

*Literature and Art as Cognitive Objects*

**From a Poetics of Language to a Poetics of Action**

**Patricia Kolaiti**

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Classes, sets and categories of entities as well as lexically encoded concepts will be indicated in small capitals (e.g. ARTWORK). Newly created ad hoc concepts and novel mental representations of objects will be represented in small capitals followed by asterisk (e.g. TREE\*, TREE\*\* etc). The first use of technical terms will be represented in italics. The feminine gender pronoun (she, her, hers) will be used as the generic when the subject is unknown.

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## Introduction

Literature and art is not a body of objects out there in the world.<sup>1</sup> That is what artworks are. The equation of ART with ARTWORK, and of LITERATURE with LITERARY TEXT, is an arbitrary and reductionist move that dominated the entire 20<sup>th</sup> century, forming the nucleus of the formalist and structuralist venture. Literature and art is an action, a unique and distinct human action that brings artworks into being.

What makes literature and art the distinct and unique kind of action it is? And what makes artworks and literary texts the distinct kind of *objects*<sup>2</sup> they are? In linguistics, literary theory and philosophy of art, this question has come to be known as the question of *literariness* or *arthood* or *essence of art* i.e. a question about the property (or properties) that make a certain object an artwork.

For nearly three centuries, linguists, literary theorists and philosophers of art have tried to answer this question by moving back and forth between the two ends of a continuum: from the artwork itself to its reception, then back to the artwork, and back to the receiver. One of the most serious 20<sup>th</sup> century attempts to answer this question arose out of early work in structural linguistics. Inspired by breakthroughs in linguistic science and parallel developments in the fine art world of the time, early 20<sup>th</sup> century theorists defended an influential idea that in Kolaiti (2019) I have referred to as the *poetics of language hypothesis* or *the distinct language of literature hypothesis*: they treated the literary text as a deviation from the ‘norms’ and ‘canon’ of ordinary language, and assumed that what makes a literary text distinct from an ordinary linguistic object is significant or deviant linguistic form and

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<sup>1</sup> The cognitive account developed in this book represents a unified cognitive theory of literature and art. I will therefore adopt the convention of talking about ‘literature/ art’, ‘literature and art’ and the ‘literary/ artistic’, using the singular rather than the plural to refer to them, often separating them by a forward slash and occasionally using just the term ‘art’ to refer to both of them, to indicate that I treat ‘literature’ and ‘art’ as interchangeable terms. As my account will show, a unified cognitive theory of the ontology of all artforms is both entirely feasible and theoretically desirable. The fact that human natural language is a conceptually nuanced communicative medium has traditionally led theorists to the assumption that literature should be treated separately from other non-linguistic forms of art (see, for instance, Tilghman 1984: 123-124). However, this segregation along with the ‘division’ of intellectual labour it implies can be held responsible for various theoretical losses for both the literary-theoretic and art-philosophical camps over the last century. So my approach not only brings all artforms under the same cognitive account but also implicitly defends the methodological need for close interdisciplinary collaboration between literary-theoretic and art-philosophical domains.

<sup>2</sup> You will notice that in this book I will be using the word ‘object’ quite often. When I speak of an ‘object’ here, I use the term in a broad construal, meaning simply something along the lines of ‘an entity out there in the world’ that might not necessarily be a tangible or concrete object, so to speak. In this broad construal, a performance is as much an ‘object’ as, say, a literary book. So, although I will be referring to literature and art as an ‘object’, I do not take this to imply an artifactual or medium-specific view of literature or art.

structure. The poetics of language was an artifact-oriented account in the sense that the property or properties that make a literary text distinct from an ordinary linguistic object were attributed to artifactual aspects of the literary text *per se*. If the poetics of language hypothesis had been correct, it would have shown that what makes an artwork essentially distinct from a 'mere thing' is some deviation at the artifactual and more specifically, formal and structural level. The most ambitious attempt to defend this programme in structural linguistic terms was Jakobson's 'Closing statement in linguistic and poetics' (1958/ 1996). However, founded as it was on assumptions which seemed increasingly lacking in psychological plausibility, this programme eventually collapsed under the weight of psycholinguistic, pragmatic and philosophical arguments showing that the formal and structural distinctness of literature (and subsequently, art) cannot be reasonably defended.

The failure of attempts to show that artworks and literary texts are formally and structurally distinguishable from other objects has been taken to show that there is no distinct essence of literature and art. In the second half of the 20<sup>th</sup> century this assumption in turn gave rise to a range of anti-essentialist approaches (for instance, receiver-oriented accounts such as reader-response criticism (e.g. Fabb et al. 1987; Fish 1980; Holland 1968), reception theory (e.g. Holub 1984) and cognitive poetics (e.g. Gavins and Steen 2003; Tsur 2008), and institutional approaches that focus exclusively on the historical and cultural aspects of literary and artistic transmission (e.g. Danto 1981; Dickie 2000; Levinson 1979, 2002): these approaches are underpinned by the assumption that any distinction between art and non-art must be largely audience-dependent and sociological.

This book takes a radically new approach to this long-standing issue. It argues against the binary oppositions proposed by existing artifact-oriented and receiver-oriented approaches and sets out a novel theory that shifts attention to the mind-internal reality of human creators. Inspired by the Chomskian cognitive perspective and cognitivist approaches to human natural languages, the book focuses on the mental activities of the writer/ artist and the characteristic action-process these activities bring about, and goes on to claim that literature/ art has distinct cognitive rather than linguistic properties. This line of investigation shifts attention away from the artifactual properties of the artwork/ literary text and its structural/ linguistic make-up and towards literature and art as a case of human agency: the essential distinctness of literature and art can be fully defended and it is of a cognitive rather than a linguistic nature. What distinguishes works of literature and art from other objects, I will suggest, is not their internal formal or structural properties or socio-cultural and reception-related aspects but their cognitive history: artworks and literary texts are causally

related to an art-specific type of spontaneously caused, complex and relevance-yielding mental state/ process involved in their creation, which I have termed an *artistic thought state/ process*. This latter approach puts the artist/ creator at the centre of theoretical attention and points in the direction of a novel *mentalistic* or *internalist* or *cognitivist* theory of literature and art as a *cognitive object*.

Artistic thought states/ processes are psychologically and metaphysically real entities. They are the minimal components of the cognitive engineering that enables literature and art as a distinct and unique human action and therefore, the minimal components of the cognitive infrastructure that made possible one of the most successful and enduring human public cultural representations. Existing cognitively-oriented studies assume that there might be a set of cognitive features or processes which are characteristic of literature and art as an output of the human mind without themselves being uniquely artistic or literary (e.g. Cave 2016; Currie 2004; Gavins and Steen 2003; Gibbs 1994; Hogan 2003b; Turner 1996, 2006). This view is rather uncontroversial and involves a somewhat weak variety of a *poetics of mind*. The present book champions a more radical version of a poetics of mind: my claim that artistic thought states/ processes are art-specific states/ processes which render literature and art a distinct type of human action and most probably amount to special evolutionary adaptations or exaptations of a certain kind favours a rather strong construal of what cognitivism amounts to for literature and art, and perhaps the strongest version of cognitivism available in existing cognitively-oriented literary and art study. In Chapter 4, I will signify my departure from weaker versions of a poetics of mind by referring to this more radical construal as *the poetics of action*.

The idea that artworks and literary texts are causally linked to such art-specific mental states/ processes can help to eliminate pervasive taxonomic confusions in the philosophy of art, motivate new research initiatives and offer solutions to intriguing ontological puzzles and instances of the problem of indiscernible objects or ‘twin events’:<sup>3</sup> what is it that distinguishes mere urinals and Duchamp’s *Fountain*, mere Brillo Boxes and Warhol’s *Brillo Boxes*, a stretch of ordinary discourse and the same stretch of discourse when quoted verbatim in a poetry book as ‘found text’, a genuine artwork and a perceptually indiscernible perfect forgery, an artwork by a neurotypical creator and one by a neuro-atypical artist with autism, a contemporary artwork and a prehistoric one? Are the moai artworks?<sup>4</sup> And if a

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<sup>3</sup> The term ‘twin-event’ is an alternative name for a set of two indiscernible objects.

<sup>4</sup> The moai are monolithic human figures with overly large heads about three-eighths the size of the whole statue carved by the Rapa Nui people on Easter Island between the years 1250 and 1500.

ready-made is accidentally broken, can it just be replaced by another token of the same type, or is the 'original' artwork inadvertently lost? In some of these ontological puzzles the aim is more to enable an entirely new way of breaking free from three hundred years of circularity and binarism, and much less to provide a conclusive and definitive answer. But new ways of thinking often give rise to new types of research programmes and initiatives, and this is perhaps one of the key epistemological contributions of this book: it lays the foundations for a new cognitively-oriented research venture for literature and art in the 21<sup>st</sup> century, with wide interdisciplinary implications.

A second major epistemological implication of the idea that artworks and literary texts inherit their essence from being the causal outputs or descendants of art-specific mental states/ processes is that a long overdue type of ontology is enabled in philosophy and metaphysics: a cognitive ontology, in which cognitive essences may start claiming their place in the natural world alongside structural, chemical or biological ones. My analysis embeds cognitive ontology within the broader epistemic framework of the cognitive revolution and the Chomskyan 'cognitive perspective' and argues for the theoretical necessity of cognitive essences in a mind-ful world.

One other major epistemological implication of the idea that literature and art is a distinct human action enabled by dedicated cognitive machinery is that literature and art is a *natural object*. Literature and art as an intra-individual occurrence caused by a particular type of mind-internal efferent activity is a natural object amenable to *naturalistic* investigation in line with the methods of the natural, cognitive and life sciences. In discussing the naturalistic approach to the domain of linguistics, Chomsky (2000: 106) suggests: 'A naturalistic approach to linguistics and mental aspects of the world seeks to construct intelligible explanatory theories, taking as 'real' what we are led to posit in this quest, and hoping for eventual unification, not necessarily reduction, with the 'core' natural sciences'.

Broadly speaking, the naturalistic approach is aiming at three key methodological claims:

*Empirical testability*, i.e. articulation of testable claims and hypotheses, compatible with the scientific method, amenable to confirmation or disconfirmation and supported by empirical and experimental evidence.

*Explanatory adequacy*, i.e. articulation of a systematic body of explanations of how regularities or states of affairs come about, with a focus on causation and generative processes.

*Psychological realism*, in the sense that the claims made must correspond to empirical findings about the mechanisms that the human mind/brain actually deploys.

My model of literature and art as a cognitive object represents a cognitivist and naturalistic account that aims to fulfil all three methodological claims. From this perspective, the present book can be seen as an integral part of a new and expanding area of scholarly investigation that is often referred to as the ‘Naturalist’ or ‘Cognitive’ turn in literary and art study (see Cave 2016; Currie et al. 2014). At least two major interdisciplinary UK research projects related to this turn have received funding from prestigious sources in the last decade: the Balzan project on ‘Literature as an Object of Knowledge’, St. John’s College, Oxford funded by the Swiss Balzan Foundation and ‘Philosophical Aesthetics: the challenge from the sciences’, University of Nottingham funded by the UK Government’s Arts and Humanities Research Council (AHRC). Also, in 2012 the AHRC supported the Cognitive Futures in the Arts and Humanities interdisciplinary conference and international network, bringing together scholars from the Arts and Humanities whose work interacts with the cognitive, brain and behavioural sciences. The steadily increasing number of literary and art-theoretical publications with an empirical and cognitive orientation (e.g. see Anderson 2015; Armstrong 2014; Austin 2011; Blair 2007; Bolens 2012; Bortolussi and Dixon 2003; Bracher 2014; Burke 2011; Cave 2016; Cave and Wilson 2018; Cook 2010; Crane 2001; Currie 2004, 2014; Currie and Ravenscroft 2003; Hogan 2003ab, 2011ab, 2013, 2016; Lyne 2014; McConachie 2011, 2013; McConachie and Hart 2007; Richardson 2001, 2010; Savarese 2015; Schneider 2013; Spolsky 1993, 2007; Turner 1996, 2006; Young 2010; Zunshine 2006, 2012, 2015) suggests a more favourable context compared even to the recent past for bringing the universal cognitive aspects of literature and art into focus.

The ‘Naturalist’ or ‘Cognitive’ turn did not of course emerge out of the blue in the 21<sup>st</sup> century, but has a number of intellectual precursors. Since the early 1970s, reader-response criticism, reception theory, cognitive poetics and the psychology of the creative eye have put the mental states and processes of the receivers of artworks on the literary-theoretical and art-philosophical table.<sup>5</sup> By setting out to investigate the receiver’s role in literary and artistic interpretation and the active contribution of the audience in the ‘co-creation’ of works of art, these early endeavours introduced the mental representations and affective attitudes of the receiver into the established conventions of art-theoretical and

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<sup>5</sup> See mainly the work of Hans-Robert Jauss (1982 ab), Norman Holland (1968), Peter Hohendahl (1977), Robert Holub (1984, 1992), Roland Barthes (1970), Rudolf Arnheim (1969, 1974, 1988), Stanley Fish (1967, 1980) and Wolfgang Iser (1978).

critical practice and stood in partial opposition to the medium-oriented legacy of 20<sup>th</sup> century formalist and structuralist models. A more decisive and explicit early cognitive endeavour must be credited to the critical school of cognitive poetics and stylistics.<sup>6</sup> From the late '70's to the present day, drawing mainly on cognitive linguistics, cognitive psychology and neuroscientific research on perception, cognitive poetics and stylistics has formed a well-established domain of literary-critical practice in which close textual analysis is informed by a diverse range of mind-internal events such as schemas, frames, scripts, foregrounding, mental prototypes, embodied cognition etc., which have been empirically investigated in the cognitive sciences. The common denominator in most of these early cognitive endeavours is that they were focused almost exclusively on critical practice (e.g. close literary text analysis), involved direct application of an existing cognitive model to the analysis of artworks and literary texts, and were receiver-oriented.

The way cognitivism is pursued in the present book departs from this tradition in a number of theoretically and epistemologically crucial ways. My account of literature and art as a cognitive object is not just another attempt at critical practice, but represents what I would describe as robustly theoretical, highly up-to-date, empirically and cognitively aware literary and art-theoretical naturalistic discourse. Second, my account does not involve transfer and application of an existing theoretical model from a linguistic or cognitive domain to the philosophy of literature and art (e.g. application of relevance theory, or application of simulation theory, or application of extended 'theory of mind', or something along these lines) but rather fleshes out, develops and articulates a novel theoretical model from scratch. Last but not least, the model I propose puts the creator/ artist at the centre of attention, and is therefore among the first systematic and empirically testable *action-based* and *creator-oriented models* in existing literary-theoretical and art-philosophical discourse.<sup>7</sup>

The methodological and epistemic foundations required for the cognitive venture I attempt in the present analysis are in fact articulated in my first philosophical monograph *The Limits of Expression: Language, Literature, Mind* (Kolaiti 2019), an epistemological book 'masked' under the pretext of a theoretical treatise on the so called 'prison house of language'. There, I explore in detail the possibility of a methodological merger between the literary and art study and the empirical, cognitive and life sciences, and argue not only in

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<sup>6</sup> See for example see Brône and Vandaele 2009; Crisp 2003; Emmott 2003; Freeman 2002; Gavins and Steen 2003; Gerrig 1993; Kuiken, Miall and Sikora 2004; Miall 1988, 1989, 2006; Semino and Culpeper 2002; Stockwell 2002ab, 2007 and Tsur 2002, 2008.

<sup>7</sup> In Chapter 2, I will discuss in detail my intellectual precursors in terms of implicit or explicit theoretical focus on the creator/ artist.

favour of a naturalised literary and art theory but more broadly for a naturalised and genuinely interdisciplinary Arts and Humanities.

To my mind, a naturalised literary and art study is also and potentially a genuinely interdisciplinary literary and art study, which will seek not only to draw on but also to affect hypothesis formation in the empirical and cognitive paradigm. Interdisciplinary practices in recent decades usually treat interdisciplinarity as a unidirectional game without thinking whether literary and art study should or could give something back to empirical domains. Literary and art scholars have been mostly concerned with the question of how theories about mind and language can contribute to our understanding of literature and art but not the other way around, while attempts to reverse this question and explore what humanistic disciplines could offer the sciences have been infrequent and dispersed (e.g. Burke and Troscianko 2017; Hogan 2003a; Richardson 2010; Turner 2006). Hogan's work, for instance, is among the first attempts that point tentatively towards a two-way interdisciplinary potential: in *What Literature Teaches Us about Emotion* (2003a), Hogan integrates insights from literature with work from empirical domains such as neuroscience and psychology with the two-way aim to contribute to the ongoing interdisciplinary research in emotion; in *The Mind and Its Stories: Narrative Universals and Human Emotion* (2011a), he treats literature as an ignored vast body of data that bears directly on the study of human emotion and its cross-cultural universality. These attempts, however, have not so far steered either a paradigm shift or systematic pursuit of two-way research endeavours. As a result, interdisciplinary research in literary and art study has had little impact on empirical and cognitive enquiry. In Kolaiti (2019) I make a methodological claim for genuine or two-way interdisciplinarity and an epistemologically robust literary and art study that will revise its paradigm-specific investigative practices, so as to make decisive backward contributions to scientific theory formation in the empirical and cognitive sciences. Literature and art is not an *autonomous* object, and the same can be said for most if not all investigative objects in the Arts and Humanities. The non-autonomy of literature and art as an investigative object can be interpreted in two possible ways: first, literature and art cannot be investigated by one discipline alone without being seriously diminished. Second, the investigation of the distinct and at the same time non-autonomous object that literature and art is should help highlight issues and questions in pertinent interdisciplines in a way no other investigative object can. If nothing else, this realisation should be good enough grounds for re-instilling ambition in a naturalised literary and art study to pursue two-way effects on scientific theory formation through the unique vantage point of its non-autonomous investigative object.

The proposed book aims to build momentum for two-way interdisciplinary practices: it is equally concerned with how our understanding of literature and art can contribute to theories of mind and language, and hopes to offer a tangible example of a two-way interdisciplinary relation in which literary and art study can not only draw on but also seek to affect pertinent scientific enquiry. My discussion throughout the book makes incidental contributions to a range of pertinent empirical and cognitive interdisciplines, while Chapters 6 and 7 offer a concrete illustration of two-way interdisciplinarity by yielding backward effects in a targeted way: in Chapter 6, I explore how my suggestions about positive effects of literature and art on the human perceptual system explicitly complement and extend the machinery of cognitive anthropology (Sperber 1996) and pragmatics by adding the term ‘perceptual effects’ to Sperber and Wilson’s (1995) relevance theory, implicitly enrich current debates in philosophy of mind on the ‘thesis of non-conceptualism’ and embodied cognition, provide a new vantage point for cognitive theories of agency, attention and selective directedness, and finally, allow a re-interpretation of various emerging claims in neuroaesthetics and cognitive science as describing different types of positive effects of art on the perceptual system. In Chapter 7, I give a further hands-on illustration of my notion of two-way interdisciplinarity by exploring the extensive and highly revisionary backward interdisciplinary effects of my cognitive model of literature/ art for twenty-five years of empirical research in the psychology and neuroscience of creativity.

However, as I argued in detail in Kolaiti (2019: 95-129) and my talk ‘The Arts and Humanities and Sciences as mutually informing modes of exploration: the need for curricular initiatives in Higher Education settings in the European and Global society’ at the 2019 London International Conference on Education, for the two-way epistemological vision of the present book to be fully fleshed out, parallel curricular reform on both ends of the spectrum is an absolute prerequisite. Theoretical endeavours like the present monograph might inspire young talent, but for inspiration to transform into fruitful interdisciplinary investigative endeavours, young talent needs to be equipped with the appropriate analytical and cognitive skills. It follows that empirical modules in key and highly up-to-date subjects from the cognitive and life sciences should start populating Arts and Humanities majors, equipping the new generations of Arts and Humanities scholars with the empirical and cognitive awareness as well the characteristic arguing and questioning mind-style of the naturalistic paradigm that is necessary for two-way interdisciplinarity to take off. At the same time, the ambition of the present book to give a hands-on example of how theory formation in literary and art study can decisively affect theory formation in the empirical and cognitive sciences places this

monograph at the heart of discussions on curricular initiatives that seek to integrate Arts and Humanities subjects in the core curriculum of science and technology majors: in the last six-seven years or so curriculum reform is under way in a number of Chinese universities that have begun incorporating Arts and Humanities subjects in science-focused institutions. Leading US universities such as MIT (see, for instance, the ‘mission statement’ of The MIT Centre for Art, Science and Technology)<sup>8</sup> and Harvard<sup>9</sup> have started looking into the methodological and curricular implications of treating the Arts and Humanities and Sciences as mutually informing modes of exploration.

Through theoretical innovation, commitment to broadening and revising existing interdisciplinary practices, and putting the case for an epistemologically robust literary and art study and more broadly, an epistemologically robust Arts and Humanities, the present book does not simply sketch a novel, cognitive theory of the essence of literature and art but also contributes to reinstating the Arts and Humanities as a global actor in the front line of interdisciplinary research and innovation, with a broader impact on both the European and Global society: humanistic thinking is integral to forming anthropocentric and democratic societies. Scientific thinking is integral to forming inquisitive minds that challenge dogmatic unsubstantiated ‘truths’ and safeguard the secular structure of social functioning. Every endeavour that strengthens the epistemic and curricular profile of the Arts and Humanities and promotes humanistic and scientific thinking as mutually informing modes of exploration can thus be seen as not merely a theoretical but also, and more importantly perhaps, a political venture that promotes the fundamental European values of anthropocentrism, secularity and democracy.

Yet, two-way interdisciplinarity and a methodological merger in the sense of seeking bidirectionality of effects is only one of the two at least prerequisites for interdisciplinary ventures in the 21<sup>st</sup> century to be genuine and full-blown. The other is methodological merger in the sense of methodological and discursive integration, inducing substantial discipline-shaping changes in the paradigms involved and generating new types of interdisciplinary discourses and new types of investigative and discursive practice. Until now, the Arts and Humanities as much as the empirical, cognitive and life sciences have been describing loosely as ‘interdisciplinary’ intellectual outputs that are better described as multi-

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<sup>8</sup> Available at <http://arts.mit.edu/welcome/cast/about/>.

<sup>9</sup> Harvard President Drew Faust 2010 speech ‘The Role of the University in a Changing World’ delivered at the Royal Irish Academy, Trinity College Dublin. Available at [www.harvard.edu/president/speech/2010/role-university-changing-world](http://www.harvard.edu/president/speech/2010/role-university-changing-world).

disciplinary or *inter-discursive* to use Richardson's (2010: x) term: outputs that involve selective reading across disciplinary boundaries and selective adoption of terminological vocabulary from other domains, but more often than not do not challenge the established disciplinary practices, boundaries and perspectives of the home discipline through what Richardson (2010: x) has acutely described as 'transformative dialogue'. How can there be interdisciplinarity in any epistemologically robust sense of the term without transformative dialogue? How interdisciplinarity really is an output that does not reflect any essential and sustained merging between the methods and reasoning styles of the disciplines involved? In the last few decades interdisciplinarity has come into intellectual fashion more than ever before but interdisciplinarity endeavours across domains of enquiry have nevertheless preserved and nurtured a parallel desire to perpetuate established disciplinary practices, the moment interdisciplinarity in a full-blown and epistemologically robust sense should not be anything less than a transformative merging and sustained crossing of discipline-shaping boundaries. To the extent that the resulting inter-discursive outputs can be comfortably accommodated within pre-existing disciplinary 'boxes' and easily identified as 'literary theory', or 'cognitive science' or 'linguistics' or 'aesthetic philosophy' or 'psychology' etc, interdisciplinarity in a robust sense of the term has not really taken effect: it is just a loose label term for ramping up the competitiveness of our grant proposals and the appeal of our proposed books.

For interdisciplinarity to be genuine and intellectually informed, a condition of discipline-crossing discursive merger must also be fulfilled. Genuine interdisciplinarity interaction is not simply a matter of sharing topics, but also, and more crucially, of merging methods, mind-sets and discursive conventions into a new methodological proper of paradigm-transforming interdisciplinarity discourses. To this end, a head on revision of established investigative and paradigm-specific practices is necessary, calling for fundamental shifts across and within existing paradigms and disciplines.

The publishing industry can in many ways be thought of as a central actor for full-blown epistemic innovation in interdisciplinarity research to actually take off in the 21<sup>st</sup> century. The chief editors and peer-reviewers of globally influential publishing houses, could play a key role in promoting the epistemic vision of genuine interdisciplinarity, by fostering a new culture across their extant monograph series and peer-reviewed journals, and by pursuing explicit strategies for identifying and promoting new types of paradigm-crossing interdisciplinarity outputs. At this moment, the publishing sector has not, as yet and for the main, fostered a positive environment for genuine interdisciplinarity to be able to flourish.

Anecdotal but highly illuminating evidence about the unpreparedness of the existing publishing mind-set for interdisciplinary outputs that merge, cross and challenge existing disciplinary ‘boxes’ comes from my attempt to publish some of the chapters of this book as papers in peer-reviewed journals. The peer-reviewers of cognitive science journals rejected the papers listing at the top of their negative review comments the argument that ‘this is not cognitive science; it looks more like linguistics or philosophy’. The peer-reviewers of linguistics journals rejected the papers suggesting that ‘this is not linguistics; it looks more like literary theory or aesthetic philosophy’. The peer-reviewers of philosophy of art journals rejected the papers suggesting that ‘this is not aesthetic philosophy; it looks more like linguistics or cognitive science’. And the peer-reviewers of literary journals rejected the papers suggesting that ‘this is not literary theory; it looks more like aesthetic philosophy or cognitive science’. This ripple effect is tell-tale of the absence at this moment in epistemological and publishing history of explicit strategies that will enable and encourage genuine interdisciplinary ventures and the parallel articulation of paradigm-transforming discourses. The fear that full-blown interdisciplinary outputs might not be able to target an existing readership is unreasonable: any kind of innovative and ground-breaking theoretical or epistemological endeavour does not assume an existing readership at the time of its emergence. Instead, such endeavours seek to cultivate and create new readership. When the first cognitive research outputs started being published in the early seventies, they could not possibly target an existing readership since cognitive studies at the time were only a newly emerging domain enquiry. Publishers and scientific journals in the front line of research innovation of the time pioneered the way towards generating new target readership for the newly emerging domains. But with epistemological innovation things are by definition significantly trickier, because epistemic innovation does not involve the emergence of a new disciplinary and paradigm-specific ‘box’ –which, roughly speaking, is something more usual in the long course of human scientific history and therefore, more easily digestible– but messes up with the familiar and comforting boundaries of existing disciplinary and paradigm-specific ‘boxes’.

In the 21<sup>st</sup> century, we need to rise to a quadruple challenge: a theoretical challenge to generate two-way interdisciplinary theoretical outputs. An epistemological challenge to generate paradigm-transformative practices interdisciplinary discursive. A curricular challenge to nurture a new generation of Arts and Humanities graduates that will be able to materialise such a two-way interdisciplinary programme. And a publishing and dissemination challenge to cultivate through explicit strategy development a positive publishing

environment so that genuine interdisciplinary ventures can gain public access and impact upon both international scholarship and the wider community. This latter challenge depends crucially on generating new pools of target readership and cultivating new reader mind-sets. Genuine, full-fledged interdisciplinarity will have taken off at that moment in epistemological and reading history, when, say, linguists, neuroscientists, cognitive scientists, philosophers, psychologists, literary scholars, anthropologists and aestheticians will be open to treat a book on the nature of literature and art as equally relevant to their domain of enquiry and reading agenda. Full-fledged interdisciplinarity should render any attempt to characterise an output as ‘linguistics’ or ‘literary theory’ or ‘cognitive science’ etc as a matter of mere labelling and epistemologically irrelevant labour distribution.

To rephrase what I have claimed in the last few paragraphs, interdisciplinarity as we have known it so far is not interdisciplinary enough so as not to easily fit existing disciplinary boxes. This book hopes to flesh out a new type of discursive practice and a new variety of two-way research initiative in literary and art study that decisively crosses disciplinary boundaries across the Arts and Humanities, linguistics and the cognitive sciences.

Now, among all candidate disciplinary domains merging in the present book, if one was to merit the credentials of the enabling force behind its epistemological and theoretical innovation, that should certainly be linguistics. Back in 1958, Jakobson described his ‘Closing statement in linguistics and poetics’ as an ‘attempt to vindicate the right and duty of linguistics to direct the investigation of verbal art in all its compass and extent’ (Jakobson 1958/ 1996: 377). Interestingly, as I will show in detail in Chapter 2 of this analysis, Jakobson’s ‘Closing statement’ envisaged to sketch an answer to the exact same persistent ontological question that forms the nucleus of the present book: what makes a certain entity a work of art. Operating within a formalist and structuralist linguistic model, Jakobson’s ambitious programme for poetics envisioned the field of poetics as one of the earliest interdisciplinary ventures for linguistic enquiry, where the systematic and analytical apparatus of the newly emerging science of linguistics could help unearth some essential morphostructural distinctness of literary and poetic as opposed to ordinary language. As I will argue in Chapter 2, the early 20<sup>th</sup>-century assumption about an essential linguistic distinctness of literature (the poetics of language) is not correct but this has little to no effect on the calibre and ambition of the programme it inspired and the numerous rewards literary and linguistic study are still reaping from it by means of its extension in current studies in text linguistics, literary linguistics, poetics and close text analysis. Jakobson’s interdisciplinary venture is perhaps one of the most noteworthy and ambitious programmes in literary,

linguistic and art-theoretical thinking in the 20<sup>th</sup> century and, I dare say, it is not contingent that this programme was motivated by linguistic enquiry.

In the 70 years or so since Jakobson's statement, linguistics has evolved into a massively influential empirical or quasi-empirical domain, particularly through the theoretical and epistemological implications –both within and beyond the realm of linguistic enquiry itself– of the Chomskian cognitive revolution. No other discipline has had the breadth or depth of transformative implications linguistics has had over the last six decades in coining new disciplinary domains and enabling new ways of thinking. And this owes heavily to Chomsky's ground-breaking epistemological edifice, his cognitive perspective and generative programme in Universal Grammar, innateness and cognition. Thanks to Chomskian linguistics, it is not just the face of linguistics *per se* that has radically transformed but the face of 20<sup>th</sup> century scientific and theoretical enquiry across a massive range of empirical and life-scientific domains. The impressive strides witnessed in cognitive research over the last 30 years from cognitive science to neuroscience to robotics and AI to the more recent 'cognitive turn' in the Arts and Humanities may well be seen as a direct epistemological implication of the types of research initiative enabled by Chomsky's cognitive revolution. Paradigm transforming research endeavours like Sperber and Wilson's relevance theory (1986/ 1995, 2012) serve as further illuminating examples of the epistemological impact of linguistics in enabling new modalities of research enquiry. Embedded within the broader edifice of the cognitive revolution and framed as a theory of pragmatics, communication and cognition, relevance theory was a ground-breaking epistemic stride that radically extended and renovated the analytical and discursive tools available that far to the humanities and life sciences. Relevance theory launched a new discursive variety that fleshed out what I described earlier as the Chomskian 'naturalistic approach' and presented an innovative exemplar of research output that weaves together linguistics, philosophy of mind and cognitive psychology by embedding its view of human ostensive inferential communication upon a structured view of human cognition: relevance theory is a theory of human communication as much as a theory of human cognition, attention and agency with very wide multidisciplinary implications across the Arts and Humanities, life and cognitive sciences.

The new type of research endeavour this book represents would have been impossible without these two epistemological precedents, both of which owe to advancements in the field of linguistics. Although the theoretical focus of this analysis is a question that has traditionally been central to literary theory and the philosophy of art, and although the range of interdisciplines merged in the novel discursive practise by means of which I attempt to

tackle this question is particularly wide, still it should be stressed that the rationale, outlook, theoretical and epistemic foundations of the present book draw decisively on the Chomskian and relevance-theoretic ventures. In line with the epistemic commitments sketched earlier, my discussion does not involve some kind of direct application of theory from the generative programme or the relevance-theoretic edifice to the question of the essence of literature and art, in the way, for instance, Jakobson's conception of interdisciplinarity involved a direct application of morphostructural linguistic analysis to unearthing the essence of the 'poetic'. Yet, the outlook of my discussion and the way it ventures into paradigm-transforming interdisciplinary theory development is crucially underpinned by the relevance-theoretic model of ostensive inferential communication, the relevance-driven view of human cognition, the relevance-theoretic arguments in favour of linguistic and cognitive plasticity and the heated debates over the nature of concepts and their relation to word meaning pursued in the linguistic and cognitive strand of relevance theory and the relatively newly-emerging field of lexical pragmatics. In a two-way interdisciplinary modality, my discussion also feeds back to relevance theory by providing tentative evidence that the propositional type of effects (cognitive effects) extensively explored in relevance theory so far might be complemented by partly or wholly embodied types of effects, which might in turn enable us delineate further partly or wholly embodied types of relevance. At the same time, my outlook is also crucially inspired by the Chomskian view of language as a biological object and hence, natural kind, charting new territory for the epistemological and theoretical implications of Chomsky's cognitive perspective in the cognitive study of literature and art: my new-coined notion of art as an intra-individual occurrence, as well my subsequent notions of cognitive essences and a cognitive metaphysics may well be seen as innovative theoretical and epistemic implications of the Chomskian mentalistic and psychologistic model for I-language, and the Chomskian cognitive perspective in the domains of the anthropology and ontology of literature and art as well as in the broader domain of philosophical metaphysics. If my assumption that literature and art as an action is enabled by art-specific engineering in the mind-internal reality of human creators, is correct, then a robust literature and art is not a set of artifacts out there in the world as is standardly thought but rather, a cognitive and biological object, and hence, a natural kind.

