, the power of invention, either in science or in the arts" (Gerard, 1774, p. 318). He explains genius in terms of psychological processes such as imagination, associations, memory, passion, etc. This rigorous approach to the study of creative thinking did not receive much attention till the late nineteenth century. The philosophers of Romanticism preferred metaphorical language in which imagination was an almighty force responsible for creativity. However, as we shall see, although Gerard's name was partly forgotten, his way of thinking became very popular in the twentieth century.

The concept of creative imagination captured the attention of many late 18th century thinkers. An intense discussion about its role broke out (see: Engel, 1981). From today's perspective this debate seems to be a part of a more fundamental cultural change. The eighteenth-century European thinkers redefined their relationships with God and universe (Cassirer, 1951, p. 97-98; Eysenck, 1995, p. 12-18). Thereafter it was assumed that the man could and should create new things. The power of causation started to be attributed to the man instead of God. An interesting side effect of this process was a semantic change of the word 'genius'. In Latin, and originally in English, genius meant 'spirit watching over each person since birth' (Weekley, 1921, p. 631). Gerard and Duff treated genius as a special ability. Gerard analyzed the way of thinking of the 'man of genius' (Gerard, 1759, p. 163). Duff wrote: "It is likewise to be observed, that we regard the *Iliad* and the *Odyssey* as works of Genius" (Duff, 1767, p. 24). Gerard wrote: "The genius of Homer has been always held in veneration" (Gerard, 1774, p. 10-11). In those quotations 'genius' is an attribute of Homer, something that belongs to him. Today we use 'genius' as a name for "a person of extraordinary intellectual power" (Encyclopaedia Britannica, 2013). As we can see, a semantic shift occurred. The term 'genius' initially understood as a good spirit, then as the mind's attribute, today is understood as a social role. The first phase of the change (from a good spirit to the mind's attribute) was the result of the eighteenth-century 'discovery' of creative imagination. The second phase of the change (from the mind's attribute to a social role) took place in the late nineteenth and early twentieth centuries. It was a side effect of a series of studies of genius and intelligence conducted by psychologists.

3. Studies of genius

The idea of creative imagination was developed in the late eighteenth and the early nineteenth centuries without any direct opposition to religious beliefs. The old meaning of the term 'genius' left room for an interpretation that genius is a God's gift or even – as in Plato's philosophy – a result of a direct God's intervention. Most of the romantic poets and philosophers – for example Friedrich Schelling and Samuel T. Coleridge – hold that although a poet is an author of a certain poem, the truths which he tells come from God (Engel, 1981, p. 301–366). Imagination served as an intermediary between the man and the God. This opinion was put into question by Thomas Carlyle in his lectures published in his book of 1840 (Carlyle, 1861; first edition – 1840).

In the book "On heroes, hero-worship, & the heroic in history: six lectures" Carlyle claims that the course of history is determined by a very limited number of people called by him 'heroes' or "Great Men". He proposes to divide them into six categories: Divinity, Prophet, Poet, Priest, Man of Letters, King, and gives examples of such heroes (Odin, Muhammad, Dante, Shakespeare, Luther, Knox, Johnson, Rousseau, Burns, Cromwell, Napoleon). He makes no distinctions between famous people and divines because, as he says, a hero becomes equal to God for most people: "And now if worship even of a star had some meaning in it, how much more might that of a Hero! Worship of a Hero is transcendent admiration of a Great Man" (Carlyle, 1861, p. 10). Carlyle thought that there was something miraculous in the lives of heroes but it had no supernatural grounds.

A different explanation of the phenomenon of genius was given by the Italian physician and criminologist Cesare Lombroso (Lombroso, 1891). He held the view that it has the same grounds as insanity. In a number of chapters he discussed the factors which cause or signal both mental conditions. These are: different forms of mania, alcoholism, super-acute sensitiveness, living in hot climate, being addicted to drinking, advanced age, or insane parents and others. There is also a difference between genius and insane people: the first pursue their goals in a consequent and well organized way, the latter act in a chaotic way. Lombroso illustrated his theoretical statements with examples from biographies of more than 100 famous people. Those were mostly anecdotal findings but taken together made an interesting piece of writing⁴.

