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Creating meaning. The importance of Arts, Humanities and Culture for critical thinking development

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ABSTRACT

This paper discusses the need for Arts, Humanities and Cultural Studies to be widely studied within Higher Education. Research shows that such topics are necessary for the development of critical thinking, this type of analysis being innate to these domains. In this paper, I introduce the concept of creating meaning, which I define as the link between creative thinking and critical thinking and as the first attribute of a critical thinker. Before making inferences, judgements or decisions, one must identify the framework of a problem, determine the parameters of the discussion and reflect upon assumptions. These are propaedeutic to a good discussion and are prerequisites of a good critical thinker. Arguing that creativity is not a separate process from critical thinking, I aim to demonstrate that the Arts, Humanities and Cultural Studies are the promoters of critical thinking. Because disciplines in these fields are likely to create environments that foster critical thinking and encourage the production of meaning, I argue that these necessarily belong in all curricula of Higher Education.

KEYWORDS

Creating meaning; critical thinking; critical thinking dispositions; higher education; humanities; arts; culture

Introduction

What is 'meaning'? How can we find meanings? Can we talk about 'meanings' with the same accuracy and clarity as we talk about physical objects? And, after all, is there a meaning at all? Are there as many meanings as there are people in the world? Is there common ground between meanings?

These are perennial questions and a comprehensive treatment is not in the purview of this paper. I shall argue that critical thinking cannot exist without a proper humanistic education

and without, at least, an introduction into Arts and Cultural Studies. I propose the concept of creating meaning, seen herein as the link between creative thinking and critical thinking. Creativity is seen too often as the process of making something original, but I think it is important that this is also seen as the process of producing something new. The novelty depends on the context, on the people involved and on the subject under discussion. Thus, something can be new relative to the present pool of knowledge (new to me, new to my colleague, new to my classroom). When a debate/discussion takes place, a creative process also takes place. Therefore, each time I try to understand or to explain something, I create a new meaning for me.

Creating meaning – the first of many requirements for a good critical thinker

Roger Crisp (2014, ix) shows that Aristotle in *Nicomachean Ethics* proposed four stages of arguing:

(1) deciding on the area of inquiry; (2) setting out the views of the many and the wise; (3) identifying inconsistencies therein and (4) showcasing one's personal contribution. The first and second stages require a propaedeutic, a preparation and a terminological clarification of the concept, domain and scope of discourse.

Such an approach suggests that a speaker creates and re-creates a world, based on his/her knowledge, present context, the moment of speech, his/her cultural and historical background, as well as the cultural context within which the discussion is taking place. In other words, every time we formulate an opinion, we are in effect creating a view of the world. If the debate comprises a multitude of participants, the group forges new understandings of the concept under discussion.

A similar theory is developed by Lipman (1991) and Wenger (1998), who discuss communities of inquiry. The pool of knowledge accessed depends on the members of the group or the community engaged in discussing a theme. It follows that the common pool of knowledge of the community is directly linked to the participants in that community at a certain point in time. Further, the decision about what to discuss or to research is determined by the people in the community. The puzzles that are discovered, in Crisp's words, are also linked to the knowledge of the contributors. The community should be discussed both in a narrow sense and in a broader way.

Narrowly, a community of inquiry can be defined as a small group discussing the theme or setting the parameters of a project. Broadly, a community of inquiry can be a large, geographically dispersed group of people, all of whom are interested in the same topic.

Participation within a community of inquiry comprises different levels of involvement, which correlate to each individual member's level of expertise (expert, novice and so on) (Dumitru 2012). In a broader sense, the concept of community of inquiry can be subsumed under the concept of a community of practice (Wenger 1998), the principal aim of this kind of group being the forging of new knowledge and the sharing of experience.

As meaning is dependent upon the people involved in its creation, to ensure the production of coherent meanings, we must prioritize the teaching of proper tools for the creation of meaning. In order to do so, we must first answer the following question: how can we nurture a critical thinker in the spirit and with the awareness that he/she is also a creator?