To bring this introduction to an end, one of the first systematic accounts of literariness and arthood in the 20<sup>th</sup> century (the poetics of language) was facilitated by intellectual breakthroughs in linguistics. The proposed book represents one of the first systematic accounts of literariness and arthood in the 21<sup>st</sup> century (a poetics of action) and is once again

facilitated by intellectual breakthroughs in linguistics. In this sense, the proposed book could be seen as a novel type of paradigm-transforming discursive practice and two-way interdisciplinary research initiative that provides yet another reason why linguistics may well deserve to be thought of as one of the most influential intellectual ventures of modern times.

## Chapter 1

### A theory of BLIBS

#### 1.1 The ‘gallery of indiscernibles’

I would like to invite you to step with me in this book as if we were stepping in a gallery. This is no usual gallery. It is a space containing some of the most fascinating philosophical conundrums of an inimitably fuzzy and puzzling ontological category, ART. It is the space Danto (1981) called the ‘gallery of indiscernibles’. Let’s open the door and walk inside. The exhibits in the ‘gallery of indiscernibles’ articulate quite eloquently to what literature and art owe their uniquely perplexing metaphysics: the category LITERATURE and ART as standardly and conventionally perceived by existing art history, cultural studies, philosophical enquiry and everyday folk wisdom comes across as an extremely fuzzy set of rather disparate *perceptually indiscernible* objects, objects that, while intuition suggests they must be ontologically distinct, cannot, nevertheless, be peeled apart on the basis of their formal, structural and prototypical properties. The indiscernible exhibits in our metaphysical gallery are formally, structurally and prototypically equivalent objects, or identical ‘twins’. Perceptual indiscernibility has traditionally led philosophy of art and literary theory to treat these objects as problematic cases; I would like to do the exact opposite. I would like to put them forward as highly illuminating instances that hold the key to the ontological essence of art.

I will start the tour of our metaphysical gallery with the most ground-breaking and highly illuminating instance, *conceptual art*. In 1917, Marchel Duchamp<sup>10</sup> submits to the inaugural exhibition of the Society of Independent Artists hosted by The Grand Central Palace in New York an artwork that was bound to change the face of contemporary art: the *Fountain* –a now famous urinal bearing the signature of one R. Mutt– becomes the first of a series of artworks called ‘ready-mades’, because they use existing prefabricated or found objects (objects that have not been fabricated by the artist) and therefore have perceptually

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<sup>10</sup> The fatherhood of the *Fountain* by Duchamp has been debated by art historians (e.g. see Gammel 2002; Higgs 2015), who investigate the possibility of attributing this ground-breaking artwork to an eccentric performance artist, poet and sculptor of that time, Baroness Elsa von Freytag-Loringhoven. In line with Gammel (2002), however, who not only finds that the evidence in favour of the Baroness is inconclusive but also proposes that if the *Fountain* was indeed Freytag-Loringhoven’s conception then at some point or other the Baroness, who was known not to be shy of controversy, would have claimed to have been involved in the conception of a work that had caused a flurry of press interest, in this book I will adopt the standard approach of treating the *Fountain* as a work by Marcel Duchamp.

indiscernible mere thing equivalents. Mere urinals from the exact same production line as the urinal used by Duchamp and Duchamp's *Fountain*, mere Brillo Boxes in the aisles of supermarkets and Warhol's *Brillo Boxes*, a stretch of ordinary discourse and the same stretch of discourse when quoted verbatim in a poetry book as 'found text'-poetry, are 'twin events', formally and structurally indiscernible objects. What is it that makes the one object an artwork while its perceptually indiscernible twin is a mere thing? The problem of perceptual indiscernibility persists in all the equivocal cases exhibited in our metaphysical gallery: a genuine artwork and its perceptually and prototypically indiscernible perfect forgery, an artwork by some atypical creator – say, a neuro-atypical artist with autism and a perceptually indiscernible artwork created by a neuro-typical creator, an original artwork and its perceptually indiscernible mechanical reproductions or perceptually indiscernible replicas, an artwork by a martian (Currie 1993) and a perceptually indiscernible artwork created by a human being, *Echo and Narcissus* and a perceptually indiscernible *twin earth Echo and Narcissus* (Budd 1990), a contemporary and a pre-historic work of art, an artwork that resulted from a meaningful accident and one that did not involve any such accidental starting point, an object traditionally classified as a CRAFTED OBJECT or MERE PERCEPTUALLY GRATIFYING OBJECT, a pretend-to-be-art 'artwork' and a 'real' artwork, a *moai* from the Easter island, animal 'art', pink novels, hybrid cases such as Plato's *Dialogues*, aphorisms, philosophical poetry, videopoems, visual poetry or poetry comics, Sappho's surviving *fragments* of poems whose wholeness cannot be reconstructed, John Cage's 4'33'' as an artwork without materiality or one that negates expected materiality, Robert Smithson's earthwork *Spiral Jetty* as work of art of eternally transforming non-definitive materiality, Christian Bök's *Xenotext* project as a living form of poetry and an operant machine that hopes to disentangle the artwork from the artist, ingenious artworks that were never recognised in their time, and finally, incomplete artworks, unexpressed/ non-externally materialised artworks, and bad art. Each of these allegedly problematic exhibits in our 'gallery of indiscernibles' will be used in this book as an articulate starting point for shedding new light on the question of the essence of literature and art and sketching a novel cognitive theory of the ontology of art and artworks.

## **1.2 A rather widespread variety of conventionalism**

Let me, however, underline in passing an epistemological claim that should be fundamental in a theoretical venture of this kind: an explanatorily and descriptively adequate theory is one that holds true for all past, present and future, existing and possible examples and

manifestations of the object under investigation. If even a single instance or manifestation of the object under investigation cannot be accounted for by the theory, then the theory is descriptively and/ or explanatorily inadequate. And this is a point where many of the existing ontological models of the essence of literature and art fail at a descriptive or explanatory level. In this sense, one can in principle draw on the philosophical problems posed by the exhibits in our 'gallery of indiscernibles' either to test the descriptive and explanatory scope of a developing theoretical account or to challenge the descriptive and explanatory adequacy of already existing accounts. The 'gallery' will therefore be a place we will very often return to in the course of trying to sketch an explanatorily and descriptively adequate novel hypothesis about the nature and metaphysics of literature and art, while at the same time bringing into question persistent underlying assumptions on the matter.

A recurring descriptive problem in much existing theory, for instance, is that literary-theoretical and art-philosophical discourse has standardly used the terms 'literature' and 'art' to denote the set of literary texts and artworks out there in the world. But if literature/ art were the body of objects out there in the world that we call 'artworks'/ 'literary texts', then the terms 'literature' and 'art' would be theoretically redundant: if 'literature' merely picked out a category already picked out by the term 'literary text' and if 'art' merely picked out a category already picked out by the term 'artwork', then the terms 'literature' and 'art' would not really have any theoretical or ontological necessity. Implicit in this descriptive approach is the assumption that the metaphysics of the world only contains the entities 'artworks' and 'literary texts'. Yet simple empirical observation suggests that alongside 'artworks' and 'literary texts' the world also contains the distinctive human actions, or more precisely, the distinctive *action-processes*,<sup>11</sup> that bring 'artworks' and 'literary texts' to light. So, while existing theory uses the terms 'literature' and 'art' to pick out categories already picked out by the terms 'artwork' and 'literary text', the distinct action-process that generates 'artworks' and 'literary texts' ends up being an unlexicalised category that we are not really currently picking out by the use of any theoretical term. It is this latter category that it seems reasonable to me to refer to as 'literature' and 'art'. A fundamental epistemological departure of my account from existing theory involves precisely the assumption that 'literature' and 'literary text', and 'art' and 'artwork', are not identical categories. The dominant *artifactual*

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<sup>11</sup> The more refined notion of an action-process aims to capture the empirical fact that art as an action also occurs in ongoing macroscopic patterns where long and complex sets of artistic thought/ states processes are contemplated, evaluated, physicalised, semi-physicalised or abandoned by the artist until the final completion of an artwork/ literary text. From this point on whenever I speak of literature/ art as an action I am actually referring to an action-process.

*view of literature and art*, as I would call it, –i.e. the view that equates art with the artifact that results from it– leaves the distinct action-process that brings artworks into being theoretically unaccounted for and terminologically unlabelled. To treat artworks and literary texts as products of human cognition is to treat literature and art as the kind of object it really is, not an artifact but a distinct human action. From the cognitive perspective pursued in this analysis, the action-process that brings artworks into being claims the metaphysical importance it deserves.

Another recurring descriptive and explanatory problem in existing theory is that so far there is not a single theoretical account that has not implicitly treated literature and art as a conventional category. By referring to literature and art as a ‘conventional category’ I mean a category whose instances are identified and classified customarily or by tradition, assuming that literature/ art is a set of sociologically and collectively determined prototypical features and functions established by institutional agreement, tradition and custom. In Chapter 2, I will discuss at length what forms conventionalism has taken in art-philosophical and literary-theoretical history. Here I am interested in a much more wide-spread version of conventionalism, that even essentialist approaches to literariness and arthood, such as the formalist and structuralist program, are not entirely free of. To the extent that an approach takes LITERATURE/ ART to denote something along the lines of ‘that set of outputs that have customarily and by tradition been categorised as LITERATURE/ ART’ this approach is conventionalist. It is also to some extent canonistic. On the conventionalist approach, being a work of literature and art is seen as a status conferred on an object by a system of established collective, sociological or institutional practices, which in turn motivates prototype-driven sets of highly exemplary cases of such objects commonly known as canons. To base a theory under development on a conventionalist view of LITERATURE/ ART is also to base it on a canonistic view of LITERATURE/ ART. And that’s a major methodological flaw. Let me spell out why. Despite looking for inherent and hence non-conventional properties that make a certain object an artwork, the formalist and structuralist program, for instance, –just as most, if not all, existing programs– clearly started its investigative venture on the essence of art taking LITERATURE/ ART in its conventionalist sense: it put under its analytical lens that set of works that have customarily and by tradition been categorised as LITERATURE/ ART and tried to identify formal and structural properties that might be thought of as shared by all the members of this conventionally delimited set. Two at least methodological discrepancies arise from this: first, the investigative venture in question starts from the *a priori* assumption that we already know what literature and art is, based on canon-driven and conventional

categorisations; second, because the conventionally delimited set used as a starting point for observation and inference deduction is in reality a disparate set that contains artworks as much as what I would call *artwork simulacra* (objects that prototypically resemble artworks but from a cognitive viewpoint can be shown to have palpably different ontological status from artworks), while it can also be claimed that in human cultural history there must be objects that have the essence of artworks but for contingent reasons were never recognised and identified as such, being left out from the conventionally delimited sets of existing canons. To the extent that our sample is based on a view of LITERATURE/ ART as a conventional category whose members share family resemblances at the level of prototypical features and/ or functions delimited by tradition or custom it is, therefore, bound to be inherently problematic as a sample leading to incorrect theoretical implications and predictions: entities such as perfect forgeries or the mere thing equivalents of ready-mades that we wouldn't want on intuitive grounds to credit with the ontological essence of an artwork share the same formal, structural and prototypical properties that cut through the conventionally delimited set of LITERATURE/ ART as a conventional concept, yielding the incorrect prediction that, say, a perfect forgery and an artwork must have the same ontological status.

What is important about the cognitive perspective as I will pursue it in this analysis is that it aspires to brake the methodological circularity arising from using as a starting point for investigation LITERATURE and ART as a conventional concept. Instead of starting from the *a priori* assumption that we already know what an artwork is on the grounds of canon-driven and conventional categorisations, we might start by treating the question of what an artwork is as one whose answer is to be discovered. But how is that possible?

### **1.3 A theory of BLIBS vs BLOBS**

The methodological model arising from the cognitivist twist aims to leave aside any preconception about what an artwork is and builds its theoretical edifice on a very different line of approach: let us begin from the assumption that we don't know what an artwork is. Observing the world and the entities it contains, the cognitive outlook introduced in this book identifies a set of objects out there in the world that seem on the basis of empirical observation, close theoretical argument and backward inference to share a common trait: they have what in subsequent chapters I will call the same minimal *cognitive history*, i.e. they descend from the same minimal mental operations. For the sake of argument, let's call it cognitive history  $X_1$ . We then observe that many objects with this type of cognitive history are

customarily and by tradition put into a category that collective practices have conventionally called LITERATURE/ ART. However, we also observe that many objects with cognitive history  $X_1$  are not customarily and by tradition put into the category conventionally called LITERATURE/ ART but into other conventionally-determined categories, say, CRAFTED OBJECTS or OBJECTS OF DESIGN or ARCHITECTURE etc. We then also notice that in the category conventionally called LITERATURE/ ART, collective practices have by tradition and custom also grouped objects that cannot be claimed to have cognitive history  $X_1$  but different cognitive histories, which might be labelled non- $X_1$ . From the cognitive perspective introduced in this book, objects with cognitive history  $X_1$  and those with cognitive history non- $X_1$  cannot be the same type of object from the point of view of what I will call a *cognitive ontology*. The one object is a BLIB and the other a BLOB. Although essentially distinct, BLIBS and BLOBS are perceptually and prototypically indiscernible, and for that reason end up being mistakenly grouped in an undifferentiated way under the same conventional category LITERATURE/ ART, because conventional categorisation is wholly founded on perceptual and prototypical features. To draw a parallel, conventional categorisation currently groups human beings, perceptually convincing perfect androids and virtual representations of humans under the same ontological category. It is also important to note that, while from a cognitive standpoint BLIBS form a homogeneous set with as common denominator their shared cognitive history  $X_1$ , BLOBS amount to a set of disparate objects with varied cognitive histories, their sole common thread being their apparent, yet ontologically misleading, perceptual and prototypical resemblance to BLIBS. Finally, we also observe that conventional categorisations fail either to make correct predictions about why other sets of objects with cognitive history  $X_2$ ,  $X_3$ ,  $X_n$  that share the exact same perceptual and prototypical features as BLIBS and BLOBS are neither BLIBS nor BLOBS in terms of their ontological status, or to explain why they are not grouped under conventional canons of LITERATURE/ ART; perfect forgeries and mechanical reproductions of artworks are telling exemplars of this. So here is the picture our observations have sketched: the conventional category LITERATURE/ ART, determined by perceptually- and prototypically-driven criteria that I will analyse at length in Chapter 2, has ended up containing both BLIBS and BLOBS, objects, that is, that according to cognitivist-driven criteria should not be grouped in the same ontological category, while at the same time, numerous BLIBS appear to be conventionally grouped into categories other than those of LITERATURE or ART.

Although preliminary and sketchy at this early point in the book, the cognitive perspective explains the fuzziness resulting from perceptually-driven and prototypicality-

driven taxonomies and gestures in the direction of a cognitively-oriented revision of the canons of literature and art, if not their complete abandonment in favour of new taxonomies that take into account the mental operations that bring certain entities out there in the world into being. Based on such canons, existing theory has so far tried to put together exegetical approaches that attempt to account for BLIBS and BLOBS in an undifferentiated way, as though they belong to the same ontological set. A cognitive ontology of art, on the other hand, treats the distinction between BLIBS and BLOBS as a theoretical *sine qua non*. In subsequent chapters, I will try and flesh out this cognitive perspective into a systematic theory of the essence of literature and art and defend the metaphysical necessity of the cognitive ontology that I believe results from it. Unlike conventionalist approaches, the sample I am looking at does not set out from the assumption that I know *a priori* what an artwork is but, following the rationale I tried to sketch above, is founded in the observation that there are certain objects out there in the world that have the minimal cognitive history of BLIBS, and that from a cognitivist standpoint cannot be grouped under the same category as objects with the cognitive history of BLOBS, or objects with other types of cognitive histories, say, X<sub>2</sub>, X<sub>3</sub>, X<sub>n</sub>.

A problem that arises here concerns the extent to which such a venture runs the risk of being prescriptive. Prescriptivism in this case would take the form of an arbitrary equation of ARTWORK with BLIB, and ARTWORK SIMULACRUM with BLOB; and I fully acknowledge this as a genuine methodological and theoretical challenge. To put it differently, based on my analysis above, BLIBS and BLOBS are perceptually and prototypically indiscernible sets, and for that reason end up being mistakenly grouped in an undifferentiated way into the same conventional category LITERATURE/ ART, although in reality they are essentially distinct objects. Also, many objects with the cognitive history of BLIBS are customarily and by tradition put into categories other than LITERATURE and ART. So, in existing theory as well as wider folk perception, both BLIBS and BLOBS are treated in an undifferentiated way as ARTWORKS. How and on what criteria and rationale are we to decide which of the two sets of objects is the artwork? On what grounds can we claim that the BLIB is an ARTWORK, while the BLOB is an ARTWORK SIMULACRUM? And would such a claim in the end be no more than mere prescriptivism, a masked attempt to prescribe that 'real' artworks must be BLIBS?

The answer to this challenge is not an easy one but it certainly must be provided, even in a somewhat sketchy form, if the mentalist, internalist and cognitivist theory sketched in this book is to be seen as a neutral descriptive and explanatory account of the ontology of art rather than a prescriptive attempt to dictate what art and artworks ought to be. My reasons for treating BLIBS rather than BLOBS as those objects that are more adequately categorised as

ARTWORKS are not random or arbitrary or prescriptive but motivated by factual considerations about the origins, evolution and perpetuation of art as a potentially distinct human action and an occurrence within the individual consciousness of the creator. In later chapters, for instance, I will try to isolate the components of the minimal cognitive history of BLIBS, suggesting that a key constituent in their cognitive history is an agent's ability to entertain non-trivial representations of a certain kind. In fact, it seems that a fundamental cognitive difference between BLIBS and some of the disparate set of objects contained in the category of BLOBS is that various BLOBS do not require or even involve this component. Looking at human generativity and creative ideational abilities from a relevance theory standpoint (Carston 2002; Sperber and Wilson 1995; Wilson and Sperber 2012), we might claim that the objects whose cognitive history contains an element of non-trivialness are objects that yield greater *relevance* for an individual organism at a given time, by yielding greater *effects* for this organism than their trivial counterparts. What effects these might be, and what types of relevance they can be assumed to yield, are issues to be discussed in more detail in Chapter 6, where I will try and give a taster of the fascinating bi-directional questions arising for both relevance theory and the philosophy of art from looking at the cognitive engineering of BLIBS from a relevance-based standpoint. The core inference that we need to make here from the preliminary assumption outlined above is that from an evolutionary point of view, it makes a lot more sense to assume that art has evolved from and built on the cognitive history of those objects that yielded greater relevance and achieved greater effects for an individual organism at a given time rather than the opposite. And these objects are those with the cognitive history of BLIBS, not BLOBS.

Another component of the cognitive history of BLIBS that is not shared with some of the disparate set of objects contained in the category of BLOBS is that BLIBS involve full-blown rather than naïve or defective forms of agency. I will try and substantiate this claim in Chapter 3, but at a preliminary level it can be argued that it doesn't make sense to assume that art as an action has evolved from naïve and defective forms of agency and that, quite incidentally, in the course of its evolution it generated simulacra that happen to involve full-blown agency. The opposite makes a lot more sense to me: I would be keener to describe as simulacra of an object those outputs that have resulted from naïve or defective rather than full-blown forms of agency, since naïve and defective agency are a lot more chance-dependent. In contrast to outputs of full-blown agency, the products of naïve and defective agents are usually random, occasional and incidental outputs that are generated without a parallel ability for systematic or reflective elaboration, and it is because of this incidental

aspect that to my mind they are more appropriately described as simulacra than their more systematic and reflective counterparts. With the former being BLIBS and the latter BLOBS, I would therefore suggest that it makes a lot more sense from an evolutionary standpoint to assume that artworks do not descend from BLOBS.

The aim of this book is not to sketch a hypothesis about the evolution of art, although it certainly has radical implications for such a hypothesis; I therefore presume that even the sketchy account I have outlined here is enough to give the reader an idea of why the rationale behind my assumption that ARTWORKS are BLIBS rather than BLOBS is neither prescriptive nor canonistic but based on causal and factual considerations about the evolution of art that make my equation of ARTWORKS with BLIBS a neutral descriptive and explanatory rather than a prescriptive one. To a reader who is still convinced that this equation somehow makes my model canonistic, I am tempted to suggest that the mentalistic, internalist and cognitivist theory of the essence of literature and art developed in this book might alternatively –in order to weed out any shred of canonical prescriptivism– be described as a mentalistic, internalist and cognitivist theory of BLIBS.

Are BLIBS artworks? Well, who knows? Maybe I am wrong and they are not. But what I can say for sure is that BLIBS and their cognitive history are metaphysically and psychologically real entities without which the metaphysics of our world and the diverse collective paths of human cultural history would be so radically different that I am more than happy to write a book sketching an ontological theory of BLIBS even if BLIBS are not the things that deserve to be described and categorised as artworks. On to a theory of BLIBS, then rather than necessarily a theory of art and artworks... Even so, the radical shift in perspective that I deliberately aim at through a cognitivist –and as non-conventionalist as possible– exegetical account allows us for the first time to focus on and systematically explore the causal relation between certain entities out there in the world and the dedicated mental states and processes that bring them to light. Even if the sceptical reader does not feel comfortable equating a theory of these entities (BLIBS) with a theory of art and artworks, I still believe that –sceptical as she may be– she will not deny that since the objects with the cognitive history of BLIBS not only feature within the conventional category of ARTWORKS and LITERARY TEXTS but also correspond to some of its most ground-breaking exemplars, a cognitivist theory of BLIBS is a theoretically significant model for comprehending at least part of the literary and art event and its cognitive engineering. Allow me, though, to be less sceptical than the sceptical reader and assert that I am personally convinced by the sketchy

rationale outlined above that an ontological theory of BLIBS in fact also amounts to a theory of art and artworks.

An ontological theory of BLIBS is not only integral to comprehending a crucial aspect of the literary and art phenomenon but is also relevant to a wide range of interdisciplinary domains that in one way or other touch on areas that overlap with the non-autonomous nature of BLIBS and the potentially distinct mental operations of the action-process that brings them into being. From cognitive anthropology and pragmatics through to cultural studies, philosophy of action, cognitive science, philosophy of mind, evolutionary and developmental psychology and all the way to the philosophy, psychology and neuroscience of creativity, the systematic empirical and naturalistic study of the cognitive engineering that enables the creation of BLIBS as well as the selection and propagation of the action-process that brings them to light and foregrounds them as one of the most enduring sets of human cultural representations promises to be a venture with rather broad potential interdisciplinary implications across the humanities and cognitive and life sciences. It also promises to be an enterprise that will contribute decisively to an understanding of the natural object without which BLIBS wouldn't have come into existence, the mind. As I will claim in more detail in Chapter 4, a naturalistic and cognitivist ontology of BLIBS is as much a programme that delves into literature and art as *natural objects* as a programme that highlights a distinct and unique –and perhaps, even dedicated– type of operations of the natural object mind.

#### **1.4 Essentialism and its ethics**

It should also be obvious from the fact that from the outset of this analysis I have made reference to literariness and arthood as a question about the essence of literature and art that I take an ontological theory of BLIBS and the action-process that generates them to be an essentialist theory.

Various existing models of the property (*P*) that makes a certain object an artwork are in reality crypto-essentialist projects. Few nowadays acknowledge that the early 20<sup>th</sup> century formalist and structuralist model of literature widely known as ‘the poetics of language’ was an essentialist programme. In defending the view that literature is a distinct object because of inherently deviant formal and structural properties of the literary text, the poetics of language implicitly assumed that literature has an essence. The poetics of language was in fact an essentialist project compatible with Putnam’s (1975) structural metaphysics, where the essence of a natural kind is determined by the kind’s structure or microstructure. When Putnam walks in a ‘gallery’ of perceptually indistinguishable natural kinds, he peels them

apart based on structural criteria: of two superficially indiscernible substances, only one of which is actually water,<sup>12</sup> water is the substance that has the structure H<sub>2</sub>O. Here, ‘structure’ amounts to chemical make-up. Of two superficially indiscernible beings, only one of which is actually human, the human is the one that has the appropriate DNA structure. Here, ‘structure’ takes the form of genetic make-up. Accordingly, for the poetics of language, the distinctness of literature as opposed to ordinary language was assumed to be the result of a differential linguistic structure.

In Chapter 2, in discussing the main existing theoretical proposals about what could be the property (*P*) that makes a certain object an artwork, I will show in passing that Danto (1964, 1981, 1992), Dickie (1971, 1974) and Levinson’s (1979, 1989, 1993, 2002) as well as Monroe Beardsley’s (1976) institutional models are accounts that can be shown to be at the same time conventionalist and ‘essentialist,’ paradoxical as this may sound: the rationale behind their work could be spelt out as ‘art is a case of entities whose essential properties are conventional ones’; also, Fodor’s (1993) and Farrell’s (2017) intentional accounts are clearly cases of essentialism, and more specifically what I will call ‘causal essentialism of an intentional variety’.

Blaming essentialism for all the mischief it has been used for in human intellectual, social and ideological history –the repertoire is surprisingly rich and ranges from sexism and its doctrines to racism and its doctrines– is as wise and advisable as blaming the knife for a killing. Essentialism and its ethics are two rather different things. Scepticism about the latter cannot legitimately permit dismissal of the former.

It is accepted practice in philosophy, social science and anthropology to talk about kinds, and the fact that some kinds have an essence is fairly uncontroversial. These include natural kinds, which exist independently of human nominal intervention, and nominal kinds,

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<sup>12</sup> What I am referring to here is the famous ‘Twin Earth problem’. The relevant metaphysical question in Putnam’s Twin Earth example is what makes Earth water and Twin Earth ‘water’ ontologically/ essentially distinct (Putnam 1975: 139-140):

(...) we shall suppose that somewhere in the galaxy there is a planet we shall call Twin Earth. (...) In fact, apart from the differences we shall specify in our science-fiction examples, the reader may suppose that Twin Earth is exactly like Earth. (...) One of the peculiarities of Twin Earth is that the liquid called ‘water’ is not H<sub>2</sub>O but a different liquid whose chemical formula is very long and complicated. I shall abbreviate this chemical formula simply as XYZ. I shall suppose that XYZ is indistinguishable from water at normal temperatures and pressures. In particular, it tastes like water and it quenches thirst like water. Also, I shall suppose that oceans and lakes and seas on Twin Earth contain XYZ and not water, that it rains XYZ on Twin Earth and not water etc.

whose essence we humans invent in the form of a conferred status or a definition. A question that is central to cognitive and social anthropology is whether artifacts –however they are characterised– can also be said to have an essence, and if so, what it is like. Could it be a prototypical shape? Or a prototypical function? Or maybe an essential structure or function? Or, perhaps, none of these. Apart from conventions of terminology, the borders between artifacts and natural kinds are anything but sharp. *Biological artifacts* (Sperber 2007), which have both a natural and a cultural dimension, are perhaps the prime examples of fuzziness in the borderline between the two categories; as Dan Sperber (2007: 124) has proposed,

the notion of an artifact commonly used in social sciences, particularly in archaeology and anthropology, is a family resemblance notion, useful for a first-pass description of various objects and for vague characterisation of scholarly, and in particular museographic interests. It should not be taken for granted that this notion could be defined precisely enough to serve a genuine theoretical purpose.

The following quote from Chomsky (1976: 50-52) is rather revealing about the nature of the long-standing debate over essential properties:

To take another case, Kripke suggests that ‘(roughly) *being a table* seems to be an essential property of the table’ (1972: 351), that is, of a particular thing that is a table. Exactly what weight is being carried by the qualification ‘(roughly)’ is unclear. If we drop the qualification, the proposal can hardly stand. Suppose we discover that the designer of this particular object had intended it to be a hard bed and that it is so used. Surely we would then say that the thing is not a table but a hard bed that looks like a table. But the thing is what it is. Neither a gleam in the eye of the inventor nor general custom can determine its essential properties, though intention and function are relevant to determining what we take an artefact to be. Suppose further that the thing in question is a table nailed to the floor. We would be inclined to say that it would have been the same thing had it not been nailed to the floor, but it could not have been other than a table. Thus it is necessarily a table but only accidentally immovable. Consider now another creature with a different language and a different system of common-sense understanding, in which such categories as movable-immovable are fundamental, but not function and use. These creatures would say that this immovable object would have been a different thing had it not been nailed to the floor, though it could have been other than a table. To them, immovability would appear to be an essential property of the thing, not ‘being a table’. If this is so, a property may be essential or not, depending on which creature’s judgements prevail.

Chomsky’s argument, then, is that essentialist claims may reveal more about the cognitive systems of those who make them than about the essences of the objects described:

We might discover that humans, operating within cognitive capacity, will not develop 'natural' systems of the sort postulated for this hypothetical creature. If true, this would be a discovery about human biology, but I do not see how such biological properties of humans affect the 'essence' of things.

(...) A study of human judgements concerning essential properties may give considerable insight into the cognitive structures that are being employed, and perhaps beyond, into the nature of human cognitive capacity and the range of structures that are naturally constructed by the mind. But such a study can carry us no further than this.

(...) In the Aristotelian framework, there are certain 'generative factors' that enter into the essential constitution of objects; we gain understanding of the nature of an object insofar as we grasp the generative factors which enable it to be what it is -- a person, a tiger, a house, or whatever. Constitution and structure, agent responsible for generation within a system of natural law, distinguishing factors for particular species, are among the generative factors. These generative factors are close, it seems, to Kripke's 'essential properties'. Under this formulation, there are essential properties of things because of the way the world is in fact constituted, but we may easily drop the metaphysical assumptions and say that  $x$  is a generative factor of  $y$  under the description  $D$  (or, perhaps, when  $y$  is categorised as a  $C$  within the system of common-sense understanding).

The attribution of essences is an evolved part of human psychology. Our cognitive organisation has an inbuilt propensity not only to track essences and build certain categories of concepts around them, but also to create complex and induced states of essential fuzziness –in, say, effortlessly constructing concepts like BLUISH or CENTAUR.

At the same time, though, 'essence' in itself need not be a single, unitary notion applying in the same way to both artifacts and natural kinds, or even to different types of artifacts or different types of natural kinds. In fact, it seems to me much wiser to talk about 'essences' in the plural, acknowledging the many different forms essence may take, each applying to different sets of artifacts and natural kinds –just as it is more appropriate to talk about the 'structures' (rather than the 'structure') of various natural kinds, with types of structure ranging from biological to genetic to chemical, etc.

My mentalistic and cognitivist model of literature and art will innovate on various fronts in relation to existing discussions on essence. It will not only attempt a defence of essentialism in literature and art by arguing for the essential distinctness of artworks (or if you prefer, BLIBS) and the essential distinctness of the action-process that brings them to being, but also introduce a new type of essences (*cognitive essences*) that in my view has long been needed not only in the philosophy of literature and art but also in philosophical

metaphysics. Yet the greatest innovation is that my naturalist and cognitivist perspective, as it will be articulated in following chapters, will at least partly disentangle the question of the essence of literature and art and its distinct outputs (artworks and literary texts, or if you prefer, BLIBS) from circular and museographic discussions about the essence of artifacts by making a novel and daring suggestion: both the action-process that literature and art is and its distinct output are in fact natural kinds, and more specifically, a type of natural kind that combines a natural with a cultural dimension. From this standpoint, the cognitive investigation of the metaphysics of art and its distinct output underline even further the hazy borders between artifacts and natural kinds, and become telling examples of the fuzziness in the assumed cut-off point between the two categories.