Carlyle's and Lombroso's theories both had many supporters in the second half of the nineteenth century. However, their popularity did not last long – it declined at the beginning of the twentieth century. Carlyle's book was to a great extent an ideological manifesto. It did not lay sufficient foundations for a scientific theory. Lombroso's reasoning seemed to be much more "scientific", which was typical of social thinkers of the late nineteenth century. Unfortunately, from today's perspective both terms "genius" and "mental illness" are so broad that the thesis that they are related cannot be verified (Silva and Kaufman, 2010, p. 391). A question "Is creativity related to mental illness?" is not a scientific one.

The fast-growing number of books about genius published in the late nineteenth century contained a huge number of examples of eminent people. The term 'genius' slowly changed its meaning from a mind's characteristic into a widely recognizable social role. One of the elements of this process was creation of lists of the most eminent people. The first to propose such a register was James McKeen Cattell (1903). He calculated the number of lines devoted to famous people in six biographical dictionaries or encyclopedias and used it as an indicator of eminence. This allowed him to publish an "objective" list of 1000 eminent men in history among whom the most eminent were Napoleon and Shakespeare. One year later Havelock Ellis published a book in which he analyzed the anthropological and psychological characteristics of 1030 British men and women of genius (Ellis, 1904). He published the names of those people in an appendix in the alphabetical order.

To say that William Duff was the father of studying genius would probably be an overstatement. Lombroso and Cattell did not refer to him. On the other hand, we may expect that Duff had an indirect influence via Carlyle. For sure he was a pioneer and his style of thinking and writing was repeated in a number of influential publications. What turned out to be the most resistant to the passage of time in the early studies of genius was an assumption that great works reflect the personal character of their authors. Life and work of geniuses – who are often insane – form an indivisible whole.

4. Genius and intelligence

One of the key moments in the fortunes of creative imagination comes in the work of Francis Galton (1822–1911). In 1869 this English polymath published a book titled "Hereditary Genius". His aim was to prove that the differences between races were a result of the inheritance of mental abilities. He wrote under a strong influence of the theory of evolution proposed by his cousin - Charles Darwin. Although the results of the investigations concerning racial differences were highly questionable, Galton introduced important issues into the debate on genius and creativity. The main point of Galton's argumentation was an observation that extremely gifted parents often have gifted children (Galton, 1865). He showed that there was a much higher chance of a close relationship between two "distinguished" people than between two randomly chosen people. An extensive evidence for this hypothesis was presented by Galton in the book "Hereditary Genius" published in 1869. The book contained not only comprehensive statistical analysis but also definitions of key terms. One of them was 'genius' which meant for Galton an exceptionally high ability (Galton, 1892, p. viii), "a nature which, when left to itself, will, urged by an inherent stimulus, climb the path that leads to eminence, and has strength to reach the summit" (Galton, 1892, p. 38). In this point he went in line with the eighteenth-century tradition. This characteristic was operationalized for the conducted study in an interesting way. Galton assumed that mental faculties differ in population in the same way as stature. There are very few extremely high and extremely low people and there are also very few exceptionally talented people and "true idiots and imbeciles" (Galton, 1892, p. 36). According to Galton, in each million there are 250 eminent people and only one prodigy (Galton, 1892, p. 33, 40). The same reasoning can be applied to people having very low mental abilities – they are rare from a statistical point of view. Between those extremes live a large number of people belonging to mediocre classes.

Galton's theory of differentiation of cognitive abilities received strong support from empirical research conducted at the beginning of the 20th century. In 1905 Alfred Binet and Théodore Simon created a test which allowed for measuring the intelligence of school children (Goddard, 1916, p. 5). They performed a number of simple tasks such as drawing pictures from memory, naming an object or defining a term. The number of correct answers in the test was an indicator of the intelligence. The test was correct in the sense that it allowed for indentifying children with mental retardation. Further development of the test led to the creation of Binet-Simon Intelligence Scale which measured the mental age (Binet and Simon, 1916). Child's intelligence quotient (IQ) was computed in the following way: IQ = mental age / actual age *100. The more IQ points a child gained in the test, the more talented he or she was (Wróbel, 2012, p. 116).

The method of measuring intelligence was popularized in the USA by Lewis M. Terman. In 1916 he published his own version of the test called Stanford-Binet Intelligence Scales. Unlike his French colleagues, Terman used the test to identify exceptionally gifted children. From 1921 until his death he conducted a longitudinal study of a group of 1528 young "geniuses" – children that gained at least 140 IQ points in his test. Today we know that he was not as successful as Simon and Binet – the selected children achieved quite much in their lives but very few of them turned out to be famous and none of them became a world known genius. Moreover, on the basis of the test results Terman excluded from the research group two persons who became Noble Prize winners later (Simonton, 2009, p. 52–55).