From a different perspective, the present paper also tries to shed some light on the definition of critical thinking (CT) and its place in the world and in everyday life. Currently, there are two ways of conceptualizing CT's place within higher education disciplines: one that states that CT is general, universal and thus transferable from one domain to another. Another that says that CT is domain-specific and, as such, not transferable. However, the general belief today among Higher Education (HE) teachers is that CT is beneficial to their students and CT will make them more competent in their domains. In order to make headway within this debate, we must begin by defining the concept of 'domain' and by identifying domain boundaries. A second step entails the definition of 'transfer' and 'transferability'.

Do such things exist? Or are they pedagogical artifices? R. Ennis (1989) gives a hint of how a domain should be defined, arguing that the specificity of a domain should be judged epistemologically, empirically and conceptually (Ennis 1989, 4–10). This claim engenders yet another question: if CT is not universal, should we develop as many CTs as there are domains?

The answer to this second question is more complicated and depends on our current understanding of critical thinking. The theory that I am espousing is one developed by Peter Facione (1990), according to which the definition of CT includes, in addition to the skills of critical thinking, a concept identified as a disposition toward critical thinking (a concept to be discussed in the next section). This means that CT is a complex psychological reality, which becomes a trait of certain personalities and takes years to develop.

Returning to my main point, I argue that there is no better way of nurturing the disposition towards critical thinking than through a study of the Arts, Humanities and Culture.

Thus, learn Philosophy because it represents the embodiment of critical thinking. Learn Literature because it teaches interpretation, analysis and analyticity. Learn History because you will learn inquisitiveness and evaluation. Learn Archaeology because you will develop truth-seeking and systematicity. Learn Arts because you will find open-mindedness, self-confidence and cognitive maturity. Take Cultural Studies and you will have explanation, self-regulation and open-mindedness.

All these disciplines encourage the development of CT skills and dispositions. Thus, critical thinking is innate to Humanities, Arts and Culture and these domains contribute decisively to nurturing the critical thinker.

Concept, theory, reference and history

There is a variety of CT definitions used today but we should never forget the history of critical thinking, which is part of Philosophy.

If we were to situate the beginning of critical thinking, it would be in Ancient Greece, in Plato's *Dialogues* (e.g. *The Republic*, 2007) where Socrates is the main character. Aristotle came to complete the beginnings of rationality in its critical form.

In the Middle Ages, in his famous work, *Summa Theologica*, Thomas Aquinas (1981) wanted his reasoning to meet all the requirements of the critical thinking, to be always systematically presented and to always answer the criticisms of the ideas which are put forward.

In France, René Descartes wrote what could be called the second book of critical thinking, a lesser known, incomplete and posthumously published work, *Regulae ad directione ingenii* (Rules for the

Direction of the Natural Intelligence 1619–1628, 1998). In this work, Descartes demonstrated that reasoning on a subject must be systematically disciplined.

In the sixteenth and seventeenth centuries, Thomas Hobbes and John Locke developed what might be called 'critical attitude'.

Immanuel Kant (1999) wrote the Critique of Pure Reason, in which critical thinking examines itself, its powers and limits. This is one of the most significant works of Philosophy. We can continue the debate on critical thinking in the twentieth century because this was the most prolific period for defining this concept due to the works of the era. John Dewey ([1909] 2012) showed us the instrumental side of critical thinking in relation to the aims, objectives and targets than we plan to reach. Ludwig Wittgenstein (1998) showed us the necessity to take into consideration the importance of these concepts for human thinking, as well as the necessity to evaluate their limits and powers in terms of the quality of thought itself.

Nowadays, there are many works with titles such as Critical Thinking or Argumentation or Informal Logics. Our era has further clarified the concept and its utility beyond the ancient, modern and enlightenment views presented above. Thus, critical thinking has become critical of itself.