All in all, a novel cognitivist perspective on the literary/ art event is a potentially revolutionary step away from seeing LITERATURE/ ART as a conventional concept and its distinct outputs as conventionally determined artifacts, and towards treating both LITERATURE/ ART and its distinct outputs as cognitive objects and natural kinds, which, as I will argue, fleshes out cognitivism for literature and art in the fullest conceivable way.

## **Chapter 2**

### **What sort of concept literature and art is not**

#### **2.1 Introduction**

In the three hundred years or so since contemporary philosophy of art and theory of literature embarked on a sustained enquiry into the essence of art, we have come to know a lot. It might be that what we have come to know relates more to what sort of concept literature/ art is not than what it is, but this should not be seen as showing that the overall enterprise is impossible. The almost unparalleled superficial complexity of literature and art as an open and fuzzy set with an astounding range of indiscernible ‘twins’ fully explains why theory has been so baffled and intrigued by it.

I will argue that none of the theoretical accounts that have been presented so far in either the art-philosophical or literary-theoretic domains tells a complete and compelling story about the ontology of literature and art. But having gathered a certain amount of knowledge about what sort of concept literature/ art is not might be seen as an important epistemic step in its own right. A significant level of methodological clarity may be achieved by acquiring a firm grasp of the theoretical predictions and implications of those approaches to the matter that have been disproved. So from a purely theoretical point of view, knowledge about what sort of concept literature and art is not, could hold vital clues for effectively re-addressing the question of what sort of concept literature/ art might in fact be. And I would not dismiss the enterprise as a waste of effort: if you’re looking for your keys but don’t remember which drawer you’ve put them in, you’re much better off, I think, when you at least remember which drawers you’ve already looked in, rather than having to go through every single drawer from scratch. There are also two methodologically more crucial reasons for considering the most important approaches to the essence of art and looking once again at the knock-down arguments against them. In some cases, the theoretical implications of the collapse of such models have been completely misinterpreted, throwing off decades of later theoretical reflections. The collapse of structural essentialism is, as I will argue, a case in point. So although there is compelling empirical evidence against some of these models, they somehow continue to recur, contaminating more recent accounts and leading to taxonomic dead-ends and persistent theoretical circularities. Unless the predictions and implications that follow from the discrediting or re-adjustment of existing accounts of the essence of literature and art are fully appreciated, new ontological models run the risk of constantly falling back

on theoretical claims that should have been recognised by now as partly inadequate or wholly inert.

This is not to suggest that because an existing approach is wholly or partly inadequate as an account of the essence of literature/ art it does not deserve a place in an overall philosophy of art. The fact that the ontological credibility and implications of a theory have been discredited does not exclude the possibility that this theory may make some other significant contribution to our understanding of the literary/ art phenomenon. So my aim here is twofold. On the one hand, I will rule out the main existing approaches on the matter by going through a handful of knock-down arguments against each of them. It is important to emphasize that the arguments are knock-down ones, so that it is recognised once and for all that these accounts, appealing as they may sometimes be, are incorrect answers to the question of arthood. But at the same time, I will also try and re-adjust the theoretical picture, hoping to offer a fresh outlook on the kind of valuable contributions these accounts make by illuminating various aspects of the broader, *global* (as I will call it the next chapter), art event. So, before setting out my own cognitivist account of the essence of literature and art, let's have a quick look at what sort of concept literature/ art is not.

## **2.2 Literature and art as a conventional (prototypical) concept**

Research on *mental prototypes* in cognitive psychology in the last thirty years (e.g. Barsalou 1987, 1992; Landau 1994; Malt and Johnson 1992) suggests that, in intuitively classifying an object as belonging to a certain category, humans draw on the object's *prototypical features*: that is, on its superficial resemblances to highly exemplary members of that category. A given bird will be intuitively classified in the category of BIRDS on the basis of (shape-related and function-related) prototypical features such as 'it has feathers, a beak, wings, it flies, it lays eggs, creates nests etc', partly stored in our encyclopaedic background and extracted for the most part through interaction with the environment. The object's degree of prototypicality –i.e. how closely it resembles typical members of the category in question– has been shown to crucially affect the confidence, fluency and speed with which human individuals carry out the classification (Barsalou 1987): it would take much longer to decide whether we can classify a penguin as a BIRD than to make the same classificatory decision for a sparrow. And, so it seems, prototypicality judgements can be made for literally anything, including numbers. The number 3, for example, was consistently judged by subjects to be a more typical member of the category ODD NUMBER than 447 (Armstrong, Gleitman and Gleitman 1983). Which candidate members are taken to be the most exemplary of a category

seems to vary significantly across cultures and geographical backgrounds but, all in all, the prototype-driven process by which the classification takes place is the same across the human species.

Now, if this process is taken to be indicative of anything, it must necessarily be a certain aspect of the human cognitive capacity: of how our *prototype detector*<sup>13</sup> enables us to recognise things out there in the world as such and such. But the process can be said to have little bearing –if any at all– on what the thing actually is. A long chain of arguments from *mis-representation* can be devised, offering ample empirical evidence that recognition and ontology are not necessarily comparable notions.<sup>14</sup> The thing in question, for instance, might be an android, a machine, a perfect and indiscernible-to-the-naked-eye robotic reconstruction of a bird. But so long as we are not aware of it, and so long as the thing has the superficial features humans regard as prototypical of the category BIRD, the thing will be mentally represented and classified as a BIRD, despite its not really being a bird. But the thing is what it is. Prototype-driven classification processes are indicative of the operations of the human conceptual system and the mechanisms by which this conceptual system recognizes and taxonomizes certain things as such and such. Obviously our conceptual system has evolved to function in a way that generates inferences to the best explanation with high probability given the ecology of our environment: the objects our prototype detector identifies and taxonomizes as BIRDS, in standard circumstances in the ecology of our environment, are indeed usually BIRDS and not indiscernible robotic reconstructions of birds, just as the black dots that frogs identify as FLIES, and that in the ordinary context of the ecology of their environment indeed usually happen to be flies; however, when the frog is presented in artificial experimental settings with mere virtual black dots, it still persists in trying to catch them, despite the fact that they are not flies but merely virtual black dots. Having a black dot detector can be thought of as a great evolutionary advantage for frogs, even if as a result frogs in non-ordinary contexts mis-recognise black dots as flies, because in their ordinary contexts the vast majority of black dots will happen to be flies. Having a prototype detector can be thought of as a great evolutionary advantage for humans because in the majority of cases it will yield the predictions needed for human survival in the ecology of our ordinary contexts, but the

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<sup>13</sup> Many thanks to Dan Sperber for drawing my attention to the operations of the prototype detector.

<sup>14</sup> This unsubstantiated equation between the ontology and recognition of the artwork seems to persist throughout contemporary writings on the philosophy of art. Peter Lamarque (2007: 45), for instance, suggests in passing (my translation from a publication of his paper in Greek): ‘The “being” [of an art object] –the principal condition of its essence– is determined at least in part by the way the object’s identity is conceived [...] it is an object *under a description* (...)’.

descriptions under which this detector recognises and taxonomizes entities out there in the world cannot be taken as conclusive evidence about the essence of these entities. The operations of recognition and categorisation of a certain object as such and such based on our prototype detector are, and hence, should be treated as, palpably distinct from any serious ontological facts about the ‘thingness’ of the objects in question.

Recognizing a certain object as an artwork on the basis of its superficial prototypical resemblances to objects customarily or by tradition classified as artworks is a direct product of the operations of the human prototype detector outlined above. And it illuminates exactly that: how the particular operations of the human prototype detector dedicated to the recognition and conceptual categorisation of things out there in the world have also applied themselves to the detection of the members of a set as intricate and fuzzy as the category ARTWORK. Such operations, however, do not have anything significant to say about the ontology of these objects. Since prototype detection is a type of non-demonstrative inference (the underlying inference is something along the lines of ‘if it looks like X and feels like X, then it most probably is X’) the conclusion may be probabilistically confirmed by empirical evidence—indeed, more often than not, what looks like X and feels like X, is X—but, just as in any other case of non-demonstrative inference, its truth is not guaranteed by that evidence. More crucially, and to return to the purposes of the present discussion, an inference of this sort does not in any sense provide an answer to what X really is.

It is relatively easy to see why the very structure of our cognitive make-up renders it so intuitively appealing to fasten the metaphysics of literature and art onto the engineering of prototypical object-recognition. I will refer to this broader tendency as *conventionalism*. Being quintessentially a sociological perspective, conventionalism treats literature and art as a conventional concept, assuming that the property (*P*) that makes a certain object an artwork is a conventional property or set of conventional properties: a set of conventionally and sociologically-determined prototypical features and functions singled out by institutional agreement, tradition and custom. Conventionalism is only catachrestically an ‘-ism’. It has not sprung out of a systematic body of theoretical works, as was the case with, say, formalism or structuralism; it is not the result of an intellectual trend or the product of the methodical labour of some artistic or philosophical movement. Unlike other ‘-isms’, conventionalism arises naturally from the engineering of object-recognition and categorisation in the human cognitive capacity.

Conventionalism has been an underlying theoretical tendency fleshed out in many different ways and at many different moments in the history of literature and art. Until the

late 19<sup>th</sup> century, for instance, the dominant view of poetry was intrinsically conventionalist – not as a result of a systematic body of theoretical works but rather as a pre-theoretical disposition originating in the natural human tendency for prototypical recognition that I described above. If a linguistic object adhered to the conventional prototypical features of traditional prosodic rules of metre and rhyme, then it was LITERATURE, it was a poem. The most forceful argument against conventionalism came from within the literary world itself and was nothing other than the emergence of *vers libre*. Free verse emerged as an independent invention by several French poets and theorists in the late 1880's, such as Édouard Dujardin, Francis Vielé-Griffin, Gustave Kahn and Jules Laforgue, and with earlier precursors in the poetry of Symbolists, the prose poems of Rimbaud and the poems of Walt Whitman. A gesture implicit in the attempt to write while liberating oneself from the classical conventional rules of versification in was a silent undermining of the conventionalist view that a certain entity is poetry so long it adheres to these conventional rules. The pioneers of free verse did not simply invent a new form that became current in 20<sup>th</sup>-century poetry but also presented an argument against conventionalism. A linguistic object in free verse –i.e. an object that does not have any of the prototypically expected conventional features– was still LITERATURE, was still a poem; so, if something makes this object a poem, if something makes this object literature/ art, it definitely isn't a set of conventional prototypical features.<sup>15</sup> Literature/ art is not a conventional prototypical concept and in fact it is in the very nature of literary and artistic innovation to actually challenge the sets of conventional prototypical features that each time and era associates with something being literature and art.

In recent decades, a number of theoretical attempts to determine the essence of literature and art by assembling lists of 'recognition criteria' that are no more than prototypical features occurring trans-historically and cross-culturally in the arts (see Anderson 1979; Blocker 1993; Bond 1975; Dutton 2000, 2001 and 2006; Gaut 2000; Moravcsik 1993) clearly fall under the conventionalist perspective. The authors themselves see their lists of criteria as representing the necessary and sufficient conditions or 'definition' that make an artwork the kind of object it is. As Dutton (2006: 374) notes: 'A recognition-criteria approach to understanding art does not tell us in advance how many of the criteria need be present to justify calling an object art. Nevertheless, such a list, in my view, presents a definition of art. (...)'

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<sup>15</sup> Other arguments against prototypical conventionalism may include linguistic objects that bear these conventional features although intuition suggests they are not literature/ art. Ancient Sanskrit medical texts written in metre and rhyme are a typical example.

Let me first spell out why ‘recognition criteria’ lists fall under the conventionalist perspective. The raw material for these lists comes from what the authors assume to be an ‘uncontroversial centre’ (Dutton 2006: 368) of members of the category ART whose common features are then cited and analysed. The question here is what exactly is the origin of this assumed centre –essentially part of a *canon* or a series of *canons*– of indisputable and globally accepted cases. Kristeller’s seminal (1951: 496-527 and 1952: 17-46) treatise ‘The Modern System of the Arts: A Study in the History of Aesthetics’ offers illuminating trans-historical insight into the forms such canonistic art-schemes have taken in human cultural history from antiquity to the modern day, with particular emphasis on the 18<sup>th</sup> century scheme also known as the ‘modern system of the arts’ or ‘western canon’. With prototype detection, cultural custom, historical contingency and institutional practice being the main driving forces behind the way human societies have assembled sets of objects into canons of art, both the categorical structure of these canons and the family resemblance features of their members can only be said to have predominantly conventional origins. Yet the task of a philosophy of art is not to *a priori* attribute the property of arthood to the members of any sociologically and conventionally determined canon. It is, rather, to question whether the members of such canons actually have the property of arthood or not, by developing an adequate theory of what makes an object an artwork. It might be that sharp taxonomic distinctions remain elusive even given an adequate theory of the essence of art, for reasons relating to, say, the non-external observability of the taxonomic criterion used, but this is an entirely contingent epistemological fact. Moreover, this fact would not in any way render the theory inadequate for what it claims to be a theory of, and would not in any way cancel my key claim here that, in principle, it is the content of conventional canons that should be put in question by a theory of arthood, rather than a theory of arthood founding itself on the content of conventional canons.

‘Recognition criteria’ approaches, therefore, suffer from a certain degree of circularity: without a theory of arthood in place, they assume *a priori* that a certain subset of the objects admitted by convention and tradition as art is incontestably art on the grounds that it enjoys a significant level of sociological acceptance –significant enough to confer upon it a certain degree of trans-historical and cross-cultural constancy. They then use the family resemblance features of the members of this ‘uncontroversial’ subset as criteria of arthood. But as we cannot eliminate the possibility that even some of the members of this subset may well not be art –having ended up in the ‘uncontroversial centre’ as a result of prototypical mis-recognition or mis-representation–, then it seems reasonable to suggest that all the

‘recognition criteria’ approach has achieved is simply to pin down and use as a criterion of arthood the family resemblance features of what is no more than an ontologically disparate set, some members of which might indeed be artworks while others might be non-artworks or simulacra of artworks; some might be BLOBS and others might be BLIBS. And it is precisely for this reason that the ‘recognition criteria’ approach would in fact make a number of incorrect ontological predictions. For example, they would mistakenly and counter-intuitively predict that a perfect forgery has the same ontological status as an artwork, since the perfect forgery ticks off the exact same list of ‘recognition criteria’ as the genuine artwork itself.

‘Recognition criteria’ approaches have little explanatory value from an ontological viewpoint and do not really tackle the issue of the metaphysics of art; however, this does not discredit their overall importance for art-philosophical thinking. Such approaches, I would suggest, should be seen as systematic attempts to put into words the particular prototypical features that are responsible for the recognition of a certain object as an artwork by our prototype detector, given the prototype-driven nature of the mechanisms of object-recognition and categorisation in humans. In so doing, they may not supply any general theory of what makes an object an artwork, but they are still valuable to both the philosophy of art and cognitive psychology as systematic accounts of the types of conventionally-determined prototypical features and background information humans sub-attentively draw on in recognizing and classifying a certain object as an artwork.

### **2.3 Literature and art as a structural concept**

Under the influence of radical developments in the fine art world of the time, the early 20<sup>th</sup> century literary avant-garde, from Dadaism and Surrealism through to theoretical movements such as New Criticism, Russian Formalism and Czech Structuralism, makes the first systematic attempt to move beyond conventionalist doctrines.<sup>16</sup> Poets and intellectuals of that time suggest that the property that makes literature/ art distinct as an object must be a formal or structural one, and more specifically, some kind of inherent deviation or significance of the artwork at a formal or structural level (significant or deviant or special form and structure). Around the same time, similar views about art in general are expressed by the British art

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<sup>16</sup> Boris Eikhenbaum, Boris Tomashevsky, Ezra Pound, Jan Mukařovský, Osip Brik, Roman Jakobson, T.S Eliot, Vladimir Propp and Yury Tynyanov are among the proponents of the formalist and structuralist approach to literature. For a comprehensive collection of formalist and structuralist writings in English translation, see Matejka and Pomorska (1978).

critic Clive Bell (1914) and the artist and critic Roger Fry (1920).<sup>17</sup> Literature and art is therefore treated as a *formal* or *structural concept*, which is one and the same thing really: form and structure are very closely neighbouring notions, with form seen as a case of surface structure. So we are in fact looking at a structural account of the essence of literature and art that I will refer to as *structural essentialism*. In Kolaiti (2019) Chapter 4, I have already discussed structural essentialism and the misinterpretation of its implications at great length, so to avoid repeating myself here I will try and be brief and to the point.

The structuralist enterprise can be seen as a wholesale attack on the dominant conventionalist doctrines of its time and an ingenious, though incorrect, attempt to defend a presumed structural or medium-specific causation of arthood: the assumption underpinning structural essentialism is that the distinctness of artworks and literary texts is causally linked to properties inherent to their deviant perceptual make-up, or in other words, that the property (*P*) that makes a certain object (e.g. a literary text) an artwork is a medium-specific property. And if arthood is a medium-specific property, then it immediately follows from the structuralist perspective that there must exist media that are somehow inherently artistic, corresponding to distinct ‘languages’ of art.

Intuitively appealing as this assumption may have been, it was eventually deflated in both the areas of literature and visual art. To assume that what makes literature distinct as an object is some kind of inherent medium-specific deviation or significance of the literary text at a formal and structural level, and given that the formal and structural medium of literature is language, is in other words to assume the existence of a distinct language of literature. Indeed, the so-called ‘distinct language of literature hypothesis’ was central to the structuralist venture and one of the most influential hypotheses about the nature of literature in 20<sup>th</sup> century literary study (e.g. see Brik 1971: 125; Eagleton 1983/ 2008: 2-4).<sup>18</sup> In the last four decades, however, the work of Noam Chomsky (1976, 2000) on Universal Grammar and the language capacity, Jerry Fodor (1975, 1983) on the modularity of mind and language of thought, Dan Sperber, Deirdre Wilson and Robyn Carston (Sperber and Wilson 1995, 2008;

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<sup>17</sup> Kant’s (1787[1790]) *Critique of Judgment* is perhaps the first explicit defence of a formalist/structuralist approach to art (see Cheetham (2001) and Gasché (2003)). For an overview of formalism in aesthetics see Krukowski (1998).

<sup>18</sup> In Kolaiti (2019), I propose that the last serious attempt in the 20<sup>th</sup> century to defend the essential distinctness of literature in structural terms was Jakobson’s structural linguistic programme on the *poetic function* (Jakobson 1958/ 1996: 17). In his ‘Closing statement in linguistic and poetics’ (1958/ 1996), Jakobson aims to capture the inherent –and in this sense essential– structural property that makes literature distinct as an object, and thus emerges as an advocate of structural essentialism, whether he is aware of doing so or not.

Wilson and Carston 2007) on the pragmatics of human communication, as well as empirical work on aphasia and specific language impairment (e.g. see Goorhuis-Brouwer and Wijnberg 1996; Gopnik 1994, 1999; Gopnik and Crago 1991; Leonard 1997; Tallal, Ross and Curtiss 1989; Tallal, Stark, Kallman and Mellits 1981) can be used as evidence that both ordinary and literary language are linked to one and the same innate capacity, the language capacity, they are both produced and processed by the same dedicated system in the human mind, the language module, they both derive from one and the same algorithmic system, sometimes described as the language of thought or mentalese, they both exhibit identical specific impairments and finally, they both employ the exact same set of relevance-yielding pragmatic mechanisms during utterance interpretation. The empirical evidence is overwhelming: literary language is not the product of a separate capacity distinct from the capacity for natural language and as a result, the ‘distinct language of literature hypothesis’ that follows from it lacks psychological plausibility: it is not compatible with empirical findings about how language and the mind really work. The structural model for literature cannot be defended. But what about visual art? Does structural essentialism stand any better chances there?

In the fine-art world the structural model had died long before the death of its literary equivalent.<sup>19</sup> In 1917, Duchamp’s *Fountain* becomes the first of a series of artworks called ‘ready-mades’, because they use existing pre-fabricated or found objects (objects that have not been fabricated by the artist) and therefore have perceptually indiscernible ‘mere thing’ equivalents: ordinary urinals and Duchamp’s *Fountain*, ordinary Brillo Boxes and Warhol’s *Brillo Boxes* are perceptually indiscernible objects; in fact, they are not just perceptually indiscernible but are also, and crucially, structurally indiscernible. Duchamp’s *Fountain* has identical formal and structural properties to those of an ordinary urinal from the exact same production line. If arthood in Duchamp’s *Fountain* was down to its formal and structural make-up, and given that Duchamp’s *Fountain* has equivalent formal and structural make-up to those of an ordinary urinal, then either both the *Fountain* and the ordinary urinal should be artworks or both of them should be mere things. But strong introspective evidence suggests that Duchamp’s *Fountain* is a work of art, while any other perceptually indiscernible urinal from the exact same production line is a mere thing. And if Duchamp’s *Fountain* is a work of

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<sup>19</sup> It is worth noting that it took nearly one hundred years for the literary world to gather all the evidence that disproved the morphostructural distinctness of literature, while the fine art-world had already provided a knock-down argument against structural essentialism. I take this as an indicative example of the occasional losses observed in both the literary-theoretical and art-philosophical camps because of the lack of proper interdisciplinary collaboration between them, and a convincing argument for why such a collaboration is an absolute methodological necessity.

art –and intuition strongly suggest that it is– but any other formally and structurally indiscernible urinal is a mere thing, then whatever it is that makes Duchamp’s *Fountain* an artwork is not down to its form or structure. If there was any hope at all for the structural model in the first place, ready-mades and the current of *conceptual art* they gave rise to from the 1960’s onward certainly made it evaporate. The property (*P*) that makes a certain object an artwork is not a structural property. Literature and art is not a formal or structural concept.

And structural essentialism failed not only to show what makes a certain object an artwork, but also to show what makes a certain object the particular artwork it is. In his work ‘On formalism and pictorial organization’, Wollheim (2001: 128-132) introduces all the shortcomings of the formal and structural model by suggesting that ‘manifest’ and ‘latent’ formal properties<sup>20</sup> constitute the essence of a painting. If Warhol’s *Brillo Boxes* was the particular artwork it is because of its manifest or latent formal properties, then every other set of Brillo Boxes would be not only an artwork but also the particular artwork that *Brillo Boxes* is, by virtue of sharing the same manifest and latent formal properties. Arguments from mechanical reproductions and perfect forgeries would lead to the same counter-intuitive result.

A rather significant theoretical implication of the collapse of the structural model is that there cannot be such thing as an articulatory medium or ‘language’ that is in any way inherently artistic. All there is are articulatory media and systems of signs, some of which are employed by the various art forms, but this does not in any way make these media or systems of signs inherently ‘artistic’. Reference to an ‘artistic medium’ or a ‘language of art’ amounts to tacitly endorsing a theoretically inadequate structuralist ‘medium-specific view of art’. A range of recent endeavours in literary theory and philosophy of art are tacitly infected by this theoretically inadequate structuralist doctrine. David Davies’ (2004) *Art as Performance*, for instance, appears to attempt a move towards a procedural ontology of artworks, but his consistent reference to the notion of ‘artistic medium’ results in his performance theory being contaminated by theoretically inert structuralist assumptions: Davies (2004: 237) characteristically writes, ‘if we could define what makes an articulative medium an artistic medium, we could define an artistic content as the content articulated by that medium’.

The collapse of the structural model left literary and art scholars with a pervasive sense that it was impossible to defend the distinctness of their object. Literary and art theory interpreted the collapse of the structural venture as evidence that there is no distinct essence

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<sup>20</sup> For Wollheim ‘manifest’ and ‘latent’ formal properties correspond to what I am referring to here as form and structure.

of literature and art. As a result, a cluster of theories that represent a new (institutional) variety of conventionalism and that I will briefly outline in the next section emerged, tacitly adopting the presumption that literature and art does not have a distinct essence. On this approach, anything is literature and art so long the status of art is conferred upon it by this or the other set of institutional practices. But is this what really follows from the collapse of the structural model?

In Kolaiti (2019: 46-56) I attempted to put the record straight by suggesting that the collapse of structural essentialism only entails that, if the essence of literature and art is to be found somewhere, this somewhere is simply not its form or structure. The fact that we cannot defend the distinctness of literature and art at a structural level does not in any way entail that literature and art is not distinct in some other interesting sense. The question of arthood and literariness is as open in the post-structural era as it has always been, and what the present book will sketch in the chapters to follow is precisely a new take on the way literature and art might be distinct.

Let me stress here in passing that although structural essentialism is hopeless as an account of the ontological essence of literature and art, the type of morphostructural analysis it employed for literature and visual art is very important in understanding the psychology of ‘creative’ reception and the way artworks achieve their *composite effects* (cognitive, perceptual and affective) upon receivers. [in the revision of the book I want to add here some more discussion on why investigating the material and physical aspects of art is important]

#### **2.4 Literature and art as a conventional (institutional) concept**

As suggested above, the misinterpretation of what followed from the collapse of the structural model gave rise to a cluster of theoretical proposals in contemporary philosophy of art that could be grouped under the banner of conventionalism, yet a slightly different variety from the prototypical version of it discussed earlier. Having interpreted the collapse of the structural model as implying that there is no distinct essence of literature and art, these ultimately conventionalist theories proposed to treat literature and art as an institutional concept, tacitly assuming that literature and art does not have a distinct essence and that ART and ARTWORK must therefore be a *status* conferred on an object by this or that set of institutional, historical and more generally sociologically- and culturally-determined conventional practices. It is precisely because of this assumption that conventional institutional theories, although particularly important for understanding the cognitive and cultural engineering of artwork recognition (and also what in later chapters I will call the

global art event and the adventure of art) as a publicly and culturally situated inter-individual occurrence, have very little to say about the ontology of art and its metaphysical essence. The collapse of structuralism does not in any way entail that there is no distinct essence of art, and there are many possible ontological alternatives that might be explored before ‘giving up’ and treating literariness and arthood as a mere conventional status conferred on an object by an act of institutional naming. Having established the principal reason why institutional theories cannot be taken as an answer to the ontological question for art, let me nevertheless very briefly go through their core suggestions.

Drawing directly on Wittgenstein’s distinction between behaviour and action in terms of the context in which they occur, Arthur Danto’s (1964, 1981) seminal *contextual account* of art assumes that what makes artworks distinct from mere things is their differential contextual history, with ‘context’ perceived as a certain kind of institutional context: unlike mere things, artworks are always located within the particular institutional context of the art-world, and only count as artworks within and by virtue of that institutional context (1964: 531 and 1981: 142). Along very similar lines, George Dickie (1971, 1974) puts forward an *institutional account* of art, in which arthood is explicitly treated as a status conferred on an object by a system of established practices within a given institutional framework;<sup>21</sup> ‘plays, he asserts, are written to have a place within the theatre system and they exist as plays, that is, as art, within that system’ (Dickie 1974: 30). Inspired by Danto and Dickie’s contextual perspective, as well as Wollheim’s (1971) idea that the nature of art must somehow be located within the institutional aspects of its historical development, Jerrold Levinson’s (1979, 1989, 1993, 2002) account emphasizes the historicity of art by replacing the conventions of art-world and institutions with the conventions of *historical context*. Levinson (1979: 235)<sup>22</sup> defines the artwork as an object intended to be regarded or treated as previous art works have been correctly or standardly regarded or treated, and proposes that ‘whether something is art now depends, and ineliminably, on what has been art in the past. (...) [T]he concrete history of art (...) is involved, either opaquely or transparently, in the claim on arthood made by any work of art’ (Levinson 2002: 367). Finally, a claim along very similar

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<sup>21</sup> Dickie’s definition of art goes as follows: ‘A work of art in the classificatory sense is (1) an artifact (2) a set of the aspects of which has had conferred upon it the status of candidate for appreciation by some person or persons acting on behalf of a certain social institution (the art-world)’ (1971: 34).

<sup>22</sup> The exact formulation of Levinson’s definition is: ‘X is an art work at t =<sub>df</sub> X is an object of which it is true at t that some person or persons, having the appropriate proprietary right over X, non-passingly intends (or intended) X for regard-as-a-work-of art, *i.e.* regard in any way (or ways) in which objects in the extension of ‘art work’ prior to t are or were correctly (or standardly) regarded. (1979: 240)

lines can be made about Robert Stecker's 'functionalism' (1986, 1990, 1992, 1994).<sup>23</sup> Although Stecker sees his account as an attempt to pin down the essence of art, in reality he appears focused not so much on what makes a certain object an artwork but on how a certain object is classified as an artwork. There are various points in his discussion where this tacit concern with classification and categorisation becomes apparent: pretty early on in his 1994 paper 'Historical functionalism or the four factor theory', for instance, Stecker acknowledges that in formulating the first disjunct of his functionalist definition he has taken into account the 'dualtrack' or 'multi-track' system humans have for classifying items as art (1994: 257). Then, in trying to improve on his preliminary formulation of the functionalist definition, he consistently reverts to references to the functional criteria that will tell us whether or not an object will be correctly classified as an artwork at time  $t$  (Stecker 1994: 259 and 260-261). Stecker's functionalist account is on the borderline between the prototypical and institutional conventionalist accounts, because his functionalist criteria are in fact sociologically determined prototypical functions of artworks based on what is conventionally recognized by a given society at a given time as a central artform. It should also be obvious that Stecker is not really focused on capturing what makes a certain item an artwork but what enables the recognition and classification of a certain item as an artwork. The very temporal expression 'at time  $t$ ', marking the beginning of his definition, would not make sense otherwise: what could a proposition of 'an entity is a CAT at time  $t$ ' even mean? If an entity is a cat, it is a cat. At any time. Referring to an entity as being that particular entity at particular time  $t$ , seems to be actually referring to what the entity is recognized, perceived and classified as at a given temporal moment in human social and cultural life rather than to what the entity really is.

Notice how all four proposals are clearly underpinned by the conventionalist assumption that there is nothing inherent to being an artwork; that the property that makes a certain object an artwork is a conventional property, a result of social, institutional or historical agreement.<sup>24</sup> Notice also how none of these proposals can in reality be said to touch

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<sup>23</sup> A simplified version of Stecker's functionalist definition of art is that: 'an item is a work of art at time  $t$  if and only if (a) either it is in one of the central art forms at  $t$  and is intended to fulfill a function art has at  $t$  or (b) it is an artifact that achieves excellence in fulfilling such a function (whether or not it is in a central art form and whether or not it was intended to fulfill such a function).' (1994: 256). The 2<sup>nd</sup> condition ('[it] is intended to fulfil a function art has at  $t$ ') involves a parallel element of intentional realism for art: it is concerned with the function an item is intended at fulfilling independently of whether it is fulfilling it or not.

<sup>24</sup> In reality, the case is a bit more complicated. Danto makes an unusual move by introducing a relational variety of essentialism, in which the conventional property of being located in an art-world context is seen as essential to artworks. In a certain sense, therefore, his conventionalist project is at the same time 'essentialist'; the rationale underpinning his work could be described as 'art is a case of

on the metaphysics of art: what Danto's (1964: 581-584) seminal account really showed is how encyclopaedic knowledge of pertinent aspects of art history, alongside society's particular perspective on art at a particular time, alter the possibilities of a certain object being recognised as an artwork at a given socio-historical moment. Dickie took Danto's proposals further by adding 'established institutional practices' among the factors affecting an object's probabilities of being seen and recognised as an artwork in a given spatiotemporal context. Levinson's approach offered an admirably elegant explication of how historically stabilised chains of prototypical resemblances facilitate or even enable the recognition of certain objects –even highly atypical ones– as artworks in the long process of human cultural transmission. And, finally, Stecker's prototype-driven approach drew attention to possible prototypical functions an item must fulfill at a given time in the course of human cultural transmission in order to be recognized and classified as an artwork at that time, creating an art-specific equivalent of a question that has concerned cognitive psychologists for over thirty years: whether prototypical functions underlie our understanding of artifact concepts, and how far they determine the classification of an artifact as such and such (e.g. Landau 1994; Malt and Johnson 1992; Soya, Carey and Spelke 1992).

Danto, Dickie, Levinson and Stecker's models formalise the factors that determine whether something will count as an artwork, will be perceived as an artwork or be recognised and categorised as an artwork. But as I have said from the outset in this analysis, what something counts as, is perceived as or is recognised as, does not necessarily entail anything about what that something IS.