The common point of the theory of intelligence and Galton's theory of genius was an assumption that eminent mental abilities are rare – we know only a few geniuses from history and less than 0.1% of people gain at least 160 points in IQ tests. High intelligence became an indispensable asset of a genius – just as creative imagination was in the late eighteenth century. The nature of this relationship was put into question by Joy P. Guilford. In 1950, while being the president of the American Psychological Association, he published an address titled "Creativity", in which he wrote: "Some of you will undoubtedly feel that the subject of creative genius has not been as badly neglected as I have indicated, because of the common belief that genius is largely a matter of intelligence and the IQ. [...] I believe that creativity and creative productivity extend well beyond the domain of intelligence"

(Guilford 1950: 445). Guilford did not only appeal for studying creative aspects of personality as distinct from general intelligence but also worked on tests which would allow for measuring creativity. To measure it, Guilford added tasks on divergent thinking to the Stanford-Binet Intelligence Scales. Divergent thinking, according to Guilford, allows us to produce a big number of ideas. Some part of these ideas would probably be rare from the statistical point of view. Rare ideas are by definition original so divergent thinking is crucial for creativity (Guilford, 1967).

Guilford's publications resulted in an increased interest in creativity among psychologists. Further research revealed that creativity cannot be reduced neither to high intelligence nor to divergent thinking. The process of creating a new object is complex. A number of mental activities and social mechanisms condition its results. The recognition of creativity as an issue distinct from intelligence by psychologists was accompanied by an increased popularity of the term 'creativity' itself. The noun 'creativity' – as opposed to the verb 'to create' and the adjective 'creative' - is relatively new. It was used for the first time by the English literary critic A. W. Ward in 1875 ("creativity, n.". OED Online, Oxford English Dictionary; Weiner, 2000, p. 89; Ericsson, 2001, p. 8)⁵. Its 20th century career is probably a result of the semantic change of the term 'genius'. In the late eighteenth and the nineteenth centuries it was the name of special abilities possessed by great artists and scientists. Since the beginning of the twentieth century it has started to be used as a name of a type of a person. This shift left an empty space for the name of the force responsible for creation of memorable works. This gap was filled by the term 'creativity'.

5. Everyday creativity

Ruth Richards and her colleagues were the first scholars who claimed explicitly that most people are creative (Richards, Kinney, Benet and Merzel, 1988). In the 1980s they criticized the existing research as based on a too narrow definition of creativity. For example, they put into question the way in which E. Paul Torrance – the author of the Torrance Test of Creative Thinking – measured the quantity of overall creative achievements in a study of high school students 12 years after graduation:

"Quantity" of creativity was obtained by subjects' self-report on a checklist of socially recognized creative accomplishments (e.g., by indicating the number of poems, stories, musical compositions, or scientific papers published and the number of patents or research grants obtained). However, subjects who didn't submit or publicize their work or who pursued more private interests (e.g., innovations in the care of their children, in the culinary arts, or in auto mechanics) weren't credited. The checklist represented a rather limited sampling of the universe of possible creative outcomes for any given subject. (Richards, Kinney, Benet and Merzel, 1988, p. 477) As Richards and her colleagues pointed out, one of the consequences of the narrow understanding of creativity is focusing on creativity at work which is a male domain. Instead they proposed the Lifetime Creativity Scales which allowed for measuring avocational creativity. The Scales were based on two dimensions (peak creativity, extent of involvement in creative activities) considered separately for vocational and avocational activity. The peak creativity was indicated by the person's most creative enterprises and activities, not necessarily leading to manufacturing of an object. The extent of involvement in creativity measured the personal attitudes towards creativity. In practice, according to Richards and her colleagues, the most creative people were those who were pervasively preoccupied with innovative activities and did things which were "radical departures from the commonplace" (Richards, Kinney, Benet and Merzel, 1988, p. 479). The least creative people were those whose life was filled with routine activities and they enjoyed it.