The modern concept of critical thinking is outlined by the philosopher, psychologist and educator John Dewey. In his book, *How We Think* (1909; as in Stoianovici 2005), he suggested the term of *reflective thinking*. He describes this concept as the active, attentive and perseverant consideration of an opinion or any form of knowledge in the light of the proofs they support and the conclusions they wish to ground (Dewey 1909; as in Fisher 2001, 2). The next generations of authors, including contemporary ones, are the brain-children of Dewey's work. They are philosophers, educators, or other researchers interested in CT development.

The concept of critical thinking which is quite enlightening, is the framework developed by Peter Facione (1990). This framework is the result of an initiative, later referred to as 'the Delphi project', financed by the American Philosophical Association. This aimed at bringing consensus on the concept of critical thinking among CT experts from various domains. The report of the project stated the following concerning CT – namely that critical thinking is the process of purposeful, self-regulatory judgement, attending to the evidential conceptual, methodological, criteria-related or contextual consideration upon which that judgement is based (Facione 1990, 2).

The Delphi panellists (Facione 1990) describe CT as a set of skills and dispositions. Analysis, Interpretation, Evaluation, Inference, Explanation, Self-regulation are the dimensions of CT as a skill set. The Delphi Project experts claim that thinking critically is not the equivalent of thinking correctly. The person who builds an argument is imbued with this content because something motivates him/her to argue one way or another. He/she has a certain purpose and affectively relates to the content being used and also to the adopted position.

We can consider this as proof of the fact that critical thinking is both a complex of high-level cognitive skills and a complex of affective and motivational dispositions, intrinsically bound to a cognitive and rational cluster. The Delphi panellists call this reality the disposition to think critically and it has several dimensions: truth-seeking, open-mindedness, analyticity, systematicity, self-confidence, inquisitiveness, cognitive maturity (Facione 1990).

Modern works about CT include empirical research along with theoretical developments of the concept. We can find useful papers or books about the benefits of taking Art classes or Humanities classes on CT skills or dispositions. In the following section, I shall briefly present some significant works to demonstrate this claim.

Empirical studies: a brief review

Critical thinking and the arts

Being a student in an artistic domain (such as Fine Art, Music or Literature) has a direct impact on critical thinking skills and, especially, on its dispositions. In the Visual Arts, arguing why a work of art is a masterpiece requires interpretation skills, explanation, analysis and a proper motivation to engage in such a process with support from a refined sensibility.

The missing link between Art and CT is, probably, creativity (or creative thinking). As stated in Diane's Halpern book (2013), creative thinking has to be a part of extensive CT papers, like books and monographs. Art theory discusses whether artistic emotions are related to subjective or objective facts. Does beauty really exist as an ontological entity or is it merely fictitious? Is this a reality which we all agree upon? Or there is an objective reality that produces beauty and everybody can see this objective beauty in a painting? cf. W. Hogarth (1909, retrieved from

<https://ia902706.us.archive.org/6/items/analysisbeauty00hogagoog/analysisbeauty00hogagoog.pdf>).

This is the breaking point of CT and Art. Is fact-checking, truth-loving critical thinking relevant for an artistic mind? The process of creating the meaning is creative as much as it is critical. One paper showed that there is a link between CT and Art criticism (or Aesthetics). Findings from a survey conducted in three Malaysian public universities revealed that less than 30% of the undergraduate Art students were able to critically analyse works of art. Studies show how Aesthetics, which is the specific competence for assessing the nature of beauty, also improves CT skills. So, surprisingly, there is no clear demarcation of which action influences the other (Noor and Samsudin 2016).

The dispositions of critical thinking can be an outcome of Art education, meaning that undergraduate students in Art have increased scores on CCDTI (California Critical Thinking Disposition Inventory, Facione and Facione 1992) in comparison to non-Art students regarding truth-seeking, maturity and open-mindedness (Lampert 2006, 215–228). There is no mention of teaching methods or the fact that CT may improve actual artistic skills. Lampert says that the literature on education and critical thinking indicates that an inquiry-based curriculum promotes gains in critical thinking.

Similarly, learning in Art-related domains is largely inquiry-based. The results show that the exposure to learning in this field positively influences students' disposition to think critically. The 2016 World Economic Forum stated that this disposition is an important element of educating for the needs of the twenty-first century. Thus, modern Higher Education pedagogies should promote teaching that stimulates this outcome.