In fact, it should be held as a genuine taxonomic and ethical problem for the philosophy of art that social, historical and institutional practice might at times have conferred the status of an artwork on objects that may not after all be artworks, while, at the same time, objects that are artworks may have never had the status of an artwork conferred upon them. To repeat what I said earlier, the claim that Danto, Dickie and Levinson's frameworks are not in fact accounts of the ontology of art but rather accounts of the sociology and anthropology of art and the contextual factors affecting the recognition processes involved in it does not in any way discredit the major contribution these frameworks make to art-philosophical thinking. Quite the contrary. The input all three stories have had to

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objects whose essential properties are conventional ones'. With Dickie and Levinson drawing directly on Danto's model, we could say that his conventionalist-essentialist rationale applies to them too. A pretty similar implication seems to follow in Monroe Beardsley's (1976) 'Is Art Essentially Institutional?'.  
objects whose essential properties are conventional ones'. With Dickie and Levinson drawing directly on Danto's model, we could say that his conventionalist-essentialist rationale applies to them too. A pretty similar implication seems to follow in Monroe Beardsley's (1976) 'Is Art Essentially Institutional?'.

explicating recognition-related aspects of literature/ art –integral to an understanding of the sociology and anthropology of art as an occurrence within human cultural transmission– is simply priceless. It is just that none of what these frameworks have a story to tell about is the metaphysics of art.

## **2.5 Literature and art as a causal (intentional) concept**

The philosopher of mind Jerry Fodor was known mainly for his ground-breaking work on concepts, the language of thought and mental modularity. In 1993, Fodor contributes a paper with the title ‘Déjà vu all over again: how Danto’s aesthetics recapitulates the philosophy of mind’ in a collective volume on Danto’s aesthetics in which he provides a new answer to the question of what essential property makes a certain object an artwork. Although, as I will show, his account is incorrect, it deserves particular theoretical attention in philosophical discussions on aesthetics as it is perhaps one of the most significant recent contributions on the question of arthood. In some sense, Fodor can also be said to be the closest intellectual precursor of the cognitivist account I will unfold in the following chapters of this book. So let us see what kind of story he has to tell.

Directly inspired by Danto’s appeal to Wittgenstein’s definition of action, and strongly influenced by recent philosophical work on intentionality, Fodor pursues a causal type of essentialism and argues that the property (*P*) that makes a certain object an artwork is part of the artwork’s *etiological* or *causal history*, and more specifically, a causal relation between the artwork and a certain type of mental state: in Fodor’s view, this mental state is an intention. ARTWORK is therefore seen as a causal concept, and more specifically an intentional one, and as a result, Fodor’s story is one of *intentional etiology* (1993: 44). In establishing the particular relationship that he takes to hold between intentions and the essence of a work of art, Fodor appeals to Descartes’ definition of action:

A first approximation to the Cartesian story [about action] is this: in the typical case, what makes a motion an action is that it is caused, in the right sort of way, by the agent’s intentions. In the typical case, for example, what makes a motion an act of *F*-ing is that it is caused, in the right sort of way, by an intention to *F*. (What makes a rising of an arm an arm raising is that it’s caused, in the right sort of way, by an agent’s intention that his arm should rise.) (...) Suffice it that the Cartesian story (...) would explain why there can be action twins. Having the causal history it does is itself a relational property of an event, hence it’s a property that may distinguish events that are “indistinguishable to all appearances”. (...) [T]o come to the point at last, this option also suggests itself in the case of artwork twins. A relatively unilluminating version of the Cartesian story might be that what makes something an artwork is that it was *intended* as an artwork by whoever made it. In which case, it could distinguish between an artwork and a mere thing that the

latter but not the former was made with the intention of providing a container for Brillo pads. (...) ...”artwork” is an etiological concept -thereby explaining how there can be artwork twins; and it connects the intentionality of artworks (their aboutness) with the intentionality of mental states. (1993: 44-45).

Fodor admits that ‘the Cartesian proposal isn’t of much help as it stands’:

[I]ntending to make an artwork needs explication in a way that, say, intending one’s arm to rise does not. (...) it’s a lot less clear what it is that one intends when one intends that something should be an artwork. (1993: 45)

Hence, the goal of his discussion thereafter, and more specifically his appeal to the notions of *audience* and *object function* (1993: 46), is to develop and make more concrete the Cartesian proposal. Is Fodor right? Is ARTWORK an intentional concept? Let us consider an example.

Little Johnny is sitting next to his mom scribbling on pieces of paper with his coloured pencils. Little Johnny recently heard the word ‘masterpiece’, and discovered what it means. In fact, he is just now deciding to draw one. He grabs one of his coloured pencils and clumsily smudges a piece of paper. He then summons his mom and says snootily, ‘Mom, look! A masterpiece!’ His mom takes the drawing/ smudged paper in her hands and agrees: ‘Yes, it’s a masterpiece!’ Little Johnny is over the moon.

Johnny’s behaviour is an action of trying to create a masterpiece in the Cartesian sense, in that it is caused, in the right sort of way, by an intention to create a masterpiece. And we know it’s ‘the right sort of way’ because the action brought about by this intention is an action of trying to create a masterpiece, as opposed to, say, an action of trying to eat an ice-cream. Defenders of the intentional approach may not find this line of argument satisfactory. Indeed, one could propose that you can’t rationally form an intention to do something that you know is impossible, and creating a masterpiece is impossible for most children. The claim might then be further generalised: if you want your mental state to count as a genuine intention rather than a mere desire or wish, you cannot rationally intend to perform action A unless you are capable of performing A.

I want to propose, however, that intentional objects with *evaluative content* should be excluded from this claim. You cannot intend to create objects with an evaluative element in the way you intend other things. Part of what it means for an object to be evaluative –and both masterpiece and artwork, I argue, are objects with an evaluative element in this sense –

is that an agent cannot intend in the strict sense to bring them about, because she can never assess with complete confidence her ability to bring them about— in the way, let us say, that an agent can assess with confidence the ability to bring about an action like raising one’s own arm. An artist may cut her own ear off in despair at the limitations of her abilities, spend a lifetime seeing the creation of art as unachievable, doubt the actual artistic status of her output, and still be said to have a rational intention to bring about a work of art. The dimension of artworks as objects with an evaluative element allows one to intend to produce an artwork and simultaneously hold the belief that what one intends may not be achievable by her in the given time, with the whole scenario not being a paradox.

So, Johnny’s behaviour is clearly an action of trying to create a masterpiece in the Cartesian sense, in that it is caused, in the right sort of way, by an intention to create a masterpiece. Moreover, Johnny’s intention to create a masterpiece is recognised as such by his mother. In recognising this intention, his mother interprets his behaviour as an action of trying to create a masterpiece and happily acknowledges the drawing as a masterpiece, although what she is looking at is a smudge. Is Johnny’s smudge a masterpiece?

Influenced by philosophical work on intentionality, Fodor’s proposal inherits a fundamental weakness of the intentional account, which to a certain extent persists in all discussions on intentionality, including Farrell’s (2017) more recent account of art as an intentional concept. I think I could not put it better than the philosopher Fred Dretske (1988: 64):

Philosophers have long regarded intentionality as a mark of the mental. One important dimension of intentionality is the capacity to misrepresent, the power (in the case of the so-called propositional attitudes) to “say” or “mean” that P when P is not the case.

The knock-down argument against Fodor’s account follows precisely from this dimension of intentional states. Intending to create an artwork may bring about an action of trying to create an artwork, but it does not necessarily create an artwork *per se*, just as having an intention to create a masterpiece may bring about an action of trying to create a masterpiece, but does not necessarily create a masterpiece *per se*. Johnny intends to create a masterpiece, and this intention brings about, in the right sort of way, an action of trying to create a masterpiece. As it happens, though, the output of this action is not a masterpiece but a smudge. Although the smudge was clearly intended as a masterpiece, its intentional history is not in itself sufficient to make it a masterpiece. All intentional etiology can reveal about this object is whether it

was intended as a masterpiece, whether it was produced by an action of trying to create a masterpiece, but not whether it actually is a masterpiece. An object may be intended as an artwork, and this intention may even be recognised by an audience; its intentional history, however, is not in itself sufficient to make this object an artwork. Its intentional history tells us whether the object was intended as an artwork, but not whether the object actually is an artwork. The intentional history of an object is sufficient to tell us what the object was intended as, but not what the object actually is.

It may be that some actions like raising one's own arm are determined by their intentional history, although there is a lot of room for debate here too. In fact, it can be argued that the Cartesian proposal is of little, if any, help even in the case of simple, uncomplicated actions: the intentional history of even a simple action such as raising an arm is not enough to account for the identity of the resulting action, while the intention alone of raising an arm may in some contexts not suffice to bring about the intended action: if, for instance the arm in question is stranded, the upper limbs paralysed, etc. There are thus various other boundary physiological and cognitive conditions that have to be met in order for intentions to bring about even simple, uncomplicated actions, which brings into question whether even the simplest actions fall under intentional concepts in a full-fledged and uncontroversial sense. This realisation allows us to generalise the claim I made earlier about intentional objects with an evaluative element (objects like artwork and masterpiece) to all possible intentional objects: the intention of raising one's own arm may bring about an action of *trying* to raise one's own arm but not an action of actually raising one's own arm.

In any case, art is not such an action. An artwork is not constituted by its intentional history –by its being intended as an artwork– any more than a masterpiece is. Intentional causation leaves the question of the essence of art entirely untouched. Fodor is wrong, literature and art is not an intentional concept.

In discussing the matter in the 2011 Balzan workshop on 'Concepts' (September 2011, St. John's College, Oxford), Gregory Currie suggested to me that Fodor's account could perhaps be supplemented with a 'success criterion', where 'intending something as an artwork' would be substituted by 'successfully intending something as an artwork'. A closely related suggestion concerning the essence of artifacts in general has been made by the cognitive psychologist Paul Bloom (1996) and endorsed by Levinson (2002: 378-379). Bloom adds a 'success criterion' to the intentional account, combines it with Levinson's historical perspective and proposes an *intentional-historical account* according to which, for any artifact, to be the kind of artifact it is is to be successfully created with an intention to be

that artifact (Bloom 1996: 10); and what it is to be that artifact, is given historically by past instances of the artifact in question.

Now, if all that is meant by the term ‘success criterion’ is that you cannot rationally intend to perform action *A* unless you are capable of performing *A*, then my argument from the evaluative nature of objects like artwork and masterpiece has already suggested why this claim does not fully apply to such objects. If what is meant by ‘success criterion’ is that you have (successfully) intended to perform action *A* only when you have managed to successfully perform *A*, then the claim can be challenged on the following lines. Intentions are much like desires or wishes in that failure to perform *A* does not entail that you have not (successfully) intended *A*, any more than failing to win the lottery does not entail that you have not (successfully) wished or desired to win it. It is not just that, as I suggested before, the transition from (successfully) intending *A* to successfully performing *A* might be obstructed by various boundary conditions, but also, and more importantly, that success in performing *A*, although causally linked to the intentional state, is not in any way part of the intentional state (i.e. of what it means to have successfully intended *A*) just as the fulfillment of a wish or desire (i.e. winning the lottery after all) is not in any way part of the state of wishing or desiring (i.e. of what it means to have successfully wished or desired to win the lottery). In its latter sense, the notion of a success criterion compresses a two-step process into just one: 1) an agent (successfully) intends *A* and 2) an agent successfully –or not successfully– performs what she has (successfully) intended, i.e. *A*. The fact that intentions are causally linked to their outcomes in a way that does not apply to wishes or desires does not change the picture much: in its latter sense, the success criterion clearly applies to the second step, i.e. the step of successfully or not successfully performing what I have intended (Bloom’s formulation is very cautious and makes this detail explicit: ‘the extension of artifact kind *X* [are] those entities that have been successfully created with the intention that they belong to the same kind as current and previous *X*’s’ (1996: 10)). Yet the step of creating and performing, although causally linked to the intentional state, is not part of the intentional state itself –hence the occasional slippage between intentions and the actualization of these intentions that Bloom acknowledges–, so as to be able to retroactively render the intentional state successful or unsuccessful. In this latter sense, appeal to a ‘success criterion’ does not in any way affect my earlier claim that the intentional history of an object is sufficient to tell us what the object was intended as, but not what the object actually is. I don’t think that the addition of a ‘success criterion’ can save Fodor’s intentional account. If ARTWORK is a causal

concept –and, as you will see later, I agree with Fodor that it is– the etiology involved is not intentional.

Fodor’s intentional account of the essence of art is incorrect, but a certain aspect of the rationale behind his proposal seems to me to point in a rather exciting direction. Fodor’s story moves beyond the binarism of artifactual and receiver-oriented theories of art by looking for the essence of art in the causal relation between the artwork and a certain type of mental state. In so doing, Fodor’s intentional account not only decisively interweaves the essence of literature and art with the workings of human agency but also implicitly puts the creator, the artist, into the focus of theoretical attention. In this sense, Fodor’s story can be said to implicitly involve an important epistemological shift: it primes what in the next chapters I will call a creator-oriented, mentalistic or cognitivist view of literature and art, a view, that is, that concentrates not on artworks *per se* or their reception by audiences, but on the relation between artworks and the mental states and representations of the human agents that bring them into being. Fodor doesn’t seem anywhere to be reflectively aware of the epistemological, art-philosophical and literary-theoretical importance of this shift, or to be explicitly describing it as such, but his proposal can nevertheless be said to implicitly involve it. There are, of course, various disparate intellectual precursors of this shift. Let’s take a quick detour through them.

For more than fifty years now, it has been in principle acknowledged in passing in the art-philosophical literature that artworks are the results of human agency, and there has also been some discussion of the interface between art and creativity (Kieran .....) and art-related generative processes.<sup>25</sup> Collingwood (1938: 128-129) in *The Principles of Art*, for instance, focuses on artistic creation as a case of conscious and voluntary making. Dutton (1979: 302-341), in trying to pin down the ontological difference between genuine artworks and forgeries, acknowledges in passing that art involves an element of accomplishment, and speaks explicitly of artworks as ‘results of human agency’ and ‘end-products of the artist’s performance’, without however fleshing out these passing references into a systematic creator-oriented account.

In *The Transfiguration of the Commonplace: a Philosophy of Art*, Danto (1981) does not explicitly discuss the creation-related aspects of art or the mental goings-on involved in

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<sup>25</sup> Some early discussions on ‘human agency’ and creativity in art can be found in the philosophical aesthetics literature: Beardsley (1965), Currie (1989), Danto (1981), Davies (2004, 2005), Dutton (1979), Hospers (1985), Koestler (1964), Maitland (1975) and Morgan (1953). Two recent analyses with a focus on literature and linguistic creativity can be found in Attridge (2004) and Carter (2004).

the artist's performance, but it should certainly be noted that by turning to Wittgenstein's distinction between behaviour and action in order to distinguish artworks from their 'mere thing' equivalents, Danto implicates the theoretical necessity of some notion of human agency.

The same can be argued about Currie's (1989) 'Action-Type Hypothesis' (ATH). This early account by Currie is an exciting attempt to allocate theoretical attention to art-related generative procedures by treating artworks not as the tangible products of a generative procedure but as the procedure itself.<sup>26</sup> A similar –although quite different in its details– theoretical move towards a creation-directed ontology of artworks as procedures can be found in Davies's 'Performance Theory' (2004): the very notion of 'performance', if nothing else, is tacitly underpinned by human agency of some kind.<sup>27</sup> Indeed, both Currie (1989: 72) and Davies (2004: 199) explicitly acknowledge that the appreciation of artworks involves the appreciation of a certain kind of action on the part of the creator, one that merits the status of an accomplishment or achievement. However, there is a certain move that makes both these accounts debatable: both Currie and Davies seem to implicitly equate ART with its output, the ARTWORK. That is not news. In Chapter 1, I argued extensively against this theoretically and methodologically inadequate, arbitrary and reductionist equation that has tacitly dominated literary-theoretical and art-philosophical discourse. In the case of Davies and Currie this equation takes a more interesting twist: instead of as usual reducing ART to the tangible physical properties of its output ARTWORK, they actually seem to be doing the reverse. They seem to attribute to the output ARTWORK the action-based and process-based nature of ART. The move is not entirely new. The idea that artworks are generative performances and the subsequent implicit equation between ART and ARTWORK can also be found in Dewey's claim (as quoted in Croce (1948: 205)) that there are not artistic 'things' but only an artistic 'doing', in Maitland's (1975: 181-196) reference to the artwork as a 'doing' and a 'performative presence' and in Sparshott's (1980: 346-367 and 1982) treatment of the artwork as a performance geared to the establishment of a design.

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<sup>26</sup> Currie (1989) argues that all artworks are action-types, i.e. discoverings of a particular structure-type (S) by a particular method (the heuristic path HP) used by the discoverer. The action-type can be multiply tokened by different agents on different occasions. Currie, however, did not pursue the ATH any further. His subsequent attempts (e.g. 1993, 2000, 2010) suggest that Currie's ontological views must have changed direction.

<sup>27</sup> Currie and Davies' proposals have been widely discussed and reviewed. For reviews of Currie see Budd (1990: 369-372), Davies (2004), Levinson (1992: 215-222) and Wolterstorff (1992: 310-314). For reviews of Davies see Dilworth (2005: 77-80), Kania (2005: 137-141), Stecker (2005: 75-77 and 2009: 375-86).

The fact that in these works that equation between ART and ARTWORK has changed directionality does not make the equation any less inadequate and arbitrary. As I will discuss in detail in the following chapters, the global art phenomenon or art event can be said to involve a distinct action-process (ART), which might or might not lead to a characteristic output (ARTWORK), which is by design likely to elicit some characteristic response (AESTHETIC RESPONSE). If Currie, Davies, Dewey, Maitland and Sparshott had claimed that ART is not merely the tangible product of a generative process, as is standardly believed, but rather the generative process itself, they would be pointing the way in a direction that in my view, and in line with the account I develop in this book, is long overdue in contemporary literary-theoretical and art-philosophical thinking: the shift from talking about art as a mere inert object (the artwork or literary text) to talking about it in terms of actions and processes of human agents that bring artworks into being. Yet their claims are about not art but the artwork itself.

In his 2017 monograph *The Varieties of Authorial Intention: Literary Theory beyond the Intentional Fallacy*, Farrell tackles the intentional fallacy anew and proposes a somewhat more refined version of an intentionalist account, which relates intentionality to a notion of context and interconnects the creator's intentions with dynamic co-creation by the receiver based on context-dependent inferential processes. Farrell's account is, nevertheless, an intentionalist one and suffers from the same fundamental weakness as Fodor's intentionalist account. He should be credited, though, for making a convincing move towards seeing literature and art as outputs of human agency and intelligence.

In his least well-known paper, 'Non-lexicalised concepts and degrees of effability', Pilkington (2001), known mainly for his work on poetic effects and relevance (Pilkington 2000) puts the agent at the centre of attention by introducing a notion that he refers to as *poetic thought*: Pilkington focuses on the literary mind's 'continual struggle to express something that is relatively ineffable' and attributes this struggle to a specific kind of thought (poetic thought) that in his view literature tries to express. In Kolaiti (2019: 60-66) I have argued at length against Pilkington's notion of poetic thought and argued that it should be thought of as theoretically inadequate and redundant. However, at the same time, I have also acknowledged that Pilkington's focus on the inadequate notion of poetic thought is a significant epistemological shift in the creator-oriented perspective that I am interested in here.

Finally, Hogan's more recent work *How Authors' Minds Make Stories* (2013) envisages a rigorous theory of the species-specific mechanisms that underpin narrative

imagination, with a focus on the role of mental simulation and the Theory of Mind capacity (ToM). Hogan brings into play highly up-to-date empirical and cognitive findings from the areas of simulation theory and the human metarepresentational capacity in trying to illuminate the universal cognitive engineering that comes into play in our everyday counterfactual and hypothetical imagination, also enabling narrative imagination. Although, strictly speaking Hogan's analysis does not develop a creator-oriented account of art, it can be seen as tacitly endorsing a shift of attention towards authorial cognition and agency.

Despite the obvious (in my view) epistemological significance of these contributions for bringing into focus the agency-related aspects of art as a distinct type of human action and an essentially distinct object, none of these contributions has so far received the theoretical attention needed to instigate a widespread epistemological and theoretical shift of discussions in the direction of a creator-oriented, or action-based, or cognitivist research programme for literature and art. Theory has for the most remained persistently in the grip of an artifact-oriented v receiver-oriented binarism. The next few chapters will attack this binarism head-on and try to lay the foundations for this long overdue programme.

## Chapter 3

### Literature and art as an action<sup>28</sup>

#### 3.1 Three centuries of binarism

For three whole centuries since Emmanuel Kant's *Critique of Judgment* (1790/ 1987), debate in both the philosophy of art and the theory of literature has tended to revolve around two main reference points: one is the artwork as a physically tractable and externally observable entity, and the other is our reception or appreciation of it. Despite the passing references to the fact that artworks are the results of human agency and the few more recent attempts to shift attention from the products of art-related generative processes to the generative processes themselves that I discussed extensively in the last section of the previous chapter, it would not be an exaggeration to claim that the creation part of the literary/ art event has received relatively little attention. The 20<sup>th</sup> century polarizations between medium or text or artifact-oriented and receiver-oriented approaches have treated as a dipole what in reality is a triptych. Literary-theoretic and art-philosophical discourse has been moving back and forth from the artwork *per se* to the receiver, and back to the artwork and back to the receiver, leaving out of the picture the third, most fascinating and, from an ontological perspective, most crucial aspect of the triptych that makes up an art event: the creator, the artist. In those cases during the last century where the artist indirectly came into theoretical focus through incidental discussions of agency and generativity, the artist only stayed in focus very briefly. None of these discussions attracted enough theoretical interest to divert attention from the binary oppositions of artifacts vs receivers; the artist would very soon fade out of the theoretical picture again and the ontological conundrums would revert to their initial state of circularity. The contemporary intellectual history of the question of the essence of literature and art has involved looking mainly at the artefactual and reception-related aspects of art, almost neglecting the fact that artworks are products of human agents and their mental representations. It has been absorbed by the study of art as a public, culturally situated, externally observable entity, overlooking the fact that art begins in the individual mind.

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<sup>28</sup> An early version of this chapter appeared as 'The Poetic Mind: a producer-oriented approach to literature and art' in 2015 in the *Journal of Literary Semantics* 44, 1: 23-44. Many of my claims about the notions of 'creativity' in general and 'aspectual creativity' in particular have since then been significantly refined as a result of the dedicated research on creativity and productivity/ plasticity I carried out as part of the 'CogLit' Project, European Commission based at the University of Brighton between 2018-2020 and also for writing Chapter 7 of the present book that is focused on a two-way interdisciplinary approach to current creativity research.

It should be quite uncontroversial that literature/ art somehow begins in the mind. That the set of entities out there in the world we call ‘artworks’ are the physical outcomes and externally observable instantiations of internal efferent activities in the mind of creative agents and the subsequent action-processes that these activities bring about. Amongst the many reasons why literature/ art is not an action like raising one’s own arm, its production-specific particularities immediately stand out. It seems plausible to assume that, while any human being –provided they are not physically or mentally impaired– can raise their own arm, not every fully physically and mentally functioning human being can produce *De niemandrose* or *Guernica*.

The differential distribution I allude to here is not the result of mere environment and chance ecological factors. In Chapter 7, I will try and weave together research on talent with current empirical studies in the psychology and neuroscience of creativity in order to discuss at length how the ability to produce literature/ art and the aptitudes, gifts and talents, as well as the specialised types of thought-states/ processes and creative ideation that enable it, distribute themselves differentially across the human species in what can be assumed to be a rather complex context of gene-environment interaction.<sup>29</sup> All I would like to lay on the table at this provisional stage is the empirically and intuitively appealing fact that the ability for art is not equipotential across human individuals in the way the ability to raise one’s own arm is, and this is not only due to contingent differences in nurture and ecology but also due to prior differential predisposition in terms of innate states and biological endowment. What might these innate states be, and what do they reveal about the nature of literature and art as an action potentially distinct from all other human actions? Could focusing on the production-related aspects of literature and art bring to light some significant cognitive distinctiveness in the nature of the internal efferent activities involved, and ultimately in the mind that entertains them? If not every mind is capable of art, what makes certain minds capable of it? In this chapter, I would like to step out of three hundred years of binarism. I would like to shift the focus from the externally observable output ‘artwork’ as a shared public stimulus to the non-externally observable mind-internal activities that bring artworks into being. Move from looking at artifacts *per se* or their reception to looking at art as a potentially distinct –if

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<sup>29</sup> It is pretty standard in cognitive science to distinguish between equipotential ‘general abilities’ shared by all physically and cognitively non-impaired individuals and ‘high aptitudes’ or ‘talents’ which are much less widely distributed. Part of my aims in Chapter 7, will be to use the cognitive model of literature and art I will develop here as a starting point for investigating a range of backward interdisciplinary effects that could help refine existing discussions on human ‘creativity’ and ‘talent’, and lay the basis for radically new taxonomic, theoretical and empirical accounts of the human ability for creative ideation.

not unique— intra-individual occurrence within an individual consciousness, that of the artist. The enterprise of putting under scrutiny the action-processes, mental states and representations of the mind that is capable of art may help provide new answers to some persistent theoretical and ontological questions in literary and art study and lay the foundation for a new programme in the 21<sup>st</sup> century in which a diverse range of literary-theoretic and art-philosophical issues, including the question of the essence of literature and art, could become the subject of a new, cognitive type of interdisciplinary research initiative in the most robust construal of ‘cognitive’ I can possibly think of.

### **3.2 Ways of *seeing* objects: the aspectual mind**

Let us start from the uncontroversial assumption that there exist objects and mental representations of objects. Do not take the notion of object too narrowly. Construe it broadly as anything that a mental representation might be about: an existing or fictional concrete ‘thing’, a state of affairs, a situation, a sensation, a feeling, a psychological, emotional or mental state, or even a tightly interwoven bundle of all these. Do not take ‘representation’ too narrowly either. Think of it not as a mere mental image or conceptual description of an object, but as being in a complex state in relation to some object, involving conceptual descriptions, phenomenal representations and affective attitudes towards it.<sup>30</sup> The aim here is to stay within a computational and representational theory of mind, but one that does not reduce human experience to strict conceptualism, mere mental imaging or affectless, disembodied representationalism. So, from now on, I will refer to this complex state as a

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<sup>30</sup> My use of the term ‘phenomenal’ covers every non-conceptual representation that the human mind can potentially entertain, including both perceptual and emotional states. Emotions are responses to the world rather than perceptions of it. Since perceptual states are defined as states that give information about distal objects, emotions cannot be thought of as perceptual representations. It is therefore more adequate to use the broader term ‘phenomenal’ rather than the narrower ‘perceptual’ to refer not only to states associated with the senses but also to emotions (for an overview of phenomenal consciousness see Alter and Walter 2007; Byrne 2004; Carruthers 2000; Rosenthal 2002 and Smith 2002). In Kolaiti (2019: 28-45) I argue that phenomenal states are not associated only with certain sorts of concepts, as is standardly thought, but are quite pervasive in our mental tapestry; as far as linguistic communication is concerned, phenomena reach well beyond the limited range of those expressions tightly associated with emotion and perception: all words and linguistic expressions can be shown to provide access to phenomena. It should note that the view of emotions I generally adopt is in line with Cosmides and Tooby’s (2000) computational approach where emotions are seen as ‘superordinate programs whose function is to direct the activities and interactions of the subprograms governing perception: attention, inference, learning, memory, goal choice, motivational priorities, physiological reactions (e.g., heart rate, endocrine function, immune function, gamete release)’ etc (Cosmides and Tooby 2000: 93) without nevertheless being reducible to any one category of effects, such as sensations or effects on physiology. Cosmides and Tooby’s (2000) view of emotions is computational but still not at odds with the type of all-round and embodied representationalism I would like to favour in this analysis.

‘way of *seeing* objects’, with *seeing* interpreted broadly along the lines sketched above, and not just in its everyday (strict visual or even perceptual) sense. In this broad sense of ‘object’ and *seeing*, even the ‘found text’ in David Antin’s early collage poetry or Susan Howe’s phonetic or visual poems or, finally, a minimalist piece of fine art may be described as involving an element of representation, in that they involve an object, pre-existing or manufactured by the artist, whose formal, spatial, perceptual, substance-related properties (lexemes, phonemes, morphemes and graphemes, surface, material, volume, colour, texture etc) are *seen* by the artist in a certain way.

Particularly in literature/ art, as opposed to other areas of human intellectual performance –and for reasons that *inter alia* derive from the fact that artworks are instances of *weak communication*<sup>31</sup>– the objects involved are of such complexity and fluidity that it is often almost impossible to entirely pin them down, never mind exhaust them. What is the object of Anne Carson’s ‘Kinds of Water’? What is the object of Joel-Peter Witkin’s ‘Portrait as a vanité’? What mental object can they be taken to represent? How can we ever capture that or exhaust it entirely? In fact, the better the artwork, the less likely it is that its object will ever be exhausted. The fact that objects are not explicitly tractable within the framework of literature/ art does not, however, entail that they are not metaphysically or psychologically real. Both introspective evidence and the striking fact of interpretive convergence –i.e. the fact that an artwork or literary text can cause different recipients to have surprisingly similar perceptual, affective or conceptual responses– suggest that objects of literature/ art must exist. So, even when we are unable to explicitly and rationally pin down our intuitions about what is the object of an artwork, or what a representation is a representation of, our analysis need not admit any serious degree of artificiality.

From the indefinite number of lines that hover somewhere at the back of my head, here are a few:

A child squeals as if being slaughtered / or someone is slaughtered and squeals like a child.  
(Boukova 2000)

Lemon/ Waxen totem of death/ Luminous lust.  
(Iliopoulou 2007)

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<sup>31</sup> The term ‘weak communication’ refers to the case where a communicative stimulus makes available not a single proposition or a determinate set of propositions, but a vague range of possible implications with roughly similar import, any subset of which could contribute to the relevance of the stimulus. For discussion see Sperber and Wilson (1995: 217-224, 235-237) and Sperber and Wilson (2008, 2015) and Wilson and Carston (2019).

My heart/ a warm meek mouth/ that your heart's scented caress/ has condemned to survive/ wide open/ stammering/ without lips.  
(Kotoula 2007)

We are in spring already and the flowers/ bloom upon the temples of the dead.  
(Polenakis 2007)

(...) with all the ways birds have to fly, step after step, towards infinity.  
(Elytis 1972)

If we want to tell an interesting story about the production-specific particularities of literature/ art, this is a very good place to start. The objects of these lines elude my ability to fully explicate them. At the same time, though, I can intuitively and pre-rationally grasp that there is something about the way this object is being *seen*. I can also intuitively and pre-rationally grasp that this something is not simply conveyed by the formal properties of these utterances, but is rather inextricably bound up with them.

In talking about birds flying step after step towards infinity, Elytis makes an exciting and unexpected connection. His utterance fluently transforms a vague *gestalt* –a raw, undifferentiated input to perception, as it were– into structured commotion. It does that with enviable formal simplicity and clarity. There is something vigorous and startling and untrivial in the way Elytis *sees* and speaks about his object. More importantly, this something is not external to Elytis' consciousness. It does not concern how birds fly, or even Elytis' attending to how birds fly. If there is a 'something' here that is relevant for a philosophy of literature and art, it is the way in which Elytis *sees* the flying of birds. Note that 'how birds fly' is an external, real world, object. But 'the way in which one *sees* the flying of birds' is an internal, mental object.

The way in which Elytis *sees* the flying of birds is inextricably tied to the way in which Elytis speaks about the flying of birds. It would be impossible for Elytis to speak of birds 'flying, step after step, towards infinity' unless he was in some, even subconscious, sense, able to *see* birds as 'flying, step after step, towards infinity' –at least, to the extent that his speaking is a deliberate and meaningful act rather than the result of unconscious rambling, delirium or a game of random word assembly like the Surrealists' 'corps exquisite'. I would also suggest that it is impossible –and I will show later in discussing stylistic thought states

why I think so— for Elytis to be able to *see* birds as ‘flying, step after step, towards infinity’ but not be able to speak of birds as ‘flying, step after step, towards infinity’.

Elytis’ lines are indicative of a type of original and unexpected association-making which suggests that among the set of all the ways of *seeing* (objects) there exist certain original, unexpected or non-trivial ways of *seeing* (objects).<sup>32</sup> I take these latter non-trivial ways of *seeing* to be a special kind of representation, which I will call *aspectual representation*<sup>33</sup>—where by ‘aspect’ I refer to the aspects of an object that somebody attends to, conceives of, comes up with. *Seeing* objects in novel non-trivial ways is in effect *seeing* novel, non-trivial aspects of objects or novel, non-trivial connections amongst objects.