Richards' article turned out to be very inspiring for psychologists. Creativity in everyday life started to be analyzed by researchers gathered around such journals as Journal of Creative Behaviour, The Creativity Research Journal, Psychology of Aesthetics, Creativity and the Arts. The list of creative elements of life was expanded. These views elaborate the idea that creativity can be observed in the way of living, not in the way of producing things. Mark A. Runco claimed that the very core of creativity is the ability to construct original interpretations of experiences (Runco, 1996, p. 4; 2004, p. 22–23). For Anna Craft the core of creativity is the "possibility thinking" which means "refusing to be stumped by circumstances, but being imaginative in order to find a way around a problem in order to make sense of a puzzle" (Craft, 2000, p. 3). Such a merit is necessary in the "liquid" postmodern times in a rapidly changing world.

The "democratic" approach towards creativity is a new point of view. Such a theoretical shift is surprising. Paradoxically, the basis for the "democratic" creativity was laid by Galton, who claims that mental abilities demonstrate Gaussian (normal) distribution in society. He uses this model to explain why there are few geniuses. At the same time he assumes that mental abilities are gradable and the statistical function describing differences in intelligence is continuous. It means that although there are just a few extremely gifted people, there are also a few very gifted people only slightly less brilliant than those extremely gifted. Moreover, there is also a number of gifted people who are only a bit less clever than those very gifted but still very talented. In fact most people are gifted. They differ only in the level of their capacities. Guilford uses this scheme when inventing a set of experimental tasks which can measure individual creativity. He proposes a number of relatively simple tasks. The number of points gained by an examined person indicates his/her level of creativity. Although very few persons achieve the highest score, all examined people receive some points. A possible conclusion is that all people are creative.

Richards, who formulated and developed the "democratic" approach to creativity, was deeply rooted in the psychological tradition of studying genius. She did not want to deny the value of the 20th century psychological investigations but rather to broaden the field of research. In a number of publications she argued that everyday creativity and eminent creativity have the same cognitive basis and should be analyzed as two types of a more general phenomenon – namely creativity (Runco and Richards, 1998; Richards, 2007a; 2007b; 2010).

The study of everyday creativity is a continuation of the interest in creative imagination and genius not only for institutional reasons but also on the theoretical ground. What has remained unchanged since Gerard's times is a strong conviction that an individual is a source of creativity and the fact that creative imagination (creativity) is defined in terms of being original. Richards used the term "creative" as synonymous to "originality" in her seminal article: "Activities must meet only a minimum standard of originality to be considered «creative»" (Richards, Kinney, Benet and Merzel, 1988, p. 479). Later she developed this definition by adding that creative outcomes must be meaningful: "We define everyday creativity only in terms of making an original contribution of some sort, and one that communicates to others and is thus meaningful, rather than being random or idiosyncratic" (Richards, 2007, p. 502-503). The assumption that creativity is an individual phenomenon is supported implicitly by the fact that creativity is measured at the individual level and is explained in terms of cognitive processes. Other factors such as organizational framework, culture, social context are treated as potential catalysts or inhibitors of creativity, but not as its primary source (Rubenson and Runco, 1992, p. 139). This individualistic approach to creativity can be traced back to Gerard's and Duff's writings.

6. Scientific and artistic genius and creative industries

The vivid discussion about creativity pursued in the 1990s by psychologists was made even hotter by politicians. The Australian Government was the first to use the idea of creativity as a political concept. In 1994 the government published the document titled "Creative Nation: Commonwealth Cultural Policy" which described the general objectives and principles of the Australian cultural policy. In the introductory part of the "Creative Nation" an influential idea was expressed: "This cultural policy is also an economic policy. Culture creates wealth. Broadly defined, our cultural industries generate 13 billion dollars a year. Culture employs. Around 336,000 Australians are employed in culture-related industries. Culture adds value, it makes an essential contribution to innovation, marketing and design. It

is a badge of our industry" (Department of Communications and the Arts, 1994). The document had a limited impact on Australian cultural sector because of the lack of methods of its implementation. However, the idea was successfully adopted in Europe.

In 1997 the British Government set up the Creative Industries Task Force which played an important role in choosing new goals for the British cultural sector. The new policy was based on the assumption that culture is profitable in economic terms. This thesis was counterintuitive at that time and the Creative Industries Task Force became famous for convincing the public opinion that it was true. This was due to two circumstances. First, the Task Force redefined the cultural sector and called it creative industries. The new definition included not only arts but also such industries as advertising, architecture, design and software (Department for Culture, Media & Sport, 1998). Second, in the 1990s exports of cultural goods such as recordings, movies and publications were very profitable for Great Britain. In such circumstances the new classification allowed for proving, in statistical terms, that culture is an important economic sector (Department for Culture, Media & Sport, 2001).