Ulger (2018) conducted an experiment with Art students by testing a problem-based learning (PBL) programme for the development of both creative thinking and critical thinking dispositions. PBL had a significant effect on creative thinking but critical thinking dispositions had lower levels of improvement. According to the author, one possible explanation is that this study used open structures for learning activities as a non-routine problem-solving process to develop creative thinking (Ulger 2018, 1). So, the programme was not calibrated to develop CT dispositions.

As another example, painting can help students in the Health Sciences to improve their CT skills because creative artists use critical thinking when they paint (Velde 2008). The assumption is that all students, whatever their subject, can improve their CT skills by taking Art lessons with a certain purpose in mind such as analytical discussion or self-reflection.

Sometimes the concept of 'critical thinking' is just critical dialogue or analytical thinking. A 2014 study involving Art and critical dialogue argues that Art-related fields can complement verbal dialogue through their ability to transcend verbal language barriers to allow previously silenced narratives to be articulated and to encourage people to think critically about themselves, humanity and the world (Knight 2014, 77).

S.V. Chappell and D. Chappell (2016) describe how counter-narrative Art-based inquiry projects can build critical thought and social inclusion. They prove that 'public performance installations created by graduate students in elementary and bilingual school programmes that focus on the needs-based and dignity-based rights of bilingual families' and 'visual and performance Art pieces about historical colonial practices in world history created by undergraduate theatre students' are good for developing critical thought. We can consider this to be the equivalent of CT.

In the field of Music, Lenore Pogonowski (1989) thinks that dialogues which involve students in the analysis process can help them become better listeners and musicians. In an exploratory study, Kilic, Yazici and Topalak describe the critical thinking dispositions of Music teacher candidates using variables such as age, gender, secondary school type, daily TV viewing frequency, parental attitudes and frequency of book and newspaper reading. We find out that 'the critical thinking disposition of the study group varied considerably based on book and

newspaper reading frequency' (Kilic, Yazici, and Topalak 2017, 185). Plus, female students' self-efficacy scores were significantly higher than those of their male colleagues. All the artistic domains involve the area of 'criticism'. Although there is no specific concern about CT as defined in the first part of the article, this is frequently addressed though different terms – for example, 'critical analysis' (Subramaniam, Hanafi, and Putih 2016), 'critical inquiry' (Tucker 2007) or 'Art appreciation' (Hurwitz 1994).

During this research, I could not identify any intervention, empirical study, regarding CT and Art Critics. Specific contemporary CT definitions have never been compared with the established principles of critical theory in these fields, especially in empirical studies.

Critical thinking and the humanities

The domain called the Humanities is vast. Humanistic approaches can be found even in interdisciplinary contexts like 'medical or health humanities' (Kookan and Kerr 2018; McCaffrey 2016; Macneill 2017; Liao and Wang 2016). The recent development of this domain is 'to provide more humanizing medical care' (Liao and Wang 2016). Humanistic approaches claim to enhance critical thinking skills. Liao and Wang (2016) try to prove this point in their quasi-experimental study. It demonstrated that the application of heterogeneous cluster grouping for reflective writing related to Medical Humanities and Literature studies enhances students' empathy, critical thinking and reflective writing skills. Humanities and critical thinking are brought together to make a better HE curriculum (Rubin 2013).

Although the syntagma 'critical thinking' appears in the same paper with Literature, we see that there is little connection and little understanding of CT in terms of how this concept is defined by Facione. For example, an article by Lyubomirov (2017) considers 'the poet as critic' and 'the problem of the place of literary criticism'. This develops the thesis that we should follow the principle 'from author to author' so we can differentiate the thematic-problematic circle: biography – critical arguments of the author – literary text. But there is no reference to the modern concept of critical thinking.