Aspectual representations are internal, mental entities. It is not the external, real-world object of a representation that makes it aspectual but the way in which this object is being mentally apprehended; there are no *proper objects* of aspectual representations. By ‘proper objects’ I refer to the outdated and inadequate pre-20<sup>th</sup> century theoretical doctrine that certain sets of objects are more appropriate for literary and artistic contemplation than others (for detailed analysis see Kolaiti 2019: 62-63). Various recent accounts such as Pilkington’s (2001: 5) notion of *poetic thought* as a type of thought involving phenomenal objects—e.g. smells, images, sounds, textures, kinaesthetic, tactile and gustatory states as well as representations of manner when actions are concerned: *how* blades of grass move, *how* birds fly, *how* kangaroos eat grass, or a literary/ artistic mind merely attending to *how* blades of grass move, *how* birds fly and *how* kangaroos eat grass— represent a regression to pre-20<sup>th</sup> century proper-object poetics. They endorse the tacit assumption that art is a kind of doing that is concerned with certain sets of entities out there in the world. Perceptual and phenomenal objects in their own right (i.e. the smells, the sounds, the textures, *how* birds fly or *how* kangaroos eat grass etc) no less than a literary/ artistic mind merely attending to such objects are real-world objects external to individual consciousness, and therefore proper objects in the pre-20<sup>th</sup> century sense. What is worth focusing on from a theoretical point of view is not this or that set of real-world objects *per se* but the way a literary/ artistic mind *sees* these objects. The way in which one *sees* the smells, the sounds, the textures, *how* birds

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<sup>32</sup> Conceptual non-trivialness can be thought of in relevance-theoretic terms (Sperber and Wilson 1995) as depending on the relative size and accessibility of the set of non-trivial implications a representation has for an individual at a given time. In Chapter 7, I will discuss this notion and its interplay with relevance extensively.

<sup>33</sup> The term ‘aspectual’ is already used in philosophical aesthetics to mean something entirely different from what I take it to mean here. I considered the term ‘perspectival’ as an alternative, but this is also in use in philosophy of language. I therefore decided to stick with the term ‘aspectual’, since I think I make clear the particular sense in which I use it.

fly or *how* kangaroos eat grass etc is an internal, mental object. My notion of an aspectual representation concerns precisely these internal, mental objects: the way in which real-world objects are *seen* by an individual consciousness.

Describing something as an aspectual representation is only relevant as a comment about the properties of the representation. There is a lot of room for debate as to what these properties might be, but, as I suggested above, *seeing* old objects in novel non-trivial ways seems to be the overarching relation that holds them together. It follows that aspectual representations are *novel* entities; the output of the human ability for aspectual thinking is always a novel object. New-coined objects, objects that do not pre-exist and therefore, do not have the typical old-object equivalents out there in the world because they are invented from scratch by the individual consciousness of a creator, are equally candidates for aspectual representations: an idea or completely new-coined construct of any sort in its own right is entirely irrelevant to our discussion unless the individual mind that has come up with or invented it manages to *see* in it its novel and non-trivial aspects. It is at that moment of *seeing* that the entirely new-coined mental or physical construct starts functioning as the object of an aspectual representation. Until that moment it is nothing more than or significantly different from any other old object out there in the world that is waiting to be *seen* in some non-trivial way.

Do not let the *ut pictura poesis* confuse you. To the extent that an agent ‘holds onto’ a mental image, ‘looks’ at it, ‘scrutinises’ it and ‘rotates’ it in the mind, she is not doing anything significantly different from looking at a real-world object. She is still at a stage equivalent to looking at an external object. It just happens that this object is in the mind, and is being ‘looked at’ with inner perception or the ‘mind’s eye’, so to speak. At this stage of simply imagining, our agent does not necessarily have an aspectual representation as yet. She can be legitimately said to have an aspectual representation of this mentally entertained object if her representation of the object manifests elements of non-trivialness and novelty in the way the object is *seen*.

Keeping in mind that, in the broad construal I have adopted here, where the object can be of either a perceptual, affective or conceptual nature (or all three interwoven), it is likely that the ability to entertain aspectual representations is enabled by a whole host of more particular sub-abilities. For example:

- to conceive of non-self-evident properties of objects,
- to make loose and unexpected associations among objects and properties of objects,
- to perceive or conceive of objects in unique or at least highly unusual ways,

to spot underlying or overarching structures of objects and their relations,  
to spot ‘telling details’,  
to perceive or conceive non-habitual patterns,  
to make unusual perspective shifts,  
to break down objects into fine-grained components,  
to be in rich, fine-grained and complex informational states of a perceptual, affective or conceptual sort in relation to some object, and so on and so forth.<sup>34</sup>

Do not focus on these sub-abilities to the extent of losing sight of what the notion of aspectual representation is crucially about. Being observant in a certain way and attending to the implications of certain things are merely enabling factors: one may well be observant and attend to the implications of certain objects without nonetheless conceiving non-trivial aspects of and connections between these objects –as when one is simply perceptive or pedantic. And entertaining aspectual representations is crucially about conceiving non-trivial aspects of and connections between objects.

To put it differently, entertaining aspectual representations is perhaps being creative in a certain way.<sup>35</sup> Creativity has been little discussed in contemporary literary and art-philosophical studies. Valuable recent attempts to bring creativity into the focus of literary and art study –particularly in relation to imagination– can be found in Attridge (2004), Carter (2004), Currie and Ravenscroft (2003), Gaut and Kieran (2018), Gaut and Livingston (2003), Krausz, Dutton and Bardsley (2009), Novitz (1999), Pope (2005), Roth (2007), Scruton (1992) and Turner (1996, 2006). In Chapter 7, I will delve into an in depth and ultimately, revisionary discussion of twenty-five years of empirical research in the psychology and neuroscience of creativity in line with the two-way interdisciplinary effects and bi-directional epistemological commitments of this book. My discussion may not only help comprehend the locus of aspectual creativity within the broader human ability for idea generation but also challenge fundamental taxonomic confusions that in my opinion have made ‘creativity’ what

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<sup>34</sup> This list of sub-abilities is provisional. In Chapter 7, I will draw briefly on current empirical and neuroscientific research to foreground pertinent empirical findings about unique perception, wider associative abilities, and informational richness in the perceptual organisation of experts across the various art forms that in my view relate to the perceptual, cognitive and affective machinery that enables the sub-abilities an aspectual mind is endowed with. Still, in this book I will only be discussing the scope and nature of aspectual creativity at a speculative level, as my main concern is not to spell out a full-fledged theory of human creativity but to present a cognitive theory about the essence of literature and art. My provisional analysis, however, provides fertile ground for future two-way interdisciplinary interaction particularly with neuro-cognitive domains and current creativity-related research.

<sup>35</sup> This intuition that certain non-trivial ways of *seeing* might relate to an ability for creativity is also shared by Attridge (2004).

Toolan (2012: 19) called ‘a word or idea so indiscriminately invoked as to be of limited value in any analytical enquiry’. For obvious reasons of textual rhetoric, I wouldn’t want to prime here the entire discussion to follow. Let me just say that among the various two-way interdisciplinary aims of Chapter 7 will be to try and re-instate creativity within the theoretical terrain as a property of certain human abilities rather than an ability or capacity *per se*. As I will argue later, when talking about the ‘ability for creativity’, the notion of an ability should only be thought of catachrestically; creativity of any type (e.g. aspectual creativity) does not seem to be an ability in the strong sense of a dedicated capacity with a unitary domain of operation and its own cognitive and/ or perceptual and/ or affective and/ or neural engineering, such as the much more investigated and better understood visual capacity, language capacity or pragmatic capacity. Instead, and for reasons that I will articulate in detail later, creativity seems to be a property of human abilities, and more specifically, a property of the human ability for *generativity* or *ideation* or *idea generation*. The human mind is generative or productive in the sense that, unlike the cognitive make-up of most non-human animal species, it can produce an open-ended range of ideational outputs across domains of performance. I will refer to this open-endedness of human cognition as *species-specific productivity/ plasticity* and try to differentiate it from the more particularised property of full-blown creativity. The distinction is theoretically necessary and significant. The last century, for instance, can in many respects be regarded as the century of ‘creativity’: from Chomskian linguistics to research in newly emerging fields such as lexical pragmatics (see Sperber and Wilson (1998) and Wilson and Carston (2007)), the mind is seen as having a plasticity, flexibility, context-sensitivity, and improvisational range that were inconceivable for theories of communication in the past. However, the notion of creativity involved in these accounts is a broad and catachrestic one, used to challenge the rigid 1-to-1 relation between a signified and a signifier assumed by the semiotic tradition. Mark Turner’s ‘The Literary Mind’ (1996) is another paradigmatic exemplar of this tendency. To say that the human mind is ‘literary’ in Turner’s perspective is to say that the human mind is ‘creative’ in the loose sense of having a linguistic and conceptual productivity and plasticity that occurs in a more or less *equipotential*<sup>36</sup> way across the human species. But that is not the sense in which ‘creativity’ will be used in this analysis.

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<sup>36</sup> The notion of equipotentiality comes from the study of language acquisition and is used to refer to the equal biological and genetic potential that every human infant has, independently of ethnic origin, to acquire the language of the linguistic environment it will be exposed to during the critical period of 0-6 years by virtue of the language faculty or I-Language or Universal Grammar being part of its genetic make-up.

So, let me provisionally say that in this book ‘creativity’ will be used to refer to a non-equipotential and non-unitary property of human generativity that gives rise to non-trivial outputs of various types of value, with value determined by the local and global relevance of the output in a given context. The full explication of this approach to creativity can wait till Chapter 7. The only bit that we need to bring into the foreground at this stage of my discussion is my views that creativity is not a unitary and domain-specific property; let me explain.

There most probably exist various types of creative ideation ability, but unlike what is standardly assumed in the existing literature, the various types of creativity –whatever types these may be– do not actually stand in a direct, one-to-one correspondence with apparently unitary and prototypically-determined domains of human performance, i.e. domains determined by shared surface or typical features (e.g. the alleged domain of literature or that of music or that of kinaesthetic creativity or that of visual creativity etc). My notion of aspectual creativity challenges head on the currently dominant, unitary and domain-specific, view of creativity. Later, I will turn to recent neuroscientific and empirical research to provide a cohort of knock-down arguments against the standard domain-specific approach. Here let me simply illustrate the starting point of my rationale.

To do that, I would like to take you about three hundred years back in time. To an orchard in England. The orchard where Isaac Newton saw the legendary apple falling. The apple falls. Newton looks at the apple falling. It can be said, though, that in looking at the apple falling, Newton in a certain sense *sees* neither an apple nor the falling of an apple. What does Newton really *see*? Gravity? The earth’s magnetic fields, the planets moving, the attractive and repulsive forces between atoms or celestial bodies, the forces that keep the moon in orbit? Well, if something is absolutely certain, it is that he *sees* anything but an apple. In looking at the apple, Newton has an aspectual representation which allows him to *see* the apple’s fall in a ground-breakingly non-trivial way by connecting it with gravitational forces. On 27 December 1831, Charles Darwin boards the HMS *Beagle* for the five-year voyage that led to the articulation of one of the most compelling scientific ideas in the history of epistemology. The Galápagos finches lying side by side with tags dangling from their feet at the Natural History Museum in London are perhaps the most important specimens Darwin collected during this voyage, often credited as the inspiration for his ideas on the evolution of species. Subtle differences in the shape of the finches’ beaks depending on which island each specimen came from are anecdotally believed to have led Darwin to the key conception of his theory of Natural Selection: if in the course of a species’ evolution variations useful to the

survival of the particular individual organism occur, individuals and their offspring that happen to be characterised by the given variation will have the best chance of being preserved in the struggle for life. Let us go back to the moment Darwin looks at the finches' beaks and conceives their causal relation to evolutionary adaptations of species. Darwin looks at the finches' beaks. It can be said, though, just as in the anecdotal incident with Newton's apple, that in a certain sense Darwin *sees* neither the finches' beaks nor the differences in the finches' beaks. He *sees* the living organisms struggle for existence, populations outgrowing resources, favourable and unfavourable physiological variations, the progressive formation of new species, he *sees* anything but the finches. In looking at the finches, Darwin has an aspectual representation which allows him to *see* the slight differences in their beaks in a radically non-trivial way, leading to a conception that not only lays the foundations of contemporary evolutionary biology but ultimately challenges the very theoretical necessity of the existence of God. I don't see anything substantially different in the nature of Newton and Darwin's novel mental representations from the mental representation Duchamp can be assumed to have at the moment of looking at a mere urinal out there in the world, but nevertheless *seeing* the *Fountain*. Duchamp looks at a mere urinal no different from any other urinal from the same production line out there in the world, but the non-trivial way he *sees* this old object out there in the world or, in other words, his aspectual representation of this object, allows him to conceive the first ever ready-made, the artwork that merits the accolade of completely and radically transforming what will ever afterwards be perceived as art. Newton and Darwin and Duchamp, and Elytis when transmuting a vague gestalt into structured commotion, and Bukova when establishing an unexpected connection between the squeak of a child and the squeak of someone who's being slaughtered, and Iliopoulou when conceiving a striking association between a 'waxen totem of death' and the mere thing LEMON –the familiar mere thing we use to make lemonade, lemon trifle, lemon sorbet– and any other individual consciousness for that matter whose ideational outputs have the power to transform the way we perceive and conceive of existing or new-coined aspects of the world – can be assumed to have one and the same ability, the ability for aspectual creative thinking, the ability to hold creative representations of a certain kind, aspectual representations.

Is literature/ art possible without the ability to entertain aspectual representations in one form or another? It is almost a truism that the kind of action literature and art is provides decisive insight into one of the most exciting ways the human mind has to be creative. If there is a relevant sense in which, as Danto (1981) insightfully put it, art involves a transfiguration of the commonplace, it should be this. Being the product of an aspectual

mind, arising out of a certain way of being creative –the particular way that brings aspectual representations into being– literature/ art seems always to involve a certain way of *seeing*: seeing old things in new ways, seeing loose, non-trivial connections and associations between old objects out there in the world or new-coined objects of our imagination, making visible the invisible, bringing into being something that did not exist before by re-arranging and enriching an existing world of possibilities. But theoretical science and philosophy are no less transfigurations of the commonplace than literature and art. Scientific and philosophical ideas also *see* old things in new ways, make visible the invisible, bring into being something that did not exist before, re-arrange and enrich an existing world of possibilities in pretty much if not exactly the same way as literature and art.<sup>37</sup> The Russian Formalists' concept of *defamiliarization*, inspired by Victor Shklovsky's (1965) insightful assertion that the primary effect of literature and art is to enable fresh sensations in the receiver by estranging and defamiliarizing our perception of the world, applies no less to philosophy and science. The apple in Newton's eyes, the finches' beaks in Darwin's eyes and the urinal in Duchamp's eyes are no longer the APPLE, the FINCHES' BEAKS and URINAL as we know them, but entirely estranged and defamiliarized novel objects APPLE\*, FINCHES' BEAKS\* and URINAL\*, products of rich and nuanced non-trivial representations of an aspectual kind.

The subject matter of ancient Greek tragedies was not invented by the tragedians but 'given'. Aeschylus, Sophocles, Euripides based their literary masterpieces on raw material that originated in ancient Greek myth. The contents *per se* were given but not the way of *seeing* and mentally entertaining contents, and aspectualness relates to ways of mentally entertaining contents. Each tragedian brought out, foregrounded and materialised what they *saw* in each given myth and it is therefore not the myth itself but the way the myth was seen and mentally entertained that makes their tragedies aspectual. OEDIPUS and ANTIGONE are given by the epic and mythological legacy but OEDIPUS\* and ANTIGONE\* are products of rich and nuanced non-trivial representations of an aspectual kind.

It should be stressed here that not all the ideational outputs of an artist, scientist or philosopher are necessarily aspectual. An indefinite number of the ideational outputs that at some point or other hover in an artistic or scientific mind are in fact no more than mere trivial

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<sup>37</sup> Notice, for instance, that aspectualness is not a necessary property of types of non-trivial ideation that seem to occur in other areas of human performance: Federer can be claimed to be a highly creative tennis player but, intuitively speaking, the non-trivial elements of his game that render him a creative tennis player are not of an aspectual but some other sort. When Federer devises *ex impromptu* a new stroke there is novelty, but not of an aspectual kind. So, while it can be claimed that all possible forms of human creativity re-arrange and enrich an existing world of possibilities, it is of critical importance that they do not achieve this in the same way.

ideational outputs. What we are interested in, though, at this point in my discussion is that at least some of these ideational outputs will be aspectual.

Our analysis so far has been looking more or less like this: (figure 1)

[add Figure 1 here]

Alpers (1981/ 1985), echoing the standard view of the relation between creativity and the arts, suggests that creativity, if not a necessary condition of artistic practice, seems at least a hallmark or a characteristic feature of art in general. I have particularised this standard claim by suggesting that it is not some general creative ability but a specialised type of creativity, aspectual creativity, that is a necessary condition of the kind of action that literature and art is. I have then particularised this claim even further by suggesting that this specialised type of creativity is also a necessary condition of scientific and philosophical thinking. Literature/ art, science and philosophy have palpably distinct characteristic outputs and involve palpably distinct characteristic mind-sets but this is not, as is standardly assumed, down to employing different types of creativity. My discussion to follow and the cognitive construct I will devise here in trying to grapple with the persistent ontological question of the essence of literature and art will not only help illuminate the conundrum of how distinct characteristic mind-sets and distinct characteristic actions might in fact be drawing on one and the same type of creative ideation ability but will also employ this assumption as starting point to knock down once and for all, I hope, the misleading idea that types of creativity stand in a one-to-one relationship with prototypically determined domains of human performance: intuitively appealing as it may be, there is no such thing as a domain of ‘artistic creativity’ or one of ‘scientific creativity’.<sup>38</sup>

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<sup>38</sup> In early versions of this account published in Kolaiti (2015) I made use of the terms ‘artistic creativity’ and ‘scientific creativity’ myself. At that stage my main aim was to spell out my novel idea about the distinctness of literature and art as a cognitive object and as a result, the notion of creativity itself was not the focal point of my theoretical interest. I was therefore implicitly adopting the standard view that treats creativity as a domain-specific property and assumes a distinction between artistic and scientific creativity (e.g. for a selection of essays that contemplate creativity in art and science see Dutton and Krausz (1981/ 1985)). Thinking further about the issue of human creative ideation during the two-year individual EC funded research project ‘CogLit’ (University of Brighton, 2018-2020), I identified various taxonomic problems in existing accounts of creativity in psychology, philosophy and neuroscience, which in turn allowed me to revise and refine my own approach to human generativity and creative ideation abilities. In this revised analysis, I will therefore be talking about the ‘artistic condition’ and ‘scientific condition’ but not about ‘artistic creativity’ and ‘scientific creativity’ as such, and I take this to be a rather crucial theoretical refinement.

Aspectual representations are difficult to arrive at. Not everyone is capable of them. Aspectual creativity is the property of some minds only. We may all be ‘literary minds’ in Turner’s sense by virtue of the open-ended productivity and plasticity of our cognitive make-up, but not all of us are aspectual minds. Even fewer of us are artistic/ poetic minds, as I will call them. The model I will present here is intended to provide a schematic representation of the specific way an artistic/ poetic mind is potentially distinct.

My interest here is not in the species-specific productivity and plasticity that every human mind is capable of, but in more specialised forms of creative thinking, as well as in distinctive types of thought states/ processes that are less widely distributed in the human population and perhaps specific to certain types of action, such as the type of action that literature and art is.

It would be possible to claim that those capable of entertaining aspectual representations meet a pre-condition, a necessary condition, for being poets/ artists in a cognitive sense. But then, not everyone who is capable of aspectual representations actually is a poet/ artist –and as I am about to show, this is not just down to the fact that aspectual representations also occur in scientific and philosophical contemplation. Some elaboration is clearly called for if we are to understand the precise role of aspectual representations in the problematic of the kind of action that literature and art is.

### **3.3 Aspectual representations and naïve agency: the case of incidental creatorship**

It is a rather amazing fact that ordinary people who have never pursued poetic or artistic careers show a striking aptitude for arriving at and communicating aspectual representations.<sup>39</sup> Some of the most exciting ‘poetry’ in my life I often come across not in poetry books but in listening to ordinary people talking.<sup>40</sup> Not very long ago, to take one example, Dina Mendonca from Universidade Nova de Lisboa mentioned to me her six year old son’s manifesto of boredom:

*Mom, I’m bored like a tree. I grow and grow and I’m always at the same place.*

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<sup>39</sup> For interesting discussion of ‘creativity’ in everyday spoken discourse see Carter (2004). Please note, however, that my reason for putting ‘creativity’ in inverted commas here concerns the fact that existing approaches to creativity may require some filtering in the future that will allow us to set full-blown creative outputs apart from the outputs of the more generalised human abilities of the species-specific productivity/ plasticity that I will introduce in detail in Chapter 7.

<sup>40</sup> This does not corroborate Turner’s generalised creativity view, and it will soon become obvious why.

The little fellow's thought is mind-blowingly aspectual. From an aesthetic and creative point of view, his utterance has the aspectual non-trivialness of a poem with a capital P. Still, how am I to explain the strong intuition that this utterance, aspectually creative as it may be, is not a poem but a *mere thing*? I am also thinking: why is it that something palpably changes if, say, I take this linguistic mere thing and quote it verbatim in my next poetry book, in pretty much the same way that a visual artist (say, Duchamp) 'quotes' a concrete three-dimensional mere thing (e.g. a urinal) in the art gallery? Why is it that, in the case where the linguistic mere thing is quoted verbatim in my book, the same utterance, with exactly the same formal and structural properties, suddenly becomes a poem, just as in Duchamp's case a mere thing like a urinal becomes the artwork *Fountain*? The issue at stake here is not merely one of institutional re-contextualisation. The answer to these questions is not as straightforward as institutional accounts would tend to propose, i.e. that the mere thing becomes an artwork because it is 'quoted' in the right sort of institutional context (the institutional context of a gallery or that of a poetry book). Institutional contextualisation facilitates the process of recognising these objects as artworks but, as I argued in the previous chapter, recognising an object as an artwork does not suffice to make the object an artwork. Recognising an object as an artwork is a matter of recognition, not ontology, and I want to believe that I have convincingly peeled the two apart. And the crucial question here is the ontological one: what makes these objects artworks.

Notice too that the child, and not I, is the creator of this utterance –in the same way that a factory worker and certainly not Duchamp himself was the creator of the urinal. It is fascinating, I think, that when this utterance is put forward by the person who 'fabricated' it – its creator, that is– it is not a poem, and when it is put forward by me –even though I am not the creator/ 'fabricator' of this utterance– it is a poem, while some dissociation between art and creatorship seems to be called for. With young Mendonca's words having entered for good the 'gallery of indiscernibles', let us see where this philosophical problem might take us.

Loose, non-trivial association-making is characteristic of both aspectual creativity and schizophrenia. The schizophrenic individual is said to be able to conceive non-trivial links and associations amongst objects to the point that in her mind the whole world is eventually somehow connected. The schizophrenic individual is thus as good an instance of the

aspectual mind as the artist. It also seems that for some reason, schizophrenia often brings about an insatiable need for what by all appearances looks like ‘artistic’ expression and activity. Where is the dividing line between insanity and art? Is the schizophrenic individual automatically an artist?

There is a crucial element, I think, that distinguishes both Mendonca’s utterance and the schizophrenic’s ‘artistic’ rambling: in each case, the activity that leads to aspectual thinking and to outputs that in terms of prototypical features appear to be ‘artworks’ is neither conscious nor intentional. In making this claim, I am not excluding the possibility that a schizophrenic individual might occasionally exhibit elements of consciousness and intentionality. Here I am concentrating on what I take to be the standard case, where the ‘artistic’ activity of a schizophrenic person manifests itself as an instance of not merely unintentional but in some sense even *defective agency*.<sup>41</sup> The output of such defective agency may have all the prototypical features of an ‘artwork’ (e.g. of a ‘poem’), but from a cognitive point of view it would not be legitimate to put it in the same ontological category as artworks whose causal history cannot plausibly be said to involve defective agency.

An assumption implicit in this line of argument is that whatever type of agency we treat artworks as typically involving, we cannot treat them as typically involving defective types of agency. If so, then ‘schizophrenic artworks’ is from an ontological point of view a particularly interesting category of objects that superficially resemble artworks at a prototypical level but palpably differ from them at a cognitive level. In a state of psychosis, and without the slightest clue to what she is doing, someone puts together H<sub>2</sub> and O. She then assembles an electronic device that looks like a computer and performs all the functions that a computer can be expected to perform. The resulting objects are adequately described as ‘water’ and ‘a computer’ by virtue of their chemical and mechanical structure, independently of the cognitive processes that brought them into being. But there are two reasons why artworks are unlike such objects: first, after the emergence of conceptual art and the use of ‘ready-made’ objects as works of art we know incontestably that the essence of an artwork does not inhere in the artwork’s formal and structural make-up. As I put it in the previous chapter, if a stretch of ordinary discourse can be a poem –as in the case of ‘found’ text, ‘collage’ poetry or ‘cut and paste’ poems–, then literariness cannot be said to inhere in a

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<sup>41</sup> The term *defective agency* (Russell 1996) is used to refer to a defect in the sense of first-person self, required for executive function, and more specifically, the ability to exercise self-control and to monitor one’s own actions and their outcomes.

linguistic object's morphostructural make up. Second, there is a sense in which generative processes, defined as processes that bring actions into being –and agency is a central constituent of such processes– are somehow integral to whatever it means to be an artwork in a way that decisively sets apart what it means to be an artwork from what it means to be an object like H<sub>2</sub>O or the electronic device computer. This view is my common denominator with the writings of Currie (1989), Davies (2004) and Fodor (1993) and, although I do not entirely endorse any of these accounts, I definitely share the intuition that agency-related processes seem fundamental to making an artwork the kind of object it is in a way not applicable to other objects. Introspective developmental evidence from my own work as a poet seems to further corroborate this assumption. I started writing at a very young age. At eight I had a dedicated little notepad where I used to write fictional short stories, out of a need for writing and a type of pleasure that I recall very clearly, even today, was somehow a form of gratification inherent to the very act of imagining and writing. I didn't show my stories to anyone else. They were for me. I also recall with clarity that, at that time, I was in what I could only describe as a naïve state of agency, not very far from the naïve state of agency of young Mendonca. I had no idea if my stories had any value whatsoever in terms of aspectualness and non-trivialness, but it wasn't a concern at that stage either. At that point, I was simply engaging in an act that generated pleasure without the slightest reflective attitude or awareness or consciousness or evaluative stance towards the trivialness or non-trivialness of the output. I was in a pre-artistic condition. At age thirteen one of my teachers at school reads a poem I'd written at the time and directs my attention to what, in line with the terms I am coining in this book, I would describe as the aspectualness of that particular poem. From a developmental point of view, I take this to be a critical moment because of the perspective shift it amounted to: from that moment on I transitioned from a naïve to a full-blown state of agency, I started not just incidentally creating writings but being vaguely aware of their possible aspectualness and non-trivialness, which amounted to engaging in different agency-related processes from the ones I was engaging in before. I take that critical transitional moment in my development as a poet to be the moment I stepped out of naïve incidental creatorship and into the artistic condition. 'Schizophrenic art' arises from palpably different generative agency-related processes from non-schizophrenic art. The one involves defective agency and the other doesn't. From the cognitive and action-based approach to literature and art I am trying to develop in this account, 'schizophrenic art' and non-schizophrenic art are two palpably different types of action on agency-related grounds. And a cognitively aware

ontology of literature and art would not put these two separate cases of object into the same ontological category.

As they stand, Mendonca's utterance and the schizophrenic's creations can only prototypically be described as art. Mendonca and the schizophrenic individual are *incidental creators, naïve agents*, as I will call them, of aspectual representations. The case of incidental creators makes it possible to draw an important distinction between artistic activity, on the one hand, and creatorship or authorship, on the other. Creatorship/ authorship does not automatically suggest artistic activity, as it may be the product of naïve agency, whilst at the same time artistic activity can as well involve ready-made objects of which the artist is not the author/ creator. More importantly, the output of incidental creatorship/ authorship seems more like a raw material for literature/ art than literature/ art in its own right. An aspectual mind in itself, i.e. a mind with the ability to be creative in a certain way, seems to be a necessary condition for bringing literature/ art about, but it is not a sufficient condition. The ability for aspectual representations might be called a *pre-artistic condition*. For the possibility to become actuality, for an agent to move from the pre-artistic to the artistic condition, the agent must be able to entertain more than just aspectual representations; she must be able to entertain what I will refer to as fully-fledged *artistic thought states/ processes*. And for that to happen, obviously more parameters must come to play. Let us start considering what these parameters might be.

### **3.4 Artistic thought states/ processes: the artistic or 'poetic' mind**

If it is right that as they stand neither Mendonca's utterance nor the schizophrenic individual's creations would be adequately described as works of art, and given that naïve agency is the common thread that underlies both Mendonca's utterance and the schizophrenic individual's creations, then the leap from the pre-artistic towards the artistic condition (i.e. from merely aspectual to fully-fledged artistic thought) must involve an element of even the weakest form of consciousness, reflection and control.

To address any ethical issues that might arise from this claim –the danger, for instance, of being regarded as understating schizophrenic art or prescriptively treating it as something that does not merit the label of 'real art' etc– let me say that my assertion above is neither canonistic nor prescriptive: if the cognitive history of a work of art is a cognitive history that involves full-blown agency, then all instances of objects that prototypically resemble artworks but are the result of naïve agency or incidental creatorship cannot possibly belong in the same taxonomic category as works of art (BLIBS) and should be thought of as

artwork simulacra (BLOBS). If the cognitive history of a work of art is a cognitive history that involves naïve agency or incidental creatorship, then all instances of objects that prototypically resemble artworks but are the result of full-blown agency cannot possibly belong in the same taxonomic category as works of art (BLIBS) and should be thought of as artwork simulacra (BLOBS). To put it differently: from a cognitive standpoint, if the outputs of full-blown agency are BLIBS, then the outputs of naïve agency or incidental creatorship cannot be BLIBS too; they must be BLOBS – or the other way round. The reasons for proposing that artworks must be BLIBS rather than BLOBS are not prescriptive but purely cognitive: they arise from the introspective and empirical observation that artists are not standardly naïve agents or defective agents or incidental creators and therefore, the characteristic outputs they create can only be the outcome of full-blown agency involving some variety of consciousness, reflection and control even in the weakest possible sense. Also, as I claimed in Chapter 1, it doesn't make sense from an evolutionary point of view to assume that art has evolved from naïve or defective forms of agency and that its simulacra are outputs of full blown-agency. The reverse seems to me a lot more reasonable.

It is important that all three terms –consciousness, reflection and control– are construed rather broadly. I am not suggesting that the agent is necessarily at any one time fully aware of or consciously reflecting upon any one aspectual representation of any one object. All consciousness, reflection and control might mean in this case is that an agent capable of *metarepresentational thinking*<sup>42</sup> (Sperber 2000), an agent capable of mentally 'distancing' herself from her own representations by adopting a reflective attitude towards them, is vaguely and intuitively aware that some of these representations are non-trivial; she is vaguely and intuitively aware, that is, of the aspectual nature of some of her representations.

I suggested earlier that not all the ideational outputs of a non-naïve agent will necessarily be aspectual. An indefinite number of the representations that at some point or other our agent might entertain across the span of a lifetime will in fact be mere and relatively trivial ideational outputs. However, at least some of these ideational outputs will indeed be aspectual. What we are actually claiming in saying that an agent is non-naïve is that she can entertain intuitions about the relativistic non-trivialness of her own mental representations and she can in principle differentiate between the representations that are aspectual enough to

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<sup>42</sup> In simple terms, metarepresentation is the ability to think about a mental representation, or at least adopt some attitude towards it; the ability for metarepresentation is enabled by the Theory of Mind Capacity (ToM), that is, the capacity to represent our own mental states and those of others.

be worth attending to and elaborating on, and those that are trivial and will be disregarded and forgotten.

Our schema now looks more like this: (figure 2)

[add Figure 2 here]

Where has the mental state described in our analysis so far taken us? It followed from my discussion of naïve and full-blown agency that being vaguely and intuitively aware of the aspectual nature of some of our representations must be an integral constituent of the artistic condition. Yet, as it stands, our schema is still quite fuzzy and undifferentiated. It fails, for instance, to capture what would make a certain thought process pertinent to the artistic condition in particular, as opposed to other areas of aspectual thinking such as science and philosophy.

To achieve this differentiation, let us momentarily go back to Newton. The apple falls. Newton looks at the apple falling. In looking at the apple, Newton has an aspectual representation which allows him to *see* the apple's fall in a non-trivial way –connect it with gravitational forces. In being vaguely and intuitively aware of, or 'thinking' –in either the attentive or sub-attentive sense of the term– about what he *sees* in the falling of the apple, Newton has a reflective focus on his aspectual representation of the apple's fall. He is not a naïve agent, but nonetheless, neither his mental state nor its output is in any way artistic. All the current discussion captures is the move from a pre-aware to an aware condition.