Scientists were at first suspicious about the concept of creative industries. Cultural economists preferred the term "cultural industries" (Throsby, 2010, p. 88-89) and maintained that it could consume the idea of creative industries (Towse, 2010, p. 376-377). Even though there was little enthusiasm for the idea among scholars, some of them started analyzing the role of culture-related sectors in the economy. The first to publish on the topic was Richard Caves, who applied the theory of contract to creative sectors (Caves, 2000). One year later John Howkins published the book "The Creative Economy: How People Make Money From Ideas" (2001). in which he estimates the size of the world creative industries defined in nearly the same way as it was done in Great Britain. The next milestone was Richard Florida's book "The Rise of the Creative Class" (2002). In this publication Florida, an American urban studies theorist, claimed that creative industries could be successful only in cities where there were many talented workers, high technology companies and the culture of tolerance. His assumes that the "climate" of a place is the key factor for economic success because it attracts members of what he calls "creative class". According to his calculations, creative class comprised 30% of the U.S. workforce in 1999 (Florida, 2002, p. xxvii).

The concepts of creative industries and creative class attracted not only praise but also a lot of criticism (Kukołowicz, 2012). The negative opinions could be grouped into two categories. First, creative industries are based on neoliberal ideology (Thiel, 2005; Peck, 2007). Second, the evidence on which the British policy is based is unreliable. It involves statistical "tricks", rather than scientific proofs (Glaeser, 2005, p. 596; Markusen, 2006, p. 1924;

Hoyman and Faricy, 2009, p. 329). Probably, the concepts would not have stood the test of time if the rapid development of the Internet and the enormous growth of the ICT companies had not taken place. The mixture of technology and culture which is typical of advanced communication technologies at the beginning of the twenty-first century did not fit into the traditional concept of cultural industries. The term "creative industries" seems to be more appropriate in this context.

In the last decade a huge number of books about creative industries have been published. This great popularity of the idea resembles the career of the term "imagination" in the late eighteenth century. For the worldwide recognition of the concept, two reports prepared by international bodies were crucial. The first was written by KEA Affairs at the request of the European Commission (KEA, 2006). It is an equivalent of the British "Creative Industries Mapping Documents" but reports on the creative sector in the whole European Union. The second one was published by the United Nations Conference on Trade and Development and analyzed the world production and exports of creative goods and services (UNCTAD, 2008; see also: UNCTAD, 2010). In consequence, the idea invented in Australia in 1994, developed and implemented by the British Government in the late 1990s, became a part of the world's policy and an object of systematic scientific inquiry.

The concept of creative imagination has never been restricted to the core artistic activities. Alexander Gerard distinguishes two types of genius: in science and in the arts (Gerard, 1774, p. 318). He describes Newton's genius as a good example of the way in which genius works in science. The assumption that creative imagination characterizes all eminent people, not only artists, was accepted by psychologists developing the theory of intelligence. A broad definition of creativity is adopted also by public authorities implementing creative industries policies. The Creative Industries Task Force justifies the new classification of activities by saying that it includes "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property" (DCMS, 2001, p. 5). The European Commission and the United Nations Conference on Trade and Development adopted a similar definition: "creativity is considered as a process of interactions and spill-over effects between different innovative processes" which includes technological creativity, scientific creativity, cultural creativity and economic creativity (KEA, 2006, p. 41–42; cf. UNCTAD, 2008, p. 9-10). Recent evolution of information and communication technologies, which are responsible for the dynamic growth of creative industries, results from the synergy between scientific and artistic genius. Despite the fact that Gerard could not predict the invention of a personal computer, his way of thinking about genius remains relevant in the Digital Age.

7. Conclusion

Alexander Gerard and William Duff, thinkers of the Scottish Enlightenment, were the first authors who proposed a solid theoretical framework for thinking about creativity. Three of their works (Gerard's "An Essay on Taste", 1759 and "An Essay on Genius", 1774; Duff's "An essay on original genius", 1767) are based on several assumptions about creativity which are widely accepted till now: creativity is a result of individual mental activity, biographies of eminent persons are a valuable source of information about genius, great works are products of genius, creative products must be original, genius expresses itself both in science and the arts. Their writings began an era of interest in genius and creative thinking which lasts till now.

The development of psychological theories of genius, intelligence and creativity tremendously increased our knowledge on creative thinking. Research conducted by Francis Galton, Alfred Binet, Théodore Simon, Lewis M. Terman, Joy P. Guilford led to the invention of useful techniques of measuring intelligence and creativity. Recent studies on the role of creativity in everyday life and of the social and economic importance of creativity have revealed the democratic character of creative thinking.

A possible cause of the lack of recognition of the role of the Scottish thinkers is their language, which sounds old-fashioned and sometimes a bit naive to us. On the other hand, a historical analysis of the language reveals some trends in the way of thinking about creative imagination. Two important processes have taken place. The first is a shift from thinking about creativity as a divine activity to a natural process. It caused a semantic shift in the term "genius", which initially was the name for a good spirit, rather than the mind's attribute, and today is understood as a social role. The essence of the second process is the coinage of new terms which partly replace the old ones. Francis Galton was interested in genius in the second part of the 19th century, Alfred Binet and Théodore Simon studied intelligence at the beginning of the 20th century, Joy P. Guilford proposed to concentrate on creativity in 1950. The evolution of the language was accompanied by slow democratization of the idea of creativity which, in the late 18th century, was reserved for individuals chosen by God and today, according to Richard Florida, it is a key market asset of 30% of American adults (Florida 2002: xxvii).

Notes

Joseph Addison, in his essay on the pleasures of imagination published in the "Spectator" from 21 June 1712 to 3 July 1712, argues that thanks to imagination an artist can create new things which are a source of pleasure. In the last part of the essay, on July 3, 1712, he writes: "It is this Talent of affecting the Imagination, that gives an Embellishment to good Sense, and makes one Man's Compositions more agreeable

than another's. It sets off all Writings in general, but is the very Life and highest Perfection of Poetry: Where it shines in an Eminent Degree, it has preserved several Poems for many Ages, that have nothing else to recommend them; and where all the other Beauties are present, the Work appears dry and insipid, if this single one be wanting. It has something in it like Creation; It bestows a kind of Existence, and draws up to the Reader's View several Objects which are not to be found in Being. It makes Additions to Nature, and gives a greater Variety to God's Works. In a Word, it is able to beautifie and adorn the most illustrious Scenes in the Universe, or to fill the Mind with more glorious Shows and Apparitions, than can be found in any Part of it" (Addison July 3, 1712).

- Two hundred years later Mihaly Csikszentmihalyi, an American psychologist of Hungarian origin, formulated the theory of flow in which he describes the optimal mental state for mental activity called flow, as a result of good balance between the challenge level and the skill level (Csikszentmihalyi 1990). The theory of flow fits Gerard's observation.
- Gerard's books were quickly translated into German ("Essay on Taste" in 1766, "Essay on Genius" in 1776; Guyer 2011: 59–60). Duff did not have so much luck. Nevertheless, his writings have not been totally forgotten (see Throsby 2001: 95).
- The figure of a mad genius is often reproduced in popular culture, especially in movies which simultaneously present a biography of an artist and history of artworks. For example: "Amadeus" by Miloš Forman, "Frida" by Julie Taymor, "The Hours" by Stephen Daldry, "Copying Beethoven" by Agnieszka Holland.
- Oxford English Dictionary Online includes one reference to an older text: 1659, G. Lawson "Theo-politica": "In Creation, we have God and his Creativity (as Occam and Bacon expresse it) and the thing created". I do not treat it as the moment of coinage of the term "creativity" for two reasons. First, there is no continuity between Lawson's writings and the 20th century literature on creativity. Second, for Lawson creativity is an attribute of God and does not relate to genius. Lawson did not have any theory of creativity.

References

Addison, J. (1712). Pleasures of Imagination. *The Spectator*, June 21–July 3, 411–421. Aristotle. (1996). *Works of Aristotle*. Vol. II. Chicago: Encyclopaedia Britannica.

Bal, M. (2002). Travelling Concepts in the Humanities: A Rough Guide. Toronto, Buffalo, London: University of Toronto Press.

Binet, A. and Simon, T. (1916). The Development of Intelligence in Children (The Binet-Simon Scale). Baltimore: Williams & Wilkins.

Carlyle, T. (1861). On heroes, hero-worship, & the heroic in history: six lectures. New York: John Wiley.

Cassirer, E. (1951). The Philosophy of the Enlightenment. Princeton: Princeton University Press.

Cattell, J.M. (1903). A statistical study of eminent men. *Popular Science Monthly*, 62, 359-377.

Caves, R. (2000). Creative Industries: Contracts between Art and Commerce. Cambridge: Harvard University Press.

Cocking, J.M. (1991). *Imagination: A Study in the history of ideas*. Penelope Murray (Ed.). London: Routledge.

Craft, A. (2000). Creativity Across the Primary Curriculum. London and New York: Routledge.

- Csikszentmihalyi, M. (1990). Flow: The Psychology of Optimal Experience. New York: Harper & Row.
- Department for Culture, Media & Sport. (1998). Creative Industries Mapping Documents 1998. Retrieved from: https://www.gov.uk/government/publications/creative-industries-mapping-documents-1998 (26.09.2013).
- Department for Culture, Media & Sport. (2001). Creative Industries Mapping Documents 2001. Retrieved from: https://www.gov.uk/government/publications/creative-industries-mapping-documents-2001 (26.09.2013).
- Department of Communications and the Arts. (1994). *Creative nation: Commonwealth cultural policy*. Retrieved from: http://pandora.nla.gov.au/pan/21336/20031011-0000/www.nla.gov.au/creative.nation/contents.html (26.09.2013).
- Duff, W. (1767). An essay on original genius; and its various modes of exertion in philosophy and the fine arts, particularly in poetry. London: E. and C. Dilly.
- Ellis, H. (1904). A study of British genius. London: Hurst and Blackett.
- Encyclopaedia Britannica. Online edition (2013). Retrieved from: http://www.britannica.com/ (24.09.2013).
- Engell, J. (1981). The Creative Imagination. Enlightenment to Romanticism. Cambridge and London: Harvard University Press.
- Ericsson, D. (2001). Caught in the Iron Cage of Creativity The Ten Commandments of the Creative Field, Paper to The Second International Critical Management Studies Conference 2001. Retrieved from: http://www.mngt.waikato.ac.nz/ejrot/cmsconference/2001/Papers/Creativity/cmsironcage.pdf (24.09.2013).
- Eysenck, H.J. (1995). Genius: The Natural History of Creativity. Cambridge: Cambridge University Press.
- Florida, R. (2002). The rise of the creative class: and how it's transforming work, leisure, community and everyday life. New York: Basic Books.
- Galton, F. (1865). Hereditary talent and character. *Macmillan's Magazine*, 12, 157-166 and 318-327.
- Galton, F. (1892). Hereditary Genius. An Inquiry into Its Laws and Consequences, 2nd ed. London and New York: McMillan.
- Gerard, A. (1759). An Essay on Taste, with Three Dissertations on the same Subject, by Mr. De Voltaire, Mr. D'Alembert, F.R.S., and Mr. DeMontesquieu. London: A. Millar and Edinburgh: A. Kincaid and J. Bell.
- Gerard, A. (1774). An Essay on Genius. London: W. Strahan and T. Cadell, and Edinburgh: W. Creech.
- Glaeser, E.L. (2005). Review of Richard Florida's The Rise of the Creative Class. *Regional Science and Urban Economics*, 35, 593–596.
- Goddard, H.H. (1916). Introduction. In: A. Binet and T. Simon, *The Development of Intelligence in Children (The Binet-Simon Scale)*. Baltimore: Williams & Wilkins.
- Guilford, J.P. (1950). Creativity. American Psychologist, 5(9), 444-454.
- Guilford, J.P. (1967). The Nature of Human Intelligence. New York: McGraw-Hill.
- Guyer, P. (2011). Gerard and Kant: Influence and Opposition. *The Journal of Scottish Philosophy*, 9(1), 59-93.
- Howkins, J. (2001). The Creative Economy: How People Make Money From Ideas. London and New York: Penguin.
- Hoyman, M. and Faricy, C. (2009). It Takes a Village: A Test of the Creative Class, Social Capital and Human Capital Theories. *Urban Affairs Review*, 44(3), 311–333.
- Kant, I. (1950). The Critique of Judgement. Oxford: Clarendon Press.
- KEA. (2006). *Economy of Culture in Europe*. European Commission. Retrieved from: http://www.keanet.eu/ecoculture/studynew.pdf (26.09.2013).
- Kukołowicz, T. (2012). Ponowoczesność oczami geografa. *Studia Socjologiczne*, 3(206), 163–169.

- Lombroso, C. (1891). The man of genius. London: W. Scott and New York: C. Scribner's sons.
- Markusen, A. (2006). Urban development and the politics of the creative class: Evidence from the study of artists. *Environment and Planning A*, 38(1), 1921–1940.
- Murray, P. (Ed.). (1989). Genius. The History of an Idea. Oxford and New York: Basil Blackwell.
- OED Online. June 2014. Oxford University Press. Retrieved from: http://www.oed.com/ (30.01.2014).
- Peck, J. (2007). The creativity fix. *Fronesis*, 24. Retrieved from: http://www.eurozine.com/articles/2007-06-28-peck-en.html (26.09.2012).
- Plato. (1925). Ion. In: Plato. Plato in Twelve Volumes (Vol. 9). Cambridge, MA: Harvard University Press and London: William Heinemann Ltd.
- Reckwitz, A. (2012). Die Erfindung der Kreativität. Zum Prozess gesellschaftlicher Ästhetisierung. Berlin: Suhrkamp.
- Richards, R. (2007b). Everyday Creativity and the Arts. World Futures: The Journal of Global Education, 63(7), 500-525.
- Richards, R. (2010). Everyday Creativity: Process and Way of Life Four Key Issues. In: J. C. Kaufman and R. J. Sternberg (Eds.), *The Cambridge Handbook of Creativity*. Cambridge: Cambridge University Press.
- Richards, R. (Ed.) (2007a). Everyday Creativity and New Views of Human Nature. Psychological, Social and Spiritual Perspectives. Washington DC: American Psychological Association.
- Richards, R., Kinney, D.K., Benet, M. and Merzel, A.P.C. (1988). Assessing Everyday Creativity: Characteristics of the Lifetime Creativity Scales and Validation With Three Large Samples. *Journal of Personality and Social Psychology*, 54, 476–485.
- Rubenson, D.L. and Runco, M.A. (1992). The psychoeconomic approach to creativity. *New Ideas in Psychology*, 10, 131–147.
- Runco, M.A. (1996). Personal creativity: Definition and developmental issues. *New Directions for Child Development*, 72, 3-30.
- Runco, M.A. (2004). Everyone has creative potential. In: R.J. Sternberg, E.L. Grigorenko and J.L. Singer (Eds.), *Creativity: From potential to realization* (pp. 21–30). Baltimore: American Psychological Association.
- Runco, M.A. and Albert, R.S. (2010). Creativity Research: A Historical View. In: J.C. Kaufman and R.J. Sternberg (Eds.), *The Cambridge Handbook of Creativity*. Cambridge: Cambridge University Press.
- Runco, M.A. and Jaeger, G.J. (2012). The Standard Definition of Creativity. *Creativity Research Journal*, 24(1), 92–96.
- Runco, M.A. and Richards R. (Eds.). (1998). Eminent Creativity, Everyday Creativity, and Health: New Work on the Creativity/Health Interface. Greenwich and London: Ablex Publishing Corporation.
- Silva, P.J., and Kaufman J.C. (2010). Creativity and Mental Illness. In: J.C. Kaufman and R.J. Sternberg (Eds.), *The Cambridge Handbook of Creativity*. Cambridge: Cambridge University Press.
- Simonton, D.K. (1999). Origins of Genius: Darwinian Perspectives on Creativity. Oxford: Oxford University Press.
- Simonton, D.K. (2009). Genius 101. New York: Springer.
- Thiel, J. (2005). Ambivalences of Creative Class Policies: Targeting Reflexive Labour in Creative Industries. AESOP 2005 Vienna, best congress paper. Retrieved from: http://aesop2005.scix.net/cgi-bin/papers/Show?617 (26.09.2013).
- Throsby, D. (2001). Economics and Culture. Cambridge: Cambridge University Press.
- Throsby, D. (2010). *The Economics of Cultural Policy*. Cambridge: Cambridge University Press.

- Towse, R. (2010). A Textbook of Cultural Economics. Cambridge: Cambridge University Press.
- UNCTAD. (2008). Creative Economy. Report 2008. New York: United Nations.
- UNCTAD. (2010). Creative Economy. Report 2010. New York: United Nations.
- Weekley, E. (1921). An Etymological Dictionary of Modern English. London: J. Murray. Weiner, R. (2000). Creativity & Beyond. Cultures, Values, and Change. New York: State University of New York Press.
- Wróbel, S. (2012). The Concept of Linguistic Intelligence and Beyond. In: M. Pawlak (Ed.), New Perspectives on Individual Differences in Language Learning and Teaching Second Language Learning and Teaching (pp. 115-126). Berlin and Heidelberg: Springer.