We cannot say definitively if Literature enhances critical thinking. However, we can say that the use of literary texts may be useful both in developing reading skills and also in encouraging learners to become more critical (Gilroy and Parkinson 1997). For example, in analysing characters, students become more critical not only in the way they perceive the characters in the texts they read but also, more critical of themselves at the same time. The process of negotiation of meaning in which students learn to view and understand others' perspectives may assist them to become critical thinkers (Paul 1998; Ruggiero 2001).

Literature is viewed as a catalyst. In his article, Prinsloo (2018) aims to determine how four disciplinary groups of students responded to Literature (notably short stories as supplementary reading) where there was no apparent pedagogic purpose explicitly assigned. The study is exploratory with a sample group of 55 students from the Arts, Music, Engineering and Science. The results have implications for the transferability of CT skills and for distinguishing among different patterns of thinking related to the disciplines. The students

from all disciplines demonstrated homogenous thinking patterns when positive critical evaluations were made. Cross-disciplinary homogenous thinking pairing occurred when disciplines conducted negative critical evaluations (2018, 147–159). What this may mean is ‘that hard-pure and applied and soft-pure disciplines seem to make a positive evaluation based on similar thinking patterns’ (Prinsloo 2018, 155). The consequence is that the medieval distinctions between Science/Engineering fields and Liberal Arts and our contemporary typology of hard and soft disciplines are challenged by the patterns of thinking identified in this study. Hence, the comparison through Literature between Art and Music students on one hand, and Science and Engineering students on the other hand, revealed similar critical thinking patterns between them (Prinsloo 2018).

In an experimental study involving the play *Othello* carried out at the International Islamic University in Malaysia, the experimental group was exposed to text analysis using a concordancer, while the control group analysed the text manually. The Cornell Critical Thinking Test was used as the assessment instrument. The finding was that the background, characters and their motives are among those that invite critical inquiry and interpretation (Daud and Husin 2004, 477).

Digital storytelling is a new field in Literature and we owe the birth of this domain to the omnipresence of Information Technology. Yang and Wu (2012) are demonstrating its relationship with CT through an experimental design. CT is better if it benefits from a digital storytelling course in comparison to a lecture-type course with textbooks and power-point presentations.

‘Explicitly teaching critical thinking skills in a History course’ (McLaughlin and McGill 2017) is a paper where pre- and post-test research was conducted. The authors investigated the effects of a History course on epistemically unwarranted beliefs in two class sections. The courses were *Frauds and Mysteries of History* (an Honours seminar of the same course) and a control course for comparison entitled *Psychology Research Methods*. Beliefs were measured pre- and post-semester. The History classes were taught using explicitly CT content and they directly debunked false beliefs. Beliefs declined for History students compared to the control class (*Research Methods*) and the effect was strongest for the Honours History section (students with a mix of majors trending towards Science and Engineering, with a 1300+ SAT score on critical reading and math or 3.75 unweighted GPA from high school). The authors argue that a Humanities education produces critical thinking. The study has shown that critical thinking skills can be taught via a non-science course (History), resulting in a reduction in pseudoscientific and paranormal beliefs. This effect was strongest for beliefs directly addressed by the course but transferred to other beliefs.

Most of CT theoretical papers or books are written by philosophers. Philosophy is the origin of CT and takes its identity from this field. But we do not have a great deal of empirical research that puts together CT and Philosophy except for one paper, ‘Does College Teach Critical Thinking? A Meta-Analysis’ (2016), where Christopher Huber and Nathan R. Kuncel conclude that there is no difference among major subjects (including Philosophy) with regard to CT skills after college. But, in an unpublished Master’s dissertation by Ortiz (2007),

Philosophy students have the biggest gain in CT skills after college. However, this sample size was very small, consisting of only six items. And I quote from Ortiz's paper:

There are also some indications in the findings of the thesis that both specifically what is taught (Logic, for instance, as compared with Philosophy subjects less directly concerned with reasoning skills in themselves) and how this is taught (Keller Plan or LAMP) are the crucial considerations. This should not seem at all surprising, of course. Its implications, however, are that claims for efficacy in teaching CT should be confined to very specific subject content and teaching methods, not to broad disciplines or, indeed, disciplines as such, independent of the approach to teaching them. (Ortiz 2007, 90–91).