Let us stay with Newton a bit longer. The apple falls. Newton has an aspectual representation which allows him to *see* the apple's fall in a non-trivial way. He also has a reflective attitude to his aspectual representation, in that he is at least vaguely aware that what he *sees* in the apple's fall is in some way non-trivial. But the mental state he is in cannot be legitimately described as an artistic one. I want to suggest that the reason why Newton's mental state is pertinent to the kind of action science is (e.g. physics) rather than the kind of action literature and art is resides in the particular way in which his reflective attitude is *focused* on his aspectual representation. More particularly, I want to suggest that Newton is focused on conceptual properties and implications of his aspectual representation, and more specifically, conceptual properties and implications that his aspectual representation might have for physics. In fact, the way in which an agent is focused on an aspectual representation

seems to determine the kind of action and thought state this aspectual representation is embedded in.

An artistic thought state/ process, then, must be a state or process in which an agent vaguely aware of the aspectual nature of her representations is steadily focused on something other than and/ or more than the conceptual properties of these representations. What sort of focus should our agent have for her thought state to be pertinent to the kind of action literature/ art is rather than the kind of action, say, science is?

Let us assume that a poet and a linguist hear Mendonca's utterance and that they both *see* something non-trivial in the young boy's words. The psycholinguist comes up with an aspectual representation X connecting the aspectualness in Mendonca's utterance with a theory about linguistic productivity and plasticity in children she is currently working on. The poet comes up with an aspectual representation Y connecting the aspectualness in Mendonca's utterance with 'ready-made' equivalents in poetry, and considers quoting Mendonca's words as a 'ready-made' poem in her next book. Now think of the very different ways each of them is focused on what they *see* in the young boy's utterance. The linguist seems focused on conceptual properties and logical implications that her aspectual representation of Mendonca's utterance might have for current theory in psycholinguistics, whilst the poet seems focused on *aesthetic* properties and implications of her aspectual representation of Mendonca's utterance.

A pre-theoretical understanding of an aesthetic experience as the characteristic kind of pleasurable perceptual and sensory response<sup>43</sup> an agent has when experiencing an artwork, literary or other, fully serves the purposes of my current analysis. Originating in the ancient Greek word 'aestheses', the notion of the aesthetic aims to capture the intuition that art and perceptual/ sensory pleasure are somehow inseparable.

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<sup>43</sup> The pre-theoretical perceptual/ sensory approach to aesthetic experience as a type of experience that crucially involves the 'aestheses' is sufficient for present purposes. In reality, however, and as I will show in work currently in preparation, aesthetic experience is what I will refer to as an exemplary case of a *composite* type of response, i.e. an experience that engages predominantly the perceptual and sensory system but with parallel and potentially empirically tractable mobilisation of the conceptual and affective systems. Here, the aspect of aesthetic experience that is integral to my developing argument is not its composite but mediated aspect. In future work I will address extensively the nature of aesthetic experience and try to develop an empirically tractable model of the aesthetic as a composite and mediated, and therefore in this sense metarepresentational, type of response involving among other things an element of metacognitive acquaintance. This is one more point in my broader explanatory model of artistic thought states/ processes where the human capacity for metarepresentation and Theory of Mind (ToM) comes into the picture, implying that the occurrence in the human species of this hallmark capacity must have played an integral and enabling role in the subsequent development of the human ability for artistic creation and reception.

This intuition is not entirely uncontroversial. It has been suggested, for instance, that an object can be a work of art and yet have no aesthetic value or purpose (e.g. Danto 1981; Fodor 1993; Kawabata and Zeki 2004; Zangwill 1998, 2002) or that an artwork can be ‘ugly’, which in turn is taken by the proponents of *the non-aesthetic thesis on art* –i.e. the view that there can be artworks with no aesthetic value or purpose whatsoever– as evidence in favour of the non-aesthetic thesis. In Chapters 4 and 7, I will develop briefly a couple of counter-arguments against this view and discuss further the dissociation of aesthetic BEAUTY\* from mere perceptually gratifying natural BEAUTY that I originally introduced in Kolaiti (2019: 84-85). The case remains, however, that with rare exceptions –Hogan’s (2016) empirical approach to aesthetic response in terms of information processing, non-habitual pattern recognition and emotional involvement is one such exception– philosophy of art still lacks empirically testable models of aesthetic experience.

For present purposes, I would therefore like to rely on a broad pre-theoretical understanding of an aesthetic experience as the characteristic type of perceptual or sensory experience artworks elicit in an audience, and enrich this broad pre-theoretical understanding by suggesting that one of the reasons that make aesthetic experience characteristic as a type of perceptual or sensory response is that it is a case of *mediated* response. Notice how I have chosen in the previous paragraph to describe the mental goings-on of the poet in our thought experiment with Mendonca’s utterance: ‘The poet comes up with an aspectual representation Y connecting the aspectualness in Mendonca’s utterance with ‘ready-made’ equivalents in poetry (...)’ and ‘(...) the poet seems focused on aesthetic properties and implications of her aspectual representation of Mendonca’s utterance’. The idea implicit in my choice of words is that aesthetic experience and response is not a direct case of perceptual or sensory response elicited by the physical properties of objects (e.g. artworks) *per se* but a mediated case of perceptual or sensory response elicited by how objects and their physical properties are *seen* by a mediating consciousness.

In the case of experiencing somebody else’s artwork, the mediating consciousness is that of the particular artist to whom we attribute both the particular artwork and any experience that this artwork is causing in us by producing modifications in our cognitive, perceptual and affective environment. Experiencing somebody else’s artwork aesthetically clearly falls within the scope of the phenomenon Sperber and Wilson (2015: 140) and Wilson (2018: 202) refer to as *metacognitive acquaintance*: at times, as a result of a communicator’s behaviour, the receiver may experience a changes in her cognitive environment that she attributes to something the communicator intended to cause in her and also recognise him as

having intended it. Sperber and Wilson (2015) discuss metacognitive acquaintance within the broader phenomenon of *ostensive-inferential communication*, a notion that encompasses, but is not restricted to, verbal communication and is one of the key notions of their relevance-theoretic approach which unifies verbal and non-verbal communication in a single account (Sperber and Wilson 1995, 2015; Wilson and Sperber 2012): in Sperber and Wilson's model all communicative acts are *ostensive acts* that generate *ostensive stimuli* (be they verbal or non-verbal: e.g. an utterance, an ostensive gesture, an ostensive sigh etc), i.e. stimuli designed to attract the receiver's attention and focus it on the communicator's intention. Sperber and Wilson (2015) suggest that certain types of ostensive stimuli achieve effects on receivers by means of metacognitive acquaintance. Although artworks are not ostensive stimuli as such,<sup>44</sup> metacognitive acquaintance finds application in a philosophy of art and is a theoretically useful notion for our discussion because within the global literary/ art event, artworks are indeed embedded in acts of ostension, attracting an audience's attention and eliciting the characteristic type of experience that an aesthetic experience is by focusing the receiver's attention on the artist's intention to elicit such an experience in the receiver. By attributing to the artist's intention what she experiences when exposed to an artwork, the receiver can be said to have a mediated type of experience that involves at least a weak element of metarepresentation by means of intention attribution and metacognitive acquaintance.

Now, in the case of being in an artistic thought state/ process and therefore in an action-process of creating an artwork ourselves, the mediating consciousness by means of which we experience the artwork aesthetically is our very own: the creative agent, vaguely aware of the aspectual nature of some of her representations, is steadily focused on aesthetic properties of what she *sees* in these representations. The agent does not have a direct perceptual or sensory response to the physical properties of objects or representations as such but a perceptual or sensory response mediated by how her own consciousness *sees* these representations and objects. The response is again mediated in that it involves at least a weak element of metarepresentation. An organism that did not possess a metarepresentational capacity of some form or other (in the sense of being able to meta-represent and adopt an attitude towards some of her own mental representations) would be practically unable to experience this type of response. This organism would only directly respond to the physical

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<sup>44</sup> In Kolaiti (2019: 76-94) I developed a detailed argument about why although artworks can be embedded in acts of ostensive-inferential communication and used as ostensive stimuli, they are not ostensive stimuli as such and therefore, when described as ostensive stimuli, they are not adequately described.

properties of her representations as such and the artwork she creates as an object *per se*, rather than to how her own consciousness *sees* these representations and objects. The engineering of aesthetic experience as occurring during the creation of artworks and the artistic thought states/ processes that enable this creation is as much a mediated, and at least in a weak sense metarepresentational type of experience, as when it occurs during the reception of artworks; the only difference being that in the case of artistic creation, the metarepresentational and mediated type of perceptual and sensory experience the agent has when responding to the way she *sees* her non-trivial mental representations does not involve intention attribution to some other agent.

My claim that artistic thought states/ processes involve an aesthetic attitude toward one's own non-trivial mental representations is introspectively evident in my dual practice as a poet, on the one hand, and scientific philosopher, on the other: I have always been intrigued by the fact that, when I experience artistic inspiration, the thought state I am in amounts to my mind instantaneously focusing on and responding to the X or Y aspectual representation in an aesthetic way, whereas when I experience scientific and philosophical inspiration, the thought state I am in amounts to my mind instantaneously focusing on and responding to the X or Y aspectual representation by drawing conceptual and logical implications from it. Introspective evidence from the practice of fellow artists further corroborates this latter assumption. In my capacity as a Greek poet and performance artist, and also a co-founder of the 'Poetry as an action research group', over the years I have had the opportunity to discuss this intuition with a number of artists from the areas of literature, fine art, dance and drama. Their intuitive and introspective agreement with my claim about the aesthetic nature of an artist's attitude towards her non-trivial representations was unanimous despite phenomenological differences that were down to the use of different expressive media across different artforms.

The importance of my claim that an artistic thought state/ process is a state/ process in which an agent vaguely aware of the aspectual nature of her representations is steadily focused on these representations as aesthetic objects resides mainly in the implication that aesthetic experience seems to play a crucial role not only in the reception of artworks but also in their creation.

Since aesthetic experiences traditionally associated with the reception end of art, this latter assumption is one of the highly revisionary claims that arise from my current approach to literature and art as an action. It is also a claim with broad interdisciplinary effects as well as implications for possible evolutionary scenarios on the origins of literature and art as one

of the most successful and enduring public human cultural representations. My future research will focus on these implications in order to develop an empirically tractable model of aesthetic experience and an evolutionary story about literature and art; for now, let me just focus on what is necessary for the current line of argument: the mediated type of experience that aesthetic experience is seems integral to the production of artworks as much as to their reception, and is a key constituent of the kind of action that literature and art is.

So here is where my discussion so far has brought us:

### **minimal components of an artistic thought state/ process**

[add Figure 3 here]

However, given that, as I said before, not all the ideational outputs an artist might entertain across the span of a lifetime are aspectual, and that an indefinite number of her representations will also be relatively trivial, we can assume that the artist may spontaneously and automatically respond to her own ideational outputs in either an *aesthetically positive* or *aesthetically negative* way, depending on her intuitive spontaneous evaluation of their aesthetic non-trivialness. An aesthetically positive response is one where the agent intuitively evaluates the representation as aspectual and non-trivial, allocates attention to it and elaborates on it. Practically speaking, positive aesthetic evaluation amounts to *aesthetic selection*. The selected output thereby becomes part of the fabrication of an artwork. An aesthetically negative response is one where the agent intuitively evaluates the representation as trivial, does not grant it further attention or elaboration and simply forgets or bypasses it. Negative aesthetic evaluation amounts to *aesthetic exclusion* and *rejection*. The output will not normally feature in the fabrication of an artwork. It is also common in artistic practice that the spontaneous aesthetic response to one's own ideational outputs might be –initially at least– inconclusive: the agent experiencing the artistic thought state/ process has a *borderline aesthetic response* that is neither clearly positive nor clearly negative, and the question of whether the borderline output will feature in the fabrication of the artwork or not, and how, whether the initial borderline response will become conclusively positive or negative at a subsequent stage of the macroscopic creation etc, is very much down to entirely subjective working methods that differ radically from artist to artist. Artworks and their constituents are therefore those outputs of artistic thought states/ processes that ultimately involve positive aesthetic evaluation and aesthetic selection, and it is only these outputs that we get to witness

as receivers physically materialised in the final artwork. To ‘witness’ the aesthetically rejected outputs of artistic thought states/ processes, we would need to be granted access to the artist’s noetic/ mental or physical studio. Introspective evidence from artistic practice across artforms and from historical documentation such as draft sketches, draft models, draft re-writings etc suggest that often the ideational outputs aesthetically excluded massively outnumber the ones aesthetically selected and incorporated into final fabrication. The aesthetically selected material is the tip of an iceberg of aesthetically excluded outputs. It should also be noted that a positively selected output at a given moment may be negatively rejected at a subsequent point during the macroscopic creation procedure of an artwork upon reflective or intuitive re-evaluation, and the reverse. The key element that we need to embed in our discussion here is that artistic thought states/ processes are cognitive micro-mechanisms that spontaneously and automatically involve a positive, negative or inconclusive aesthetic response to one’s own ideational outputs.

Artistic thought states/ processes are compound mental states/ processes in that they are made up of more than one component. The figure above illustrates the *minimal components* of an artistic thought state/ process. The artistic thought state/ process in turn is itself, as I will explain later, a minimal involuntary component of more macroscopic voluntary creation procedures. The first component of an artistic thought state/ process is an agent being able to hold a non-trivial creative mental representation of a certain kind (aspectual representation). The next component is that the agent is a non-naïve agent who is at least intuitively aware of the non-trivial nature of her novel mental representation. And the third component of an artistic thought state/ process is that the agent is spontaneously, automatically and instantaneously (i.e. effortlessly and involuntarily) responding in an aesthetic way to the non-trivial nature of her own novel mental representation. Artistic thought states/ processes are also *composite*, as I would call them, mental states/ processes in that the three minimal components that make them up involve complex retroactive compositions of conceptual, perceptual and affective elements. I already suggested earlier how aspectual representations should be seen not as mere mental images or conceptual descriptions of an object, but as being in a complex state in relation to some object, involving conceptual descriptions, phenomenal representations and affective attitudes towards it. The notion of an aspectual representation allows us to stay within a computational and representational theory of mind, but in a version that does not reduce human experience to strict conceptualism, mere mental imaging or affectless, disembodied representationalism. The intuitive awareness component of artistic thought states/ processes involves potential

mobilization of central thought processes and metarepresentational processing, while the aesthetic response component amounts to spontaneous and automatic mobilization of the perceptual and affective system. So, when referring to an artistic thought state/ process as a ‘cognitive state’, we should take the notion ‘cognitive’ in this nuanced and composite sense.

The element of spontaneity and automaticity underpins artistic thought states/ processes as a whole. In cognitive science and linguistics a behaviour is spontaneous and automatic when it does not require the engagement of the volition system in order to occur, and when the individual organism cannot use volitional processes to impede it from occurring. A good example of an automatic and spontaneous behaviour is natural language processing: our cognitive make-up and universal language capacity is designed in such a way that, as soon as we are presented with a phonological stream of linguistic sound in a language we know, we cannot help but spontaneously, automatically and instantaneously mentally represent this stream of sound as meaningful sentences. This is something that happens to us rather than something we do and, as it appears, the engagement of the volition system cannot alter the picture in the slightest: even if we try and tell our mind to stop representing this stream of sound as meaningful, we will still go on hearing these utterances as meaningful utterances rather than as streams of meaningless sounds produced by someone’s mouth and larynx. An artistic thought state/ process is partly something we do and partly something that happens to us: it is something that happens to us because, for some reason, our cognitive make-up is designed by evolution so that artistic thought states/ processes spontaneously, automatically, instantaneously and involuntarily pop in the individual mind; it is something we do because the agent who has experienced an artistic thought state/ process might then choose to either bypass and disregard it or maintain attention on and elaborate on its content and potential physical outputs, shift attention between more than one consecutively occurring artistic thought state/ process, fix attention on one rather than another among a set of co-occurring and ‘competing’ outputs of artistic thought states/ processes<sup>45</sup> etc. , providing even a weak element of internally-directed attention, executive functioning and cognitive control over the spontaneously occurring artistic state/ process. The critical part out of the two is the ‘pop-up’ part.

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<sup>45</sup> Introspective evidence here from my work as a poet and performance artist suggests that in a very short expanse of time (a few seconds sometimes) I might experience in phenomenal consciousness a sequence of, say, a number of possible versions of a line or a number of possible versions of a title of a poem, all of which, in the explanatory model I am developing here, are contents of a fast sequence of almost co-occurring artistic thought states/ processes with ‘competing’ outputs.

The study of artistic thought states/ processes falls within the scope of automatic cognitive processes and spontaneous human performance. The spontaneous and automatic nature of artistic thought states/ processes, for instance, underlies the phenomenon of productive blocks such as so called ‘writer’s block’. We cannot tell our mind to generate artistic thought states/ processes. In the history of literature and art there are anecdotes about the methods artists and writers use to increase the likelihood of experiencing artistic thought states/ processes, such as walking in the open air, flaneurism, staying silent for a long time, listening to music, locking oneself in a room and waiting for inspiration to come, randomly improvising without specific purpose until artistic thought states/ processes start being generated in the mind etc. These methods increase the likelihood of experiencing artistic thought states/ processes but do not guarantee that they will indeed be experienced, hence the existence of productive blocks in all types of artistic performance. However, because of the mobilization of executive functioning and cognitive control while experiencing artistic thought states/ processes that I analyzed above –rudimentary as it may be in some cases– and the existence of hands-on practices that help kick-start the generation of artistic thought states/ processes, we should perhaps more adequately describe artistic thought states/ processes as *semi-spontaneous* states/ processes, involving an intriguing combination of involuntary types of mind-internal behaviour interwoven with elements of full-blown volitional agency.

In ancient Greek mythology, inspiration was attributed to a gift of the Muses (*Mousai*), the inspirational goddesses of literature, art and science. In some sense, my account of art as an action and the artistic thought states/ processes that underpin it fleshes out the minimal components and cognitive engineering of the mind-internal phenomenon of spontaneous and automatic performance we pre-theoretically refer to as ‘artistic inspiration’. Without artistic inspiration there would be no art. It can only be assumed that the first ever artwork of the first ever artistic action process was the output of the first ever time in the history of the human species that a human agent experienced artistic inspiration, the first ever time that a human agent entertained the cognitive engineering of an artistic thought state/ process. Momentary inspiration is the result of a single artistic thought state/ process or small sequence of artistic thought states/ processes occurring in the individual consciousness spontaneously and automatically as they do; extended periods of inspiration –which is usually what we use the pre-theoretical term ‘inspiration’ for– are macroscopic periods during which the individual consciousness experiences nuanced streams of co-occurring or successive

artistic thought states/ processes with relatively high frequency, intense *flow*<sup>46</sup> and great density of occurrence. My empirical observation that artistic thought states/ processes are spontaneous and automatic suggests that inspiration is indeed ‘given’ but, of course, not from the inspirational goddesses: a standard assumption in cognitive science is that spontaneous, automatic and instantaneous behaviours are genetically pre-determined and hard-wired. They occur involuntarily because they have wired themselves into our neural and cognitive make-up. If so, the ability to experience artistic thought states/ processes must to some extent be a genetically pre-determined and hard-wired behaviour, which in turn has numerous bi-directionally significant interdisciplinary implications. I will start with the one I regard as of primary importance.

From the beginning of this analysis, I have tried to divert the focus from the standard view of literature/ art as a set of objects out there in the world to literature/ art as a case of human agency, as a distinct and unique human action, or more precisely action-process. My notion of an artistic thought state/ process sketches an empirically tractable explanatory model of what it means for literature/ art to be distinct and unique as an action: a cognitive reason that renders literature/ art an action like no other human action, is that art has its own particularised and dedicated causal and cognitive machinery, a distinct and unique type of spontaneous and automatic thought state/ process that triggers and enables the kind of action that art is. The fact that an artistic thought state/ process is partly something we do and partly something that happens to us renders the distinct kind of action that literature and art is of particular interest for cognitive science, philosophy of action, the study of human agency and current research on human practical reasoning processes, as we are essentially looking at an intriguing case of human action where spontaneous and automatic triggers are interwoven with elements of deliberation and intentional agency in an extremely complex mutual feedback relationship.

Artistic thought states/ processes can be described as *art-specific*: they occur in art and art only. They are the minimal causal and cognitive underpinnings that make literature/ art the kind of action-process it is; and literature/ art is this rather than some other kind of action-process precisely because it has these rather than some other minimal causal and cognitive underpinnings. The construct is not circular.

In disseminating my view of art as a distinct and unique human action, and the art-specificity of artistic thought states/ processes during the two years of the ‘CogLit’ project, I

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<sup>46</sup> Flow is the mental state of operation in which the person performing an activity is fully immersed in it, experiencing a feeling of heightened attention, deep concentration and energized focus.

realised that my audience often mistakenly attributed to my model an element of circularity. The rationale of the circular mis-interpretation of what I propose goes more or less like this: what is art? Art is a distinct and unique human action. What makes art a distinct and unique human action? Well, art is a distinct and unique human action because it arises causally from an art-specific type of cognitive mechanism, an art-specific type of thought state/ process. What makes this particular thought state/ process ‘artistic’? The fact that it occurs in the kind of action we refer to as ‘art’. Circular? Well, no...

The circularity mis-attributed to this construct, in reality, originates in an inadequate understanding of the causal operations of cognitive mechanisms and of how causal and cognitive infrastructure can make an entity out there in the world the kind of entity it is. Take for instance the entities BEHAVIOUR and ACTION. In the Cartesian approach, a certain behaviour is an action if it is causally related to the type of cognitive state we refer to as an intentional state.<sup>47</sup> The rising of my arm is an action of an arm raising if it is generated by an intentional state that my arm should rise. And, what is an intentional state? An action-specific type of volitional mental state –action-specific in the sense that it occurs in, and only in, the kind of entity an ACTION is: if a BEHAVIOUR is causally connected to this particular mental state, it is not a mere BEHAVIOUR any more, but becomes an ACTION. From this causal and cognitive standpoint, BEHAVIOURS and ACTIONS cannot possibly belong to the same ontological category because they have palpably distinct mental causation and cognitive infrastructure. Only the cognitive causation of ACTIONS involves intentional states. Why should that be seen as circular? Not only is this cognitive approach to ACTION not circular at all, but in present-day terms it is even in principle amenable to empirical and neurological testability. Fifty years ago, the notion of an intentional mental state, or more simply an intention, was fundamentally questioned in terms of its very ontological status and theoretical validity. Roland Barthes’ hugely influential *The death of the author* (1967) was very much inspired by this theoretical tendency. But to what extent do the theoretical assumptions that cast doubt on the existence and role of intentions correspond to what we have come to know in the last twenty years about intentionality? Empirical research in cognitive science and developmental psychology has incontestably shown that the perception of others as intentional agents is fundamental to human experience and one of the cornerstones of

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<sup>47</sup> Here I am only using the Cartesian view of action for illustrative purposes. As you will find out in the next chapter, in my theoretical work I in fact adopt Fred Dretske’s (1988) view of action.

individual and social cognition, the Theory of Mind capacity (ToM), pragmatic inferencing<sup>48</sup> in linguistic and non-linguistic communication and natural language acquisition. Recent research in neuroscience looking into the development of advanced prosthetics and motor-rehabilitation techniques that respond to the agent's intention to move rather than her (imagined) movement suggests that we might be quite close to making intentions not only psychologically but also neurologically testable: track them via neuroimaging/electroencephalography (EEG) and use them in a controlled way to cause desirable kinds of actions in given contexts.<sup>49</sup> To return to the ontological question about actions, the present psychological and neurological realism about intention recognition makes the ontology of ACTIONS psychologically and neurologically testable: those behaviours in which the psychologically and neurologically testable occurrence of an intention pertains are ACTIONS, whereas those behaviours in which it doesn't are mere BEHAVIOURS. And if, contrary to our initial assumption, we discover that intentions pertain in both the cases of mere BEHAVIOURS and ACTIONS, then our view of BEHAVIOURS and ACTIONS as ontologically distinct on the grounds of intentional causation is not corroborated by empirical fact and is therefore incorrect. And there is no trace of circularity whatsoever in this line of reasoning.

Artistic thought states/ processes as I have described them are psychologically real entities. They exist in the mind as the minimal constituents of artistic creation. They are also, in principle at least, empirically testable. We can hypothetically think of future experimental settings in which some empirical attestation of the existence of artistic thought states/ processes might be possible. From a neuroscientific and cognitive point of view, for instance, the element of intuitive awareness and metarepresentational activation – weak as it may be – occurring in artistic thought states/ processes could be said to make three predictions in terms of in principle empirically testable cognitive functions.

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<sup>48</sup> Pragmatic inference is the process hearers engage in when inferentially bridging the gap between what sentences mean and what speakers mean. Intention recognition has been shown to play a crucial part in the human capacity for pragmatic inferencing (Grice 1989; Sperber and Wilson 1995; Wilson and Sperber 2012).

<sup>49</sup> Certain motor-related processes have been found to be predictive of movement onset and type, with most well-known examples being the Readiness Potential (RP) and Event-Related Desynchronization (ERD) in the alpha and beta bands (8-30Hz): both signals arise on average up to 2s prior to movement onset across the motor cortex and in certain contexts may act as potential instigators of intention reports as they have been found to correlate with certain aspects of the experience and reportability of an intention to move (from Ceci Verbaarschot's talk "Ready for action? Decoding movement intentions from EEG activity", COGS Seminar, Institute of Cognitive Science, University of Sussex, 2 April 2019).

The first prediction involves a possible activation of the *metarepresentational module* or *Theory of Mind (ToM) module* (the dedicated area in the human mind that is responsible for metarepresentational thinking), to the extent that weak forms of metarepresentational state like the state of intuitive awareness I am currently describing can be thought of as amenable to the operations of the Theory of Mind module just like full blown metarepresentational thought.

The second prediction involves some, minute even, activation of the so-called *cognitive control* or *executive functioning* systems whose task is to select and successfully monitor behaviours that facilitate the attainment of certain goals in given contexts. In line with current psychological and neuroscientific research, cognitive control or executive functioning mobilise fundamental cognitive processes such as *attentional control* (the ability to focus attention in one direction or other), *inhibitory control* (the ability to focus on relevant stimuli for a given task in a given context in the presence of irrelevant stimuli), and *cognitive flexibility* (the ability to switch between thinking about various different contents or think about multiple contents simultaneously). The fact for instance that the state I am describing involves an agent who is intuitively aware of the aspectual nature of some of her representations could be rephrased as a state where an agent maintains, even briefly, internally-directed attention and allocates it to relevant stimuli. An element of attentional and inhibitory control must therefore be present even in its most rudimentary form. In Chapter 6, I will bring Sperber and Wilson's *Relevance Theory* (1995, 2012) into the picture to make provisional suggestions about why the mind finds mind-internal stimuli such as artistic thought states/ processes relevant enough to allocate and maintain attention onto, but the crucial point at this stage is the fact that for whichever reason that may be, the mind finds artistic thought states/ processes relevant mind-internal stimuli and therefore worthy of attention.

Finally, the last prediction is that intuitive awareness of the non-trivialness of a certain mental representation must entail some mobilisation of memory functioning (working, episodic and long-term memory) through spreading activation processes and a subsequent change in the manifestness of certain assumptions in our cognitive background, making more highly manifest those assumptions that can be associated with the concepts or percepts featuring in the aspectual representation in question. Also the three constituents of a minimal artistic thought state/ process might be empirically or neurologically testable in the form of simultaneous co-activation –at those moments when an agent reports experiencing an artistic thought state/ process– of various areas in the human mind that neuroscience increasingly

associates with aesthetic pleasure, the metarepresentational capacity, internally-directed attention and spontaneous performance.

The notion of an artistic thought state/ process is a newly-coined theoretical construct and as such it has not been experimentally investigated and attested. An experimental investigation of the psychological and neurological reality of artistic thought states/ processes might prove interdisciplinarily robust, significantly amplifying the explanatory mechanisms currently being explored in the neuroscientific study of creativity and human spontaneous performance. The psychological reality and possible neurological correlations of such states would suggest, for instance, that contrary to standard approaches, human spontaneous performance in certain contexts might not just be a generic undifferentiated function but a function relying on highly structured hard-wired internal micro-mechanisms.

As it stands, the area of existing research in creativity that is the closest to and most relevant in collecting evidence about the empirical and neurological reality of artistic thought states/ processes is that of improvisation, with the main bulk of current research findings coming from the area of improvisation in music. Even though artistic inspiration as a form of essentially improvisational performance across artforms relies on the minimal *ex impromptu*, spontaneous and in this sense improvisational mental operations that artistic thought states/ processes are, the specific artistic practice we refer to as ‘improvisation’ can be thought of as a more particularised and complex area of spontaneous performance that embeds the micro-mechanism of artistic thought states/ processes within a rather specific cognitive macrostructure: I suggested earlier that without inspiration there is no art; literature and art as an action is a process in which the mind improvises bit by bit in moments of inspiration the creation of artworks by means of the minimal semi-spontaneous cognitive operations of artistic thought states/ processes.<sup>50</sup> However, even if the viewpoint of an *ideal receiver* is assumed as somehow sub-attentively guiding or at least informing this process, strictly speaking, artistic creation –at the very moments it spontaneously and improvisationally occurs– is in normal circumstances an internally-directed activity with only internally-directed attentional activation. The artist can troubleshoot again and again, engage in a

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<sup>50</sup> Therefore the claim by Beaty (2015: 109) when referring to improvisational practice in music that ‘Other forms of artistic performance, while similarly demanding, do not require such spontaneous creativity’ is only adequate if the emphasis is placed on ‘such’: by being causally entrenched in the engineering of artistic thought states/ processes, and since artistic thought states/ processes are forms of at least semi-spontaneous and therefore in some sense improvisational behaviour, all artforms presuppose a degree of spontaneous generativity. The emphasis should be on the different ways spontaneous generativity is put to work in full-blown improvisational practice, and this is a fine but theoretically valid point that I aim to highlight in my brief discussion here.

laborious procedure of contemplating numerous competing alternatives, change her mind between them again and again, write and re-write and re-write the same thing an indefinite number of times, and eventually arrive at a final product through a very long and complex path of mental and physical elaboration. The artistic practice we refer to as ‘improvisation’, on the other hand, differs in the way it puts artistic thought states/ processes to use in two crucial ways: improvisational art is presented, performed, demonstrated and created on the spot in front of the eyes and ears of the receiver, which in terms of cognitive engineering can be thought of as a type of performance requiring simultaneously both internally-directed and externally-directed attentional activation (Beaty 2015: 113). Also, because during improvisation the artwork (e.g. musical piece) is created on the spot in front of the eyes and ears of the receiver, the micro-mechanism of artistic thought states/ processes is required to deliver finalised outputs instantaneously. The artist cannot troubleshoot, take the time to try out different alternatives, re-draft, re-consider. The output must be immediate and one-off. Away from the eyes and ears of the receiver, the author, poet, painter, sculptor, choreographer, performance artist etc es something not very different in terms of its minimal cognitive instantiation as a mind-internal process than the improvising jazz musician, with the exception that the outputs they deliver need not be final at any one moment. Again, if thought of in terms of cognitive engineering, this suggests that higher levels of cognitive control and executive function are in principle permitted in the macrostructure of private artistic creation, whereas in the practice of public improvisation artistic thought states/ processes must be embedded in somewhat different broader mental operations that enable the instantaneous delivery of finalised outputs, say, by keeping certain aspects of cognitive control and executive functioning to an absolute minimum.

Keeping these integral differences in mind, the neuroscientific study of musical improvisation is still particularly useful in providing some preliminary empirical clues to the psychological and neurological reality of artistic thought states/ processes as spontaneous and in this sense *ex impromptu* and ‘improvisational’ occurrences across artforms. Neuroscientific evidence from musical improvisation, for instance, (see Andrews-Hanna et al. 2014) indicates a positive correlation between improvisational performance and activation of the medial prefrontal cortex area of the brain (MPFC), a region typically associated with spontaneous thought processes: the medial prefrontal cortex is correlated with stimulus-independent self-generated cognitive processes that are generally regarded as hallmarks of the default mode network, that is a network of interacting brain regions believed to be active when a person is focused on internally-directed attention, mind-wandering,

metarepresentational processing and episodic future thinking (e.g. Buckner and Carroll 2007; O’Callaghan et al. 2015; Schacter et al. 2012). Moreover, evidence about the deactivation of the dorsolateral prefrontal cortex (DLPFC), a brain area associated with executive function, is interpreted by some neuroscientists (e.g. Limb and Braun 2008) as reflecting a suspension of inhibitory or conscious monitoring processes to allow the improviser to enter an internally-driven and self-referential flow state. Evidence from the study of improvisation in jazz (Pinho et al. 2014) suggests that cognitive control processes are less involved during improvisational practice, and that the greater the improvisational expertise of the jazz player the greater the decrease in activity within executive function regions –to the point of widespread deactivation of the lateral prefrontal cortex and parallel increased activation of the medial prefrontal cortex (MPFC) (Limb and Braun 2008). At the same time, evidence from experimental settings involving improvisation by novice improvisers, classically-trained musicians, non-musicians as well as collaborative improvisation (e.g. in a trio) show activation in brain areas associated with volitional motor control, working memory and controlled memory retrieval (Bengtsson et al. 2007; de Manzano and Ullén 2012; Donnay et al. 2014), implicating elements of executive function and cognitive control. Executive elements in improvisation studies have also been identified by Berkowitz and Ansari (2008), who reported activation in the left inferior frontal gyrus area of the brain (IFG), associated with tasks that require controlled long-term memory retrieval such as verbal fluency tasks (e.g. Hirshhorn and Thompson-Schill 2006), as well as activation of the anterior cingulate cortex area (ACC), typically associated with voluntary selection, decision making and conflict monitoring (Botvinick et al. 2004; Forstmann et al. 2006; Walton et al. 2004). The two sets of findings reported here are not necessarily conflicting, and it is just possible that the differential degrees of activation and de-activation of executive function and cognitive control parallel to spontaneous performance activation during musical improvisation tasks depend on the types of the various subject groups selected for the experimental settings and a possible *expertise effect*<sup>51</sup> in some cases of subject selection, such as expert jazz players whose training tends to build on improvisation-specific practice. The results may, therefore, in my view be interpreted not as conflicting but as reflecting varying degrees of cooperation during varying degrees of improvisational activity between large-scale brain networks

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<sup>51</sup> The term ‘expertise effect’ refers to neurologically real effects that have been neuroscientifically tracked as occurring in the brain networks of expert performers, and are thereby considered as results of training and expertise (e.g. expert athletes, expert musicians, expert dancers etc.).

associated with cognitive control and brain networks associated spontaneous thought (Beaty 2015).

It is entirely contingent that neuroscientific research in the domains that would be pertinent to the venture of empirically tracking and grasping potential neural correlates of artistic thought states/ processes is at the moment in an embryonic state. It is also entirely contingent that for experimental settings to be genuinely effective, the experiments would have to be somehow carried out not in artificial laboratory conditions, with the usual ‘forced’ idea-generation tasks, but in the actuality of real-life settings and at moments when the experimental subjects are in a state of unforced inspiration, spontaneously and automatically experiencing the thought states/ processes we aim to track. This latter task is currently proving the most compelling challenge in contemporary creativity-related research, modestly acknowledged by a number of neuroscientists as raising questions about the validity of experimental results (Abraham 2018: 79). The ephemerality and unpredictability of artistic thought states/ processes, just like any other type of spontaneous creative ideation state, makes it challenging to capture in controlled laboratory settings, and it indeed raises the question of whether the empirical investigation of deliberate and forced forms of ideation can have anything theoretically significant to tell us about forms of ideation and types of mental processes that have *state-status*<sup>52</sup> (for quite similar remarks on the theoretical necessity of a distinction between spontaneous state-status and deliberate forms of ideation see Dietrich 2004). The neuroscience of musical improvisation is in fact the closest research has got so far to a domain of experimental endeavours that to some extent investigate state-status mental processes; however, as suggested above, the study of human spontaneous performance in terms of full-blown improvisational practice and the study of human spontaneous performance in terms of the internally structured and possibly hard-wired micro-mechanisms that enable literature and art as an action are not equivalent. Yet, as noted above, these practical impediments are entirely contingent. In the 1960’s we could use empirical observation, introspective evidence and close theoretical argument to talk about intentions as ontologically real entities and it was entirely contingent that we were five decades away from being able to pin down their psychological and neurological reality.

Even more important than the assumption that artistic thought states/ processes inhabit the human mind is the assumption that they don’t seem to inhabit every single human

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<sup>52</sup> By ‘state-status’ I refer, here, to the status of spontaneously occurring ideational states that should be seen as distinct from deliberate forms of ideation: mental processes with state-status cannot be forced and are difficult to study in artificial and controlled laboratory settings.

mind. Just as I suggested about one of their constituents (aspectual creativity), artistic thought states/ processes as a whole don't seem to occur universally and equipotentially across the species. Not everyone seems to experience artistic thought states/ processes. Not everyone seems to be capable of them. The pre-disposition and ability to experience artistic thought states/ processes appears to demonstrate selective distribution across human individuals, just like the pre-disposition and ability to hold aspectual representations, and experimental research is needed to empirically track and attest this selectivity of distribution. In the light of the twenty-five years of empirical findings on the long-standing nature vs nurture debate that I will analyse in more detail in Chapter 7, the possible differential distribution of the predisposition and ability to entertain such states/ processes can be attributed to complex gene-ecology interactions. If the spontaneous and automatic nature of artistic thought states/ processes suggests an underlying element of differential genetic endowment that to some extent is perhaps also materialised as differential neural hard-wiring, then a selectivity in the distribution of the propensity and ability to hold artistic thought states/ processes in the human population allows us to claim that literature/ art is most possibly an action that is feasible for certain minds only. In looking at the artistic or 'poetic' mind we are most probably looking at an essentially distinct mind, a mind genetically equipped to be capable of art.

### **3.5 Artistic thought as a stylistic thought state/ process**

The idea that fully-fledged artistic thought states/ processes involve an aesthetic attitude to one's own aspectual representations has a number of implications for the nature of artistic thought states/ processes. For one thing, the artistic condition involves an *evaluative* element. It is structured upon intuitive aesthetic assessment and evaluation of one's own novel mental representations.

Current research findings from the psychology and neuroscience of creativity emphasize the centrality of *self-efficacy* (i.e. the extent to which one judges oneself to be efficient or inefficient in relation to achieving a given creative objective) and idea *self-evaluation* (i.e. the way one evaluates one's own ideational outputs) in any creative production process (Hao et al. 2016; Kleinmintz 2014; Mueller et al. 2014; Steele et al. 2018). Two points need to be raised here though: as suggested earlier, in literature and art, self-evaluation of ideational outputs involves to a great extent considerations about aesthetic value and aesthetic non-trivialness of one's own representations. Second, a theoretical distinction is necessary between the strongly reflective types of self-evaluation currently

investigated by creativity research and the automatic and spontaneous type of aesthetic self-evaluation of ideational outputs that I believe is a constituent of artistic thought states/ processes. A non-naïve agent may also engage in fully reflective forms of aesthetic or conceptual self-evaluation of the non-trivialness of her ideational outputs, but the type of evaluative attitude I am interested in when sketching the engineering of artistic thought states/ processes is of a somewhat different order: it is a spontaneous and instantaneous evaluative response of an aesthetic kind, embedded within a spontaneous thought state/ process. I take this to suggest that for reasons that fall within the scope of evolutionary speculations about the origins and causes of our propensity for art, certain minds are hard-wired to generate aesthetic responses to certain types of mind-internal stimuli.

For another thing, to say that artistic thought states/ processes involve an agent vaguely aware of and steadily focused on her representations in an aesthetic way is to say that fully-fledged artistic thought states/ processes, unlike other possible non-artistic creative thought states/ processes, arise only at a point where the aspectual representation has –at least to some minimal extent– been entertained in the agent’s mind in a particular formal medium.

Some notion of materiality and form seems theoretically necessary for aesthetic experience and value to obtain. This is not to say that aesthetic value is a property of either forms *per se* or of how forms actualise contents. Aesthetic value is a property of an agent’s way of *seeing* forms and of *seeing* how forms actualise contents. Up to the point where an agent is in a mental state in which, say, the concepts TREE, HUMAN, BOREDOM and IMMOBILITY feature interestingly connected in her mind, our agent is only at a pre-inventive aspectual stage; and up to the point where she is vaguely aware that the connection is non-trivial, she is a non-naïve agent of pre-inventive aspectual representations. However, as I have explained, being in this thought state is not as such or as yet being in an artistic condition. This is not an artistic thought state/ process in that it cannot be sufficiently distinguished from other types of creative ‘thinking’ such as scientific thinking: the concepts TREE, HUMAN, BOREDOM and IMMOBILITY can be assumed to feature interestingly connected in the mind of a scientist or philosopher developing a theory, say, about kinaesthetic phenomenal consciousness. Notice, too, that the representation our agent has at this point cannot yet be attributed an aesthetic value in any but the very broad, non-technical, sense in which all non-trivial thinking can be said to be ‘beautiful’ –the sense in which the theory of relativity or the conception of gravity have BEAUTY. For a representation to be susceptible to aesthetic appreciation in the strong sense that is relevant to a philosophy of literature and art, it must be susceptible to at least an intuitive evaluation in terms of BEAUTY\*, or to put it

differently, the representation must have materiality and form.<sup>53</sup> The materiality and form of a representation could as well be mind-internal, experienced solely in phenomenal consciousness as, say, inner hearing, inner vision, inner kinaesthesia or linguistic phenomenal consciousness (words in the mind) without necessitating a process of physical instantiation; or the representation could be a representation of some physically instantiated materiality and form that the agent *sees* in a certain way. Although as shown in Chapter 2, materiality and form is not what makes a certain object an artwork, still there is no such thing as an artwork without materiality and form. John Cage's *4'33''*, sometimes referred to as an artwork without materiality, is in fact an artwork whose material form is the negation of materiality, the flouting of receiver expectations of what constitutes musical sound, and a broadening of standard perceptions of the material means of music to include the whole spectrum of natural sounds and noises. The *Fountain* and all other ready-made artworks, including found-text and copy-paste poems, exploit pre-existing materiality that has not been fabricated by the artist but is materiality nevertheless. Would the *Fountain* be as impactful if Duchamp had exhibited in the gallery some other prefabricated object, say, a clay tea pot or a basketball? How was the materiality of the particular object as *seen* by Duchamp decisive for the aesthetic responses and aesthetic impact of the *Fountain*, not only microscopically on individual receivers but also globally, on the history and development of contemporary art? How did the material-properties-driven non-trivial conceptual and perceptual association between a FOUNTAIN and a URINAL again play a decisive part in the aesthetic responses enabled by this emblematic category-generating artwork? Smithson's earthwork *Spiral Jetty* has an eternally transforming non-definitive materiality.

If, in order for a thought state/ process to be an artistic one, the aspectual representation has at least to some minimal extent to be entertained in the agent's mind in a particular formal medium or materiality, then artistic thought states/ processes cannot be *pre-stylistic states/ processes* (Enkvist 1964): they cannot exist before the aspectual representation has been experienced by the artist –at least to a minimal degree– as phenomenal consciousness (as phenomena in the mind such as, say, words, sounds, three-dimensional images, movements, colours, melodies, kinaesthetic sensations etc, depending on the formal medium of the art form we are dealing with). In the pre-stylistic and pre-inventive

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<sup>53</sup> In line with my suggestions in Kolaiti (2019: 84-85), while BEAUTY BEAUTIFUL is a common sense notion that concerns the physical properties of an entity and stands in an antonymic relation to ugliness, BEAUTY\* concerns a different type of beauty, aesthetic beauty, that does not result from or depend on the physical properties of an entity and does not stand in an antonymic relation to ugliness. Being BEAUTIFUL is not a prerequisite for being BEAUTIFUL\*.

state, the artist is only thinking aspectually. She can have intuitions about the relative non-trivialness of the content of her representation. Her representation is non-trivial from a conceptual point of view. An evaluative stance might be present here too, in the sense of intuitive assessment of conceptual non-trivialness. But this is not as yet aesthetically relevant. Only at the point where her representation figures in phenomenal consciousness, the point where, say, words or phrases or longer stretches of language pop up in the poet's mind (e.g. 'I'm a tree', 'I'm bored like a tree') can the artist have an aesthetic attitude towards her representation and intuitions about its relative aesthetic non-trivialness. Only at that point can our agent be said to hold fully-fledged artistic thoughts. The fact that the same pre-stylistic and pre-inventive structures can take an infinite number of different stylistic and material forms is a very strong argument in this direction: not all possible instantiations are equally non-trivial from an aesthetic point of view, and unless a pre-inventive and pre-stylistic conception is materialised into some specific (and therefore, stylistic) instantiation X, Y, Z, the agent cannot possibly have a full-blown aesthetic response to it.

Artistic thought states/ processes are at least to a minimal degree *stylistic thought states/ processes*. And they may be said to have something integral in common, despite the phenomenological differences in the way aspectual representations manifest themselves to the artist's individual consciousness as a result of the diversity of formal media employed by the various artforms. An artistic thought state/ process is what it is independently of whether the aspectual representation is phenomenologically experienced as bodily sensations and movements in the case of a dancer, as sound patterns/ melodies in the case of a musician or as words in the mind in the case of a poet. The cross-disciplinary formal fluidity of contemporary art and the invention of new types of artforms, as artistic innovation constantly stakes out new performative ground or challenges existing expectations about materiality, undermines any domain-specificity of the medium or material form in which a stylistic state may be experienced.

The idea that artistic thought states are at least to a minimal degree stylistic thought states points in a direction that could significantly enlarge the domain of current research in literary stylistics and the linguistic study of literature. Alongside investigating the systematic relation between style and interpretation, the interplay between literature, language and society, the points of convergence and divergence between literary and other non-literary types of discourse, or the ways in which insights from cognitive psychology and linguistics could highlight textual phenomena, working at the interface between language and literature may also allow us to construct explanatory accounts of a range of phenomena related to

human agency, human practical reasoning processes, creativity etc and the way they become instantiated in literary form. This approach is cognitive in nature, but with the reverse directionality from current trends in cognitive stylistics: it sees literary language not as the object of inquiry in itself but rather as an (externally observable) datum that can provide backwards evidence about the (non-externally observable) engineering of the action-process that literature is and the workings of the mind that generates it. Such an approach is not concerned with how advances in cognitive psychology/ linguistics could highlight literary phenomena but with how the study of literary phenomena could achieve retroactive effects on current debates in cognitive psychology and linguistics.

### **3.6 Artistic thought states/ processes vs artistic creation methods**

Artistic thought states/ processes are not, and shouldn't be, confused with methods and ways of artistic creation.<sup>54</sup> The notion of a process or procedure when talking about artistic thought states/ processes is a cognitive one, referring to hard-wired mental operations that occur automatically and spontaneously in the human mind, and not a common-sense term alluding to the 'processes', strategies and 'procedures' artists might voluntarily deploy in artistic creation and practice. Artistic thought states/ processes are not recipes for creating an artwork or in any way equivalent to working methods, and should by no means be thought of as such. They are automatic mental goings-on that form the cognitive and perceptual infrastructure of a causally distinct human action.

To illuminate the notion of a cognitive process or procedure as opposed to 'process' or 'procedure' as a common-sense term, let me momentarily draw on human linguistic communication. Forty years of research in psycholinguistics, pragmatics and cognitive psychology has allowed us to form a relatively clear idea of utterance comprehension and interpretation during linguistic communication. We have good evidence, for instance, that the linguistic input produced by the speaker is processed by a dedicated mechanism (module) in the human mind, the *language module*, which automatically converts phonological sound into meaningful yet incomplete logical forms as we call them in linguistic semantics. This involuntary mental operation is instantaneously triggered as soon as we are presented with a linguistic stimulus, and amounts to a cognitive process. Now, these logical forms are, as I said, incomplete, because without pragmatic enrichment in a given context through assignment of reference ('John' is used in different contexts to refer to different individuals

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<sup>54</sup> Many thanks to Professor Assimina Kaniari for indicating the need for this clarification during my pertinent 'CogLit' project talk at the National School of Fine art, Athens in 2019.

named John, ‘here’ to different locations, and ‘mama’ to different people’s mothers) and other similar pragmatic processes they are meaningful but underdetermine speaker meaning. These logical forms are thus taken as input to a pragmatic mechanism that enriches the linguistic meaning of utterances in a given context and that Carston (2002), Sperber and Wilson (1995) and Wilson and Sperber (2012) have formulated as a *relevance-guided comprehension procedure*: an automatic mental operation that bridges the gap between incomplete logical forms and pragmatically enriched speaker meanings to yield contextually appropriate interpretations of the speaker’s utterance. This is yet another cognitive process. Neither of these processes/ procedures is a recipe or method that hearers can consciously follow in interpreting utterances. Neither of them can be flouted by the receiver of an utterance. Neither can be voluntarily impeded or reversed in terms of the sequence and content of its constituents. They are hard-wired to occur in the human mind and they do so without requiring deliberation or without deliberation being able to affect them as they occur. Artistic thought states/ processes are cognitive processes.

However, artistic thought states/ processes as cognitive processes can be thought of as the minimal and most microscopic hard-wired mental operations that act as components of macroscopic working methods and creative production ‘procedures’, involving stages<sup>55</sup> that potentially differ significantly across individuals and areas of performance, and involve intricate feedback relations between the minimal recurring occurrence of artistic thought states/ processes and the parallel progressive development of the overall macroscopic creative production procedure all the way from initial conception to final instantiation (physical or mental).

It is worth noting here that artistic creation does not necessarily have to have a macroscopic dimension, or in other words, it doesn’t necessarily have to expand significantly over time: instantaneous artistic creation that pops into the mind finalised as if by immediate insight –most probably owing to prior sub-attentive thought processes– is an empirically attested phenomenon not only in the arts but across areas of human performance. It is true, however, that the most common case of artistic creation is not by instantaneous insight, and

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<sup>55</sup> Wallas’ (1926) *4-stage model* of the creative process, Lubart’s (2001) re-assessment of Wallas’ model, and Finke, Ward and Smith’s (1996) *Geneplore model* that assumes the existence of pre-inventive structures followed by an explorative phase involving idea evaluation are some prominent attempts to formalise the stages of macroscopic ‘creative processes’; in Chapter 7, I will discuss bi-directional effects of the notion of microscopic cognitive processes like artistic thought states/processes on these and other creative creation models.

that creation in any area of human performance usually has considerable temporal length and macroscopic nature.

As far as macroscopic procedures of artistic creation and their interplay with the minimal hard-wired cognitive constituents that enable them (artistic thought states/ processes) are concerned, the picture is intriguingly perplexing. The feedback relationship between pre-stylistic and stylistic states is obscure, intricate and complex. The same goes for the relationship between initial intentional states, artistic thought states/ processes and their physical manifestations. In the case of raising one's own arm, we can speak of forming an intention to raise one's own arm, which can be both mentally reflected on and visualised as an act of raising one's own arm, and also physically realised as an action of raising one's own arm. But the action of creating *De niemandsrose* is the physical realisation of which mental representation? Can we legitimately say that such a mental representation could exist—at least in its entirety—prior to *De niemandsrose* having been created? And if the action of creating *De niemandsrose* was caused and brought to light by a complex intentional state, what was the initial object of this intentional state? How much of *De niemandsrose* could have been there before the physical process of creating it had begun?

It might be that we can assume a vague and possibly sub-attentive initial conception, a starting point, which bears at least some similarity to the end product that *De niemandsrose* is. Indeed, artistic creation sometimes begins with a rudimentary and elusive mental seed. Then—and quite unsurprisingly for the kind of process it is—it develops in a way and a direction that may have little or even no resemblance to that rudimentary initial conception. On other occasions, the end-product is spontaneously caused in complete form: the agent experiences in the mind-internal reality a relatively finalised version of the artwork as the result of pre-conscious activity, as revelation or enlightenment. She can, and tends to, dispose herself aesthetically towards it, but may not be able to say how and why it was caused, if it was the object of an intention, or what this intention was.

It is at this level, of the numerous forms the practical reasoning processes involved in the relation amongst artistic thought states/ processes, initial intentions and their physical manifestation through macroscopic creation methods and procedures may take, that early endeavours like Monroe Beardsley's (1965), 'On the Creation of Art' can be accommodated. Beardsley spoke of two 'theories of artistic creation', the *propulsive theory* in which, say, the poet begins with a few words that occur to him and then proceeds to the completion of a poem whose details he could not foresee in the beginning, and the *finalistic* theory, where the poet starts from an idea of what he wants the completed work to be and then works towards

this goal. And in fact we need not restrict ourselves to just these two types of practical reasoning process: there might be a) cases where the ‘propulsive’ and the ‘finalistic’ mode of creation get interwoven, b) cases where creation starts by accident or chance, then embedding the chance element within a ‘finalistic’ projection of what the completed poem or artwork could be, c) cases where the initial goal is abandoned along the way, substituted by some other goal or by creation in the ‘propulsive’ fashion, d) cases where creation involves the use of a ready-made object, e) cases where the material/ formal medium imposes constraints on the artist, thus retroactively modifying many of her initial creative decisions, f) cases where the artist begins with a very clear ‘finalistic’ projection of the completed work, but the resulting work ends up bearing minimal or no resemblance to that initial projection due to subconscious thought processes that little by little took the creation very far away from the initial goal, g) cases of almost ‘automatic’ creation where the completed artwork simply occurs to the poet/ artist as if by revelation, etc.

Macroscopic creation methods and procedures may take an indefinite number of different, extremely complex and highly individualised instantiations across artists, and the history of literature and art involves abundant reports from artists about their individual ways of work. But the staggering variation in macroscopic creation methods is underpinned by a minimal common denominator, the artistic thought/ state process, without which not only macroscopic creation processes but art itself would not be possible. The feedback relation between the minimal and automatic thought/ state process that an artistic thought/ state process is, and the voluntary macroscopic creation procedures in which it embeds itself, are of interest not only to critical theory and philosophy of art, but also to the philosophy of action, cognitive science and the psychological and neuroscientific study of human creative performance.

Another good reason for thinking that literature/ art is not an action like raising one’s own arm is that the complex processes of practical reasoning involved in it, the constant feedback between initial intentional states, artistic thoughts and their physical realisations, are of an intricacy that often makes any attempt to separate them seem inappropriate and artificial. As a poet, often, I do not know what it is that I have an artistic thought of. All I know is that I experience phenomenal consciousness –words in the mind, that is– and that I can, and tend to, dispose myself aesthetically towards it; often I do not know that I have an aspectual representation until after I have already written about it. No one has spoken more acutely about this experience than Marina Tsvetaeva (2004):

(...) often poems give us something that had been hidden. Obscured, even quite stifled, something the person hadn't known was in him, and would never have recognised had it not been for poetry, the poetic gift. Action of forces which are unknown to one's own acts, and which he only becomes conscious of in the instant of action. An almost complete analogy to dreaming.

### **3.7 Local vs global facts**

Artworks and literary texts are *local* facts, literary/ art events are *global*. Literary texts and artworks are local occurrences within the global phenomenon of a literary/ art event, in that the literary/ art event involves a characteristic *action-process*, which leads to some (occasionally prototype-related) *end-product* (e.g. literary text), which is likely to trigger some characteristic (aesthetic) *response*. In this chapter, I have tried to shift the focus to the production end of literature/ art and divert some theoretical emphasis from the artwork *per se* to the action-process of which it is an outcome. In doing so, I have attempted to sketch an explanatory model of the unique, art-specific and potentially hard-wired mental state/ process to which every instance of art, from music and fiction through to drama, dance, performance art, poetry, installation art, even some of the cave paintings of the Neanderthals, can be said to be causally linked.

The idea that literature and art as an action-process might be enabled by art-specific mental operations enables a new type of cognitive research venture into the nature of art as a distinct and unique human action with rich backward interdisciplinary effects on a range of empirical and life sciences. Being metarepresentational in nature, artistic thought states/ processes raise interesting questions about the role of ToM and the metarepresentational capacity in literature/ art as an action-process and its evolutionary origins. The relevance-yielding aspect of artistic thought states/ processes that I will discuss in Chapter 6 has various implications concerning the success of literature/ art as both a public, culturally situated entity and an occurrence within human individual consciousness. Aspectual creativity and the way it manifests itself in literature/ art is a point on which the study of artistic thought could contribute to cognitive science, creativity-related research and the study of human practical reasoning processes. The fact that aspectual representations and artistic thought states/ processes are to a great extent spontaneously generated makes literature/ art of particular interest to current philosophy of action, research on practical reasoning processes and intentionality, and the study of human agency.

My own work as a practising poet and performer provides an abundance of introspective evidence about the action-process that literature and art is. In describing artistic thought states, I have in fact employed my scientific and theoretical background as well as my trained ability for empirical and introspective observation in order to develop an adequate descriptive and explanatory account of what for any practising artist should be a self-evident piece of introspective data. Yet, this self-evident piece of introspective data –at times so self-evident and so inexorably interwoven with the natural and spontaneous way art as an action-process just pops up in the individual consciousness– has enormous explanatory value: the idea, for instance, that artworks are causally linked to artistic thought states/ processes might help clarify pervasive taxonomic confusions in philosophical aesthetics, and suggests a solution to at least some instances of the problem of indiscernible objects/ twin events. In the next chapter I will discuss how my view of literature and art as a distinct human action enables a cognitive essentialism or causal ontology of artworks and a novel mentalistic, internalist or psychologistic theory of the kind of entity literature and art is.

## Chapter 4

### Literature and art as a cognitive object

#### 4.1 Literature and art as a cognitive concept

The property that makes a work of art the kind of object it is is a relational one. More specifically, it is a direct causal relation between an artwork and the type of mental state/ process I termed an artistic thought state/ process.<sup>56</sup>

Artworks are, in this sense, etiological, or more simply, *causal objects* or *descendants*. The essential property (*P*) that makes a certain object an artwork is not part of the object's perceptual or structural make-up, but part of its etiology (causation): what makes a work of art the kind of object it is, and distinguishes it from perceptually and structurally indiscernible twin events, is the artwork's causal and, more specifically, *cognitive history*.<sup>57</sup>

Let me unfold the line of inference behind this claim. Following the philosopher Fred Dretske (1988: 17), my cognitive account of the essence of artworks/ literary texts assumes that a certain behaviour is an action when it stands in the right causal relation to a mind-internal process of A causing B that begins with A and ends with B; it then particularises this assumption in the following argument: a certain action or action-process is art –and the resulting object an artwork– when it stands in the right causal relation to a certain minimal mind-internal process, an artistic thought state/ process. I therefore propose that art is an action-process that begins with mind-internal efferent activities A which bring about artistic behaviour, and ends in those (mind-internal or mind-external) manifestations B,<sup>58</sup> those characteristic outputs that are commonly perceived and recognised as artworks.

Fodor (1993) was right to think that the essential property that makes an artwork the kind of object it is is a relational or causal property. He was wrong to think it is an intentional

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<sup>56</sup> It is important to stress here the direct nature of the causal relation between an artwork and its cognitive history because forgeries too can be said to have a 'causal' relation to the artistic thought states/ processes from which the original artwork has descended via copying of their outputs; however, this later 'causal' relation is an indirect one, mediated by an action of copying.

<sup>57</sup> Here we are interested in the minimal cognitive history of an artwork, i.e. its descending from the minimal component that an artistic thought/ state process is, independently of the broader macroscopic creation methods and procedures in which it embeds itself, which are highly individualised across artists.

<sup>58</sup> As I will claim later, artworks, as the outputs of an artistic or literary action-process, need not necessarily be mind-external: they could as well be non-externally observable and non-externally materialised phenomena whose physicality and materiality exists in the mind-internal, psychological reality of phenomenal consciousness.

one. If ARTWORK is a causal concept –and there is good reason to believe that it is– the etiology involved is not intentional. As I argued in my example of Johnny’s ‘masterpiece’, all intentional etiology can account for is whether an object was *intended* as an artwork, whether it resulted from an action of trying to produce an artwork, but not whether it actually is an artwork. The crucial element in an artwork’s causal history is not its intentional etiology but its cognitive etiology. In Chapter 2, I took a long detour through all the kinds of concept that literature/ art is not –at least as far as its essential distinctness is concerned. Here, I offer a new answer to the kind of concept I believe literature and art most certainly is: a cognitive concept.

Artworks and their twins –mere urinals and Duchamp’s *Fountain*, young Mendonca’s manifesto of boredom and his manifesto of boredom when I quote it verbatim in a poetry book– differ essentially in that they have differential minimal cognitive histories: the one is causally related to artistic thought states/ processes, while the other is not. The one is the causal output of an artistic mind, while the other isn’t.

Causation does not necessarily presuppose, nor is it in any way synonymous with, manufacturing and physical fabrication. It is incidental that more often than not causation in literature and art also happens to involve physical fabrication: physical fabrication and causation are not synonymous, or even overlapping terms. Causation is a relational thread that ties together causes and effects. In the particular case of cognitive processes, the relational thread in question connects generative mechanisms as causal occurrences, on the one end, with their characteristic outputs as their causally determined effects, on the other. Causation and its relational thread in literature and art results from the nature of literature and art as an action-process, so that efferent cognitive activities A (artistic thought states/ processes) cause outputs B (artworks or constituents of artworks). This relational thread indeed often involves an element of physical fabrication such that cognitive activities A cause outputs B through the physical fabrication of B, but this shouldn’t mislead us into thinking that it is in physical fabrication that literariness lies in the case of literature, or arthood in the case of art.

The emergence of conceptual art and the use of ready-mades as artworks in the 20<sup>th</sup> century did not, as is usually thought, simply make manifest that there can be art without an element of physical fabrication, it made manifest something far more radical and groundbreaking than that: that arthood or literariness, or the essence of art, as we have called it in this discussion, never was, is or will be a matter of physical fabrication. From whatever we might assume to have been the first ever artwork (*proto-artwork*) in the first ever human

manifestation of the action-process we refer to as art (*proto-art*), through to the enormous success of art as an enduring public cultural representation in Homo Sapiens, and all the way to the staggering multiplicity of artwork types and practices in present day artworld contexts, literariness and arthood, even in its most highly representational versions, has always and without exception been ‘in the concept’.<sup>59</sup>

Conceptual art and the use of ready-mades as artworks can therefore be thought of as a revolutionary turning point with unparalleled implications not only for the history of art but also for its epistemology, by deserving the status of the most telling and articulate exemplar of the true nature of arthood. Common pre-existing objects and unarresting pre-manufactured or ‘found’ materials, from the porcelain urinal of Duchamp’s *Fountain* to the 1961 Volkswagen van and twenty-four sledges equipped with lumps of fat, felt blankets and torches of Josef Boeys’ *The Pack*, to the uncanny configurations of sliced shoes by *Şakir Gökçebağ*, to the sculptures of *Guerra de la Paz* made of materials from the waste bins of second-hand goods and the discarded items of daily life, fluently articulate that, in the thousands of years of a journey that is completely inseparable from the course of human biological, cultural and anthropological evolution, the essence of art has never even for a single moment been in physical fabrication as such. The transfiguration of the commonplace, to return to Danto’s (1981) expression, or the recontextualised, defamiliarized old objects out there in the world, to go back to Shklovsky’s (1965) phrasing, are the outcome of a distinct causal thread enabled by a distinct human consciousness: a relational thread such that art-specific mind-internal activities A cause outputs B, where by output B we don’t refer to the old object out there in the world URINAL but to the novel object URINAL\*, an object with a unique and distinct cognitive history enabled by its causal relation to unique and distinct efferent activities in the mind of the artist.

As soon as an old, pre-fabricated or pre-existing, object out there in the world is notionally tied with the relational thread of having been associated with an artistic thought state/ process, the relational thread causes this old OBJECT to transfigure into a novel OBJECT\*, acquiring a cognitive history that other twin mere thing equivalents of this object out there in the world do not possess. The novel OBJECT\* (be it a pre-fabricated or pre-existing ready-made artwork or found text) inherits its ontological essence from the distinct art-specific cognitive states and processes it notionally relates to and causally descends from. The reason

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<sup>59</sup> In this sense, the term ‘conceptual art’ as a taxonomic term coined to pin down a particular category of artworks whose arthood is ‘in the concept’, is strictly speaking theoretically redundant: in reality, all artworks are cases of conceptual art.

a stretch of ordinary discourse used by Antin as a ‘found text’-poem is ontologically distinct from that of its linguistic mere thing equivalent is that the ‘found text’-poem is causally and notionally entangled (related) with an action-process involving artistic thought states/processes as its minimal components, i.e. with the specific type of cognitive history that would allow it to be literature/ art.

And this is precisely where the essence of art rests not only in the case of ready-made but also *fabricated* artworks, artworks, that is, whose physicality and materiality does not pre-exist but comes into being through an act of manufacturing by the artist. The ontological essence of fabricated artworks, just like that of ready-mades, has never resided and will never reside in their physical fabrication; until *seen* in a certain non-trivial way by the consciousness that fabricates it, the physical output under fabrication (be it in the mind-external reality of the outside world or the mind-internal reality of phenomenal consciousness) is nothing more than an equivalent to an old object out there in the world, say, an old object like the URINAL. It is at the crucial moment of being *seen* in a certain non-trivial way by a mind that automatically responds to the non-trivialness of what it *sees* in an aesthetic way –at the moment, that is, of being causally connected to the distinct and unique cognitive history of an artwork– that the newly-fabricated mental or physical output becomes transfigured from an equivalent of an old object out there in the world like the URINAL to an equivalent of a novel object like the URINAL\*.

An argument from a case of meaningful accident could help visualise the suggestion I am making here. Imagine a twin incident where, while painting, painter A and painter B slip and accidentally smudge an almost finished work. The smudge has come into existence and is an existing and, as such, old object in the world. Painter A *sees* the particular old object (smudge) as a mere SMUDGE and responds negatively to the ‘accident’ by aesthetically rejecting it: she throws the painting away or creates a new one, or tries to clean the effects of the smudge that is apparently not attributed any relevance in the context of the work in progress or evaluated as meriting the status of a constituent of that particular artwork. Painter B *sees* the particular old object (smudge) not as a mere SMUDGE but as a SMUDGE\*, attributes relevance to it in the context of the work in progress, and evaluates it as meriting the status of a constituent of that particular work. She responds positively to the ‘accident’ by aesthetically selecting it: she thereby elaborates on the SMUDGE\* and incorporates it in the fabrication of the artwork. I want to create a metaphorical parallelism here and claim that every minimal ideational or physical output spontaneously fabricated in the mind-external reality of the outside world or mind-internal reality of phenomenal consciousness of the artist by every

minimal artistic thought state/ process has gone through a route pretty similar to that of the smudge. Let me explain.

In Chapter 3, I discussed how the ideational outputs that hover in an artist's mind are automatically and spontaneously selected or rejected subject to automatic and spontaneous positive or negative aesthetic evaluation as part of the minimal components of an artistic thought state/ process.<sup>60</sup> Based on the parallelism with the smudge, we could claim that the ideational or physical output *per se*, at the moment it pops up in the mind-internal or physical process of fabrication, is an object (just like the smudge) that has come into existence; as such, the newly generated ideational or physical output is an existing, 'old object' in the world. Depending on whether the artist will *see* in this 'old object' elements of trivialness (SMUDGE), or elements of non-trivialness and aspectualness (SMUDGE\*), she will respond accordingly in a positive or negative way, and aesthetically select it or reject it as a constituent of the mind-internal or physical process of fabrication. For those fragments of seconds until I *see* them in a certain way, any of the indefinite number of newly-'fabricated' lines that pop up and hover from time to time as words in my phenomenal consciousness as a poet are no more than mere old objects out there in the world, old objects in the mind-internal reality of the world; depending on whether I *see* and aesthetically respond to them as SMUDGES or SMUDGES\*, they will or will not feature in the fabrication of the poem in progress. Before being *seen* in a non-trivial way by the consciousness that experiences them, before being treated as a SMUDGE or SMUDGE\*, all mind-internal or physical ideational outputs that pop up in a human consciousness can be said to be momentarily equivalent to mere old objects out there in the world.

The linear order between old and novel objects in the case of ready-made artworks, on the one hand, and those involving physical fabrication, on the other is exactly the same: in ready-made artworks, just as in fabricated ones, the old object out there in the world pre-exists the novel object. The only difference is that in ready-made artworks the pre-existing old object out there in the world is externally observable, and as such apparent and palpable (e.g. a mere Brillo Box as the pre-existing old object of Warhol's *Brillo Boxes*), whereas in fabricated artworks the pre-existing old object is not nearly as obvious. Human mind-internal or physical ideational outputs being old objects of the mind-internal reality are not –in the

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<sup>60</sup> Aesthetic selection or exclusion/ rejection, as I suggested in the previous chapter, may also take place at the more reflective –even if intuitively reflective– phase of the macroscopic creation procedure, but for the present discussion, the phase we are interested in is that of spontaneous, automatic and instantaneous selection or exclusion/ rejection the moment the artistic thought state/ process 'fires'.

main and for now, at least— externally observable and come into existence only ephemerally and momentarily, in the fragments of time —fragments of milliseconds perhaps— that can be assumed to intervene between my spontaneously and automatically experiencing, say, words in the mind (e.g. *'I'm bored like a tree'*) and then *seeing* the words I have experienced in the mind in a certain way (*'I'M BORED LIKE A TREE'* or *'I'M BORED LIKE A TREE'\** or *'I'M BORED LIKE A TREE'\*\*\** and so on and so forth) and spontaneously and automatically responding to what I have *seen* in an aesthetically positive or negative way. In both cases, however, the causal relational thread and cognitive infrastructure enabling it is one and the same. Ready-made and fabricated artworks, found texts and newly-written literary works have exactly the same cognitive history and exactly the same cognitive ontological essence.

Treating literature and art as a cognitive concept allows us to develop an explanatory model of why the cognitive history and ontological essence of artworks may be said to be independent from the history of their fabrication, and also why it is not their fabrication and physicality *per se* that make artworks the kind of objects they are. Conceptual art made it possible to see that arthood is and always has been a causal property. I hope that the explanatory account of the cognitive ontology of artworks I have tried to set out so far starts clearly spelling out the whys and hows.

#### **4.2 Cognitive ontology, or towards a cognitive metaphysics**

The causal thread between mental states and processes in the mind of human agents and certain sets of entities out there in the world that can be said to inherit their ontological essence by descending from such and such mental states and processes entails what could be described as a cognitive type of essentialism. Literature and art may therefore be seen as an exemplary case-study for a *cognitive ontology*, in which cognitive essences may now claim their place out there in the world alongside other types of ontological essence such as structural, biological and chemical ones.

The cognitive perspective inaugurated by Chomsky's cognitive revolution lays the methodological and epistemological foundation for a cognitive metaphysics. In *New Horizons in the study of Language and Mind* (2000: 4), Chomsky writes:

The cognitive perspective regards behaviour and its products not as the object of inquiry, but as data that may provide evidence about the inner mechanisms of mind and the ways these mechanisms operate in executing actions and interpreting experience. The properties and patterns that were the focus of attention in structural linguistics find their place, but as phenomena to be explained along with innumerable others, in terms of the

inner mechanisms that generate expressions. The approach is ‘mentalist’, but in what should be an uncontroversial sense. It is concerned with ‘mental aspects of the world’, which stand alongside its mechanical, chemical, optical, and other aspects. It undertakes to study a real object in the natural world –the brain, its states, and its functions– and thus to move the study of the mind towards eventual integration with the biological sciences.

Mentalistic and naturalistic in its outlook, the Chomskian approach stakes out the ground required for an epistemologically sound cognitive ontology: the non-externally observable psychological and mental aspects of the world are acknowledged in the cognitive perspective as equally real and apt for scientific investigation as any of its mechanical, chemical, optical, and other externally observable aspects,<sup>61</sup> while at the same time the view of mind as a natural object materialised in the natural world by the states and functions of the brain allows for a possible investigation of cognitive essences as real natural-world objects potentially open to the assumptions and methods of the natural sciences.

The Chomskian approach, combined with Sperber and Wilson’s (1995: 38) notion of a *cognitive environment*, radically extends our view of environments and the possible ecologies of the real world. Alongside the mind-external ecology of the physical world that surrounds us, and which is the most common referent of the notion of an environment in both folk perception and the traditional discourse of the social sciences, there is also the mind-internal ecology of human psychological reality. Chomsky maps one aspect of this ecology by talking about the inner mechanisms of mind. The human mind-internal reality indeed partly consists of mechanisms and operations which, given that humans are what I would call *composite organisms* (i.e. organisms composed of cognitive, perceptual and affective systems), correspond to cognitive, perceptual and affective mechanisms and operations. Then Sperber and Wilson step in to map another aspect of this mind-internal ecology, that of human mental representations. Founded on the so-called *representational theory of mind* (Fodor 1983) Sperber and Wilson’s notion of a cognitive environment encapsulates how our

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<sup>61</sup> The requirement for external observability was from an epistemological point of view based on a 20<sup>th</sup> century behaviourist assumption that non-externally observable entities such as the mind are not adequate objects for proper scientific enquiry, leading to corresponding investigative dead-ends. This requirement was undermined by the cognitive revolution which counter-proposes a requirement for psychological reality, and sees the non-externally observable nature of cognitive states, functions and, in our case, essences as entirely contingent. Neuroimaging, for instance, progressively makes mind-internal processes externally observable, which was entirely unimaginable in the past. The non-external observability of cognitive essences should not be taken to affect their ontological status.

perception-driven and memory-driven representations of the goings-on of the mind-external and mind-internal world populate the mind. The notion of a cognitive environment accounts for inter-individual variation as well as convergence and overlap in human experience in explanatory and empirically testable terms. Introducing the term, Sperber and Wilson (1995: 38-39) propose:

All humans live in the same physical world. We are all engaged in a lifetime's enterprise of deriving information from this common environment and constructing the best possible mental representation of it. We do not all construct the same representation, because of differences in our narrower physical environments on the one hand, and in our cognitive abilities on the other. Perceptual abilities vary in effectiveness from one individual to the other. Inferential abilities also vary, and not just in effectiveness. People speak different languages, they have mastered different concepts; as a result, they can construct different representations and make different inferences. They have different memories, too, different theories that they bring to bear on their experience in different ways. Hence, even if they all shared the same narrow physical environment, what we propose to call their *cognitive environments* would still differ. (...) Let us define:

(...) A fact is *manifest* to an individual at a given time if and only if he is capable at that time of representing it mentally and accepting its representation as true or probably true.

(...) A *cognitive environment* of an individual is a set of facts that are manifest to him.

To be manifest, then, is to be perceptible or inferable. An individual's total cognitive environment is the set of all the facts he can perceive or infer: all the facts that are manifest to him. An individual's total cognitive environment is a function of his physical environment and his cognitive abilities. (...) Memorised information is a component of cognitive abilities.

Sperber and Wilson and Chomsky's extended notion of an ecology, which includes the operational and representational aspects of the mind-internal reality, is integral to a cognitive ontology. The cognitive perspective on the ecologies of the world makes a cognitive ontology not only possible, but also, and perhaps more importantly, theoretically and epistemically necessary. Thanks to the cognitive revolution, the human mind and its inner mechanisms have been granted their deserved status as real objects in the natural world. The natural world as we know it is a world inhabited and populated by the real object we refer to as the mind. The range of ontological essences in the natural world would not be the same if the real object that the mind is did not exist. And conversely: given that the real natural world object that the mind is does exist, then the range of ontological essences in the world as we know it must somehow have been extended to accommodate types of essence

that have come into being, precisely because of the existence and natural reality of the mind and its inner mechanisms.

The metaphysics of a mind-full world cannot possibly be the same as that of a mind-less one. This is where cognitive ontology steps in as an epistemologically necessary breakthrough in the history of science and metaphysics, and where theory of literature and art emerges as an archetypal cognitive interdiscipline that could, through the naturalistic study of the unique and distinct cognitive infrastructure of literature and art as an action, decisively contribute to an understanding of how certain entities out there in a mind-full world may inherit their metaphysical essence from the mind-internal states and functions of the human agents that bring them into existence.

An underlying assumption of the cognitive perspective, treated as a broader methodological framework that would inevitably also underpin a cognitive ontology of art, is that the mental states and processes that bring art into existence represent *universal* mechanisms, mechanisms that are biologically pre-determined to occur in pretty much the same way across a given species, even if they happen to demonstrate selective distribution, as, say, in the case of artistic thought states and processes. The ontological status of the artwork and literary text as the kind of object it is is causally determined by its relation to a certain type of such universal cognitive mechanism.

Common critiques of universalism and the cognitive perspective, which I have already addressed in passing in Kolaiti (2019: 101-126), involve a range of misguided assumptions, the two most prominent being that universality is a totalising notion which favours uniformity over multiplicity, and that focusing on the universal amounts to losing sight of the particular. I will address these two concerns again in passing here, from a slightly different vantage point starting with the latter.

In defending the cognitive perspective in linguistics, Chomsky emphasized that the study of the universal mechanisms of language acquisition and production, and the study of the staggering linguistic variation that occurs both diachronically/ historically across and within ethnic languages and synchronically across the linguistic variables and social dialects of the various linguistic communities of the same ethnic language, is simply a case of division of labour: the former falls within the domain of the psycholinguist and syntactician, while the latter falls within that of the historical linguist and sociolinguist. The cognitive perspective in linguistics does not favour the one over the other, let alone see them as standing in a relation of mutual exclusion. The mutual exclusion view was not part of Chomsky's theoretical or methodological framework, but rather a constituent of the rhetoric

of those who have completely missed the point of Chomskian linguistics. The cognitive perspective simply put on the theoretical table the long overdue expectation that the innate and universal aspects of language acquisition and production will be granted their proper position in the field of linguistic enquiry, and will be investigated alongside the historical, ethnological and sociological aspects of language that were at the core of linguistic study from the start of the discipline.

In a rather similar way, the study of the universal cognitive mechanisms that make it possible for literature and art to exist as a distinct human action and a phenomenon that is as much mind-internal as mind-external, does not stand in a mutually exclusive relation with the study of the staggering variation of the manifestations of art as a publicly available cultural and institutional occurrence; the former is the object of enquiry of cognitive theories of art, while the latter is the subject matter of institutional theories. The cognitive perspective on literature and art does not favour one set of theories over the other, but views them as the result of the kind of division of labour required in an all-round investigation of the literary and art phenomenon, while at the same time allocating to art as a mind-internal occurrence the place it has long deserved in art-philosophical and literary-theoretic discussion.

Cognitivism and institutionalism are not in any way in competition or tension, and universalism does not in any way entail a totalising uniformity which would cancel properties such as relativism, multiplicity and diversity. The cognitive perspective in literature and art should be thought of as aiming to develop systematic descriptive and explanatory accounts of the universal cognitive infrastructure that enables and underpins the astonishing relativism, multiplicity and diversity of literature and art as a cultural and institutional occurrence.

From this vantage point, parallels can be drawn between literature and art as an investigative object and human natural language, where –fifty years after the cognitive revolution, and at least for those who have correctly understood the most thought-provoking implications of the Chomskian venture in linguistics– radical multiplicity at surface structure has been inadvertently shown to co-exist with equipotential universality at deeper levels of structure. Just as a single set of universal efferent activities that make human linguistic communication possible gave rise to the hundreds of thousands of human languages that, as historical linguists estimate, have been spoken in the ninety thousand years or so since a Homo Sapiens ancestor became endowed with the crucial genetic mutation that made the language capacity possible, as well as to the 6,000 ‘living’ ethnic languages spoken on the planet today and the incalculable number of sociolinguistic varieties constituting the so-called

*descriptive grammars*<sup>62</sup> of each of these ethnic languages, so a single set of universal efferent activities can be assumed to have generated, and to continue generating, the astoundingly diverse public manifestations of the open institutional and cultural category ART, past, present and future, existing and possible.

Cognitivism and multiple perspectivism should not be thought of as competing mind-sets, and the existence of a singular ontogenetic cognitive history of artworks is not incompatible with the astounding multiplicity of their public manifestations out there in the world. Focusing on the universal not only does not amount to losing sight of the particular but it seems reasonable to conclude that it is only through the parallel study of the universal that we can get to fully and wholly grasp the particular. Ever since antiquity, and in the three hundred years of contemporary philosophy of art (taking Kant as its starting point), literary theory and aesthetics have been looking at art mainly as a public, cultural, sociologically and conventionally-determined *inter-individual occurrence*, while in reality art is a *dual occurrence*: a mind-internal as much as mind-external phenomenon.<sup>63</sup> A publicly situated entity of cultural and artifactual<sup>64</sup> status within human social transmission, and a mentally situated entity afforded by the human cognitive capacity. A publicly observable inter-individual occurrence embedded in chains of social, historical and cultural practices, and at the same time, a non-publicly observable *intra-individual occurrence*, a mind-internal phenomenon enabled by complex universal mechanisms in the psychological reality of human agents.

The study of the particular in art, if what is meant by ‘particular’ is the astounding multiplicity of surface structure manifestations of art as a publicly available and sociologically and institutionally embedded human cultural representation, can only be methodologically sound if it takes place against the background of this *duality* of art as a

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<sup>62</sup> The notion of *descriptive grammar* emerged in sociolinguistics in the 70’s and was contrasted with *prescriptive grammar*: while prescriptive grammar singles out only one (privileged or ‘high’) variety of a given ethnic language, and determines a set of rules that prescribe ‘right’ and ‘wrong’ on the basis of this high variety, descriptive grammar neutrally describes all the sociolinguistic variables occurring in the linguistic communities of a given ethnic language at a given time.

<sup>63</sup> In the Introduction, I made specific reference to how the present account is an integral part of the burgeoning cognitive or naturalist turn in the Arts and Humanities of the last seven years or so, and traced in detail reader-response criticism, cognitive poetics and the psychology of the creative eye as methodologically significant departures from the sociologically-determined view of literature and art and intellectual precursors of the cognitive turn.

<sup>64</sup> Interpret the term ‘artifactual’ here quite broadly, in the sense of ‘entity’, and not as in any way committing to an artifact-oriented or medium-oriented view of artworks as concrete objects. Also, in Chapter 1, I suggested, in line with Sperber (2003) that the borderline between artifacts and natural kinds is fuzzy and that art and artworks might in fact be prime examples of this fuzziness, being entities that combine a natural and a cultural function.

phenomenon; if it takes place, that is, against the background of the parallel aspect of art as a non-publicly available intra-individual occurrence entrenched in universal amalgams of cognitive, perceptual and affective engineering which are both empirically testable and amenable to naturalistic investigation in line with the methods of the cognitive, natural and life sciences.

### **4.3 A mentalistic or internalist or cognitivist theory of literature and art**

An implication of the view that artworks are causally linked to art-specific thought states and processes is that literature and art somehow begins in the mind. That the entity we call artwork is the causal output of internal efferent activities in the mind of a producer and the artistic action-process that these activities bring about. That artistic creation always begins with at least a rudimentary, and often elusive, mental seed that transfigures old OBJECTS out there in the world into novel aesthetic OBJECTS\* and that, even when it develops in a way and a direction that may have little or even no resemblance to the rudimentary initial conception, the existence of the initial mental seed and the causal relation of the resulting output (artwork) to it cannot be denied. That literature and art can only come into existence as a result of inner mechanisms of the mind of the non-naïve agent that brings it to light, the artist. Not only do I fully endorse the *mentalistic*, *internalist* or *cognitivist* view that art begins in the mind, but I also take it to open the way to an understanding of literature/ art as a cognitive concept in the most robust sense of the term.

The mentalistic view of literature and art as a case of cognitivism allows two possible construals of claims for an essential distinctness of literature and art. On one possible, and rather weak, construal, there might be a set of cognitive states or processes that are characteristic of literature and art as an action-process, even though the states or processes themselves are not uniquely artistic or literary (e.g. Cave 2016; Currie 2004; Gavins and Steen 2003; Gibbs 1994; Hogan 2003b; Turner 1996, 2006). This claim is relatively uncontroversial for most current cognitive research into literature and art, and involves a somewhat weak variety of a *poetics of mind* but does not have significant ontological implications: the existence of such a set of cognitive features or processes is only indicative of how literature and art, as an output of the human cognitive capacity, is inevitably underpinned by the specific nature of this capacity. On one other possible, and somewhat stronger, construal, there might be uniquely literary/ artistic cognitive states or processes that are in this sense art-specific and possibly also amount to special evolutionary adaptations or exaptations of a certain kind. The account I have been developing in this book clearly favours

this latter construal, and therefore champions a more radical variety of a poetics of mind and a much stronger version of cognitivism –perhaps the strongest version of cognitivism available in existing cognitively-oriented literary and art study. I will signify my departure from weaker versions of a poetics of mind by referring to this more radical approach as *the poetics of action*.

In the previous chapter, I also considered why the claim for art-specificity is not after all circular. I also suggested that the (semi)spontaneous and automatic nature of such states/ processes is a notable clue to their being genetically pre-determined and to some extent hard-wired mental operations. Both these assumptions raise puzzling and, at the same time, fascinating questions about the evolutionary descent of literature and art as an action, and the adaptive or exaptive mechanisms that led to the selection of thought states/ processes that offer no obvious utilitarian or survival advantage as a consistent and enduring trait of *Homo Sapiens* –if not much earlier species too. A major epistemological implication of the idea that literature and art is a distinct human action enabled by dedicated cognitive machinery is that literature and art is a *natural object*. Literature and art as an intra-individual occurrence consisting of a dedicated type of mind-internal efferent activities, and its distinct causal outputs (artworks and literary texts, or if you prefer BLIBS) are natural objects entrenched in and descended from *material* operations in the human mind/ brain, amenable to naturalistic investigation in line with the methods of the natural, cognitive and life sciences, and suitable for two-way interdisciplinary interaction<sup>65</sup> with the empirical and cognitive paradigms.

The aim of the present analysis is to start articulating an explanatory, psychologically real and empirically testable naturalistic account of literature and art as an action, identify the cognitive machinery (artistic thought states/ processes) that makes this action unique and distinct from all other human actions, and pin down the implications of this art-specific cognitive machinery for metaphysics and the ontology of art. Developing a possible scenario for the evolutionary descent of artistic thought states/ processes is not directly relevant to my present aims, but my next theoretical book (currently in preparation) will grapple exclusively with the evolutionary challenge posed by the adaptive or exaptive selection of such art-specific mental states/ processes, and will try to interweave it with a parallel empirically

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<sup>65</sup> My notion of two-way interdisciplinarity between the Arts and Humanities and the empirical and cognitive sciences refers to paradigm revising practices in the Arts and Humanities so that not only draw on but also contribute to theory-formation in empirical and cognitive domains. For detailed discussion see Kolaiti (2019: 120-129).

testable evolutionary model of aesthetic experience as a relevance-yielding mediated type of perceptual and sensory response.

The focal point for the current argument is that the art-specificity of the inner states/processes introduced in this account is defensible both at the level of outputs and that of distinct action-processes: no action-process other than literature and art involves artistic thought states/processes, and no output other than an artwork or constituent of an artwork (or if you prefer, BLIB) can be a typical causal outcome of an action-process involving artistic thought states/processes.<sup>66</sup>

The mentalistic perspective on art and the art-specificity of the inner states and processes that bring it into being implies that, of the three parameters that make a global art event (i.e. artist/ creation, artwork, receiver/ aesthetic response), the only truly necessary condition for art is the creation part, the artist. There can be art without an artwork; there can be art without a receiver or an aesthetic response; but there cannot be art without an artist. Art as a global event is a conjunction of mutual and complex feedback relations among all three factors, since artworks and literary texts as causal outputs of an art-specific action-process are standardly embedded in acts of ostension, attracting an audience's attention and focusing it on the intention of the artist in order to elicit in this audience a characteristic type of response (aesthetic response). But to the extent that we are looking more narrowly at literature and art as an action, the only truly necessary condition for this action to take place is the distinct consciousness that brings it into being. Let me delve to this assumption a bit further by looking at a range of thought-experiment-like cases.

### **Art without receiver or reception**

A castaway puts a message in a bottle. The bottle is carried away by the currents and the wind and shortly after crashes onto the rocks. The message has not been received or read by anyone. Does this change the kind of object this message is (the *import* of a communicative or, more precisely, an *ostensive act*), or the kind of action that has generated it (*ostensive inferential communication*)?<sup>67</sup> For contingent reasons, the communicative event as a global event involving a communicator, an import and a receiver does not reach its characteristic

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<sup>66</sup> As Deirdre Wilson suggested to me in discussing this, breaking your leg while trying to complete a sculpture may as well be thought of as a causal outcome of an action-process involving artistic thought states/processes. In response to this, I make reference here to 'typical' causal outcome, to eliminate accidental types of cause-effect relation.

<sup>67</sup> The notions of *ostensive act*, *ostensive inferential communication* and *import* come from Sperber and Wilson's relevance-theoretic pragmatic model of communication (see Sperber and Wilson 2015; Wilson 2018: 187-188).

endpoint of being read and interpreted, but this cannot be legitimately taken to alter the nature of either the output itself or the action that generated it. Upon Emily Dickinson's death, her family discovered about forty handbound volumes consisting of five or six sheets of stationary paper folded and sewn together, hosting what appeared to be about 1800 final versions of her poems. Although particularly prolific as a poet, Dickinson was not publicly recognised during her lifetime, and it was only after the discovery and publication of the handbound volumes that she was widely acclaimed as one of the most distinguished and uniquely American poetic voices. Let's imagine a scenario where the volumes remain undiscovered. The handbound booklets of five or six sheets of stationary paper folded and sewn together stay enclosed and forgotten in drawers, and years after her death are thrown away without being opened or read. Are the 1800 fascicles of the hypothetical handbound booklets not poems? Or are the action that brought them into being not poetry/ art, because for contingent reasons the global event of art was not fulfilled in terms of its reception?

A proponent of intentional essentialism would suggest that although the parameter of reception was not fulfilled, the action is still art and its output an artwork, because the unreceived output was nevertheless created with the intention that it be shown, read or exhibited, i.e. received. Indeed, Fodor (1993), in an attempt to clarify his Cartesian story of art as an intentional concept, introduces a notion of *audience*, which, although theoretically significant for a philosophy of art, does not make any obvious contribution to a discussion on the essence of art as an action:

(...) the intention that a thing be an artwork is in part the intention that the thing have an audience. (...) that's how it can be that [Warhol's] *Brillo Boxes* is an artwork though Brillo boxes aren't. Whereas *Brillo Boxes* is intended to be *shown*, to be *exhibited*, Brillo boxes are intended merely as boxes for Brillo. (1993: 46)

Let's imagine two scenarios where Picasso starts working on *Guernica* in a secret studio space. In the first scenario, Picasso works on *Guernica* with a clear and firm intention that *Guernica* is to be shown and eventually exhibited, but during its creation takes extra care that no living soul lays eyes on it. When the work is at last complete, although no one other than Picasso himself has seen it, the secret studio is accidentally set on fire and *Guernica* turns into ash. In the second scenario, Picasso starts working on *Guernica* in the secret studio space with a clear and firm intention that *Guernica* is never to be shown or exhibited. He

takes extra care so that no living soul ever lays eyes on it. When the work is at last complete, he sets it on fire and allows it to turn into ash.

How are we to explain the strong introspective evidence that, although the *Guernica* of our somewhat odd scenarios was neither seen by an actual audience nor intended to be seen by one, in its short life it certainly was no less a work of art than the actual *Guernica* that was exhibited by Picasso in the Spanish section of the 1937 *Paris International Exposition*? As I suggested in Chapter 2, it may be that an appeal to possible or ideal audiences could add something significant to theoretical explanations of how a certain object is recognised as art, or how it is embedded within cultural and communicative functions; it may also be that intentional realism is central to comprehending the mediated nature of aesthetic reception and response for which an appeal to intention recognition is theoretically necessary. But as regards the essence of art as an action and the essence of artworks as the causal outputs of this action, a notion of audience seems rather redundant. It could be argued, of course, that although the hypothetical *Guernica* of our scenarios has not been seen by an actual audience, and was not intended to be seen by one, the notion of some *ideal audience* during its creation cannot be totally eliminated. At the least, in the explanatory account developed in this analysis, the artist herself *sees* the artwork and its constituents in a certain way and responds aesthetically to what she *sees* while producing it, fleshing out in some sense an ideal receiver of her artwork; thus there is always and by necessity some feedback between creation and reception/ response, even if the ‘receiver’ is only the creator herself, and even if no one other than the creator herself lays eyes or ears on that artwork. The key concern here is with how far we want to treat this notion of ideal audience as constitutive of the kind of action literature and art is and the kind of object an artwork is. My reaction is that receiver, reception and audience, as well as the intentional realism that goes hand in hand with them, are central to the materialisation of the global art event but not necessary conditions for artistic essence as such. There can certainly be art and artwork without an audience, just as there can be ostensive acts without a receiver.

### **Art without aesthetic response**

Artworks are entities in principle capable of causing, and in a certain sense designed to cause in an audience the composite and mediated type of perceptual and sensory gratification that constitutes an aesthetic response. Artworks have a characteristic teleology: aesthetic teleology. However, the reason I say that artworks are only ‘in principle’ capable of this teleology is that, although the ability of artworks to cause an aesthetic experience is a

necessary constituent of their cognitive history and cognitive ontological essence, by virtue of aesthetic response being a constituent of the spontaneous and hard-wired mechanisms involved in the artwork's creation, aesthetic experience is by no means an equally essential condition for its reception. The teleology of artworks is not necessary but only characteristic, which is patently a much weaker description, designed to indicate that the object is still an artwork and the action that generated it still art, even if the teleology is not after all fulfilled. The characteristic aesthetic teleology of artworks is subject to a range of different types of 'failure' that do not, however, necessarily reflect backwards on the object's ontological essence or actual aesthetic value. Let's take a brief detour.

The rejection<sup>68</sup> of Duchamp's *Fountain*, now regarded as a major landmark in 20<sup>th</sup> century art, by the 1917 selection committee of the inaugural exhibition of the Society of Independent Artists hosted by The Grand Central Palace in New York, as I mentioned above in discussing recognition v. ontology, is not a historical exception. The history of literature and art offers copious examples of ingenious art marginalised, scorned and rejected by audience and critics in the artist's lifetime. El Greco's dramatic compositions and bizarrely elongated and distorted figures, which in the 19<sup>th</sup> and 20<sup>th</sup> century stirred the Expressionist and Cubist movements and ranked him as one of the greatest painters of all time, were scorned and ignored by the wider art community and panned by art critics of his time. Johann Sebastian Bach, regarded in the modern day as one of the greatest composers ever, during his lifetime won acclaim not as a composer but as a highly competent organist. Franz Kafka, today celebrated as one of the most influential writers of the 20<sup>th</sup> century, went largely unrecognized during his lifetime and died at age forty from starvation brought on by tuberculosis, before much of his work had even been published. Herman Melville's 1851

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<sup>68</sup> According to the official website of the Tate Modern Gallery, London, ([www.tate.org.uk/art/artworks/duchamp-fountain-t07573](http://www.tate.org.uk/art/artworks/duchamp-fountain-t07573). Accessed September 20<sup>th</sup>, 2019) 'The society's board of directors, who were bound by the Society's constitution to accept all members' submissions, took exception to *Fountain*, believing that a piece of sanitary ware – and one associated with bodily waste – could not be considered a work of art and furthermore was indecent (presumably, although this was not said, if displayed to women). Following a discussion and a vote, the directors present during the installation of the show at the Grand Central Palace (about ten of them according to a report in the *New York Herald*) narrowly decided on behalf of the board to exclude the submission from the Society's inaugural exhibition that opened to the public on 10 April 1917. Arensberg and Duchamp resigned in protest against the board taking it upon itself to veto and effectively censor an artist's work'. Following the exhibition, the *Fountain* was photographed at Alfred Stieglitz's studio, and it is this photo, published in *The Blind Man*, that allowed it to be brought back to art-theoretical attention in the 1960's and gain acclaim as, perhaps, the most ground-breaking artwork of the 20<sup>th</sup> century. The original has been lost but Duchamp is alleged to have commissioned sixteen replicas.

novel *Moby-Dick*, now considered one of the great American novels, was published to mixed reviews, belittled by contemporary critics and was out of print at the time of the author's death in 1891. And Vincent Van Gogh, whose *Portrait of Dr. Gachet* sold for \$82.5 million in 1990, making it one of the most expensive paintings ever sold, was a failed and starving artist who produced more than 2,000 works of art and only sold two of them. The reception and recognition of artworks as such and such is fundamentally prototype-driven, and thus the recognition process is inevitably affected by chains of historical and cultural practices of artworld contexts that influence both synchronically and diachronically our mental prototypes and paradigmatic exemplars of the category ARTWORK. The more paradigmatic an artwork in relation to established synchronic and diachronic prototypical exemplars, the more likely it is to enjoy recognition and positive regard. But ground-breaking artworks, or artworks that are ahead of their time, are often what a theory of human conceptual recognition would describe as *borderline* or even *atypical exemplars*: by provoking, challenging, violating, flouting, departing from or cancelling head-on the prototypical conventions established by existing chains of historical and cultural artworld practices, ingenious and paradigm-revising artworks bear borderline or even atypical features, thereby increasing the likelihood of not being adequately identified by the human prototype detector that tends to operate on the basis of highly typical and paradigmatic features. The ground-breaking artist is inevitably to some extent a provocateur and