Critical thinking and culture

This section tries to show the influence of culture on critical thinking in international educational contexts.

In the paper of Lun, Fischer, and Ward (2010), we find that cultural differences affect critical thinking performance. The study compared Asian and European students enrolled in New Zealand universities. The results showed that New Zealand European students performed better than Asian students for two objective measures of CT skills. English proficiency, but not dialectical thinking style, could at least partially, if not fully, explain these differences. The results also indicated that Asian students tended to rely more on dialectical thinking to solve critical thinking problems than did their European counterparts. In a follow-up data analysis, the authors showed that, after controlling for the effects of English proficiency and general intellectual ability, students' critical thinking predicted their academic performance. But this correlation did not vary as a function of students' cultural backgrounds or cultural adoption.

Exploring the same pathway, Chiu (2009), when seeking to enhance the CT skills amongst Asian university students, found that this group apparently had a negative disposition towards critical thinking compared to their Australian counterparts (Tiwari, Avery, and Lai 2003).

The mobility of international students and an increasingly diverse student population justify the need for more inter-cultural studies, not only regarding CT but also for other psychological dimensions.

Better pedagogical training for teachers at both Higher Education and at school levels should provide a multi-cultural perspective on these psychological issues.

Employability and critical thinking

The empirical studies previously evoked illustrate some concrete aspects of the relationship between CT, the Arts and the Humanities. But it is also essential to ascertain the opinion of employers with regard to critical thinking skills and dispositions. Do they know what CT is? Is CT important? What do they look for when hiring someone?

A recent study shows that 'for professionals, an ideal 'critical thinker' employee demonstrates a well-cultivated mind-set, fed by a natural motivation and willingness to learn and improve and anchored in a set of interdependent cognitive and propensitive tools allowing him/her not only to anticipate and be ready for any situation, but also to regulate and monitor his/her own thinking and behaviour during the process' (Dominguez 2018, v).

This profile speaks for itself that only through many years of Humanities and Arts-related education can one be a good employee. Understanding, in a History class, political decisions and facts that happened hundreds of years ago, being emotionally affected and reflecting for days about a book or a play, arguing in a debate class, describing and analysing a novel's main character or explaining why a painting is beautiful will not provide a job, per se. But these intellectual exercises will make a person a better thinker and that can lead to being recruited and performing well in a job which requires these skills and attitudes.

Flexibility, open-mindedness, truth-seeking and cognitive maturity will make a person successful to his/her job. The Arts and Humanities have the potential to exert the greatest influence on a person's capacity to create meaning, which is the link between CT and creativity.

Conclusions

In the Arts and the Humanities, the specific critical attitude for each of these domains builds up to a more general CT skill. Creating meaning, the propaedeutic to any debate, comes only from a Humanities and Arts-related education. Participation in a wider community of inquiry comes only after this type of education has succeeded in refining personality and bringing maturity into cognition.

One might think that this article implies that CT is 'domain free' and a general competence. Not quite. If one wants to be a soccer player, he/she should train the legs as a first step. But he/she also needs general physical training to develop stamina, increase lung capacity and strengthen cardio health. Analogically, one needs a specific education to acquire CT skills in a particular domain and also more general training which aims to acquire CT dispositions. These help the person to progress towards the creation of meaning. In his article 'Critical Thinking. Why is it so hard to teach?' D. T. Willingham (2008) explores how students acquire a specific type of critical thinking-namely, thinking scientifically. This expert states that 'critical thinking is not a set of skills that can be deployed at any time, in any context. It is a type of thought that even 3-year-olds can engage in – and even trained scientists can fail in. And it is very much dependent on domain knowledge and practice' (Willingham 2008, 22).

Disciplines in these fields (namely, the Arts, the Humanities and Culture) are apt to create environments that foster critical thinking and encourage the articulation of meaning. In this essay, I have endeavoured to argue that these competences should belong to all domains of the Higher Education curriculum.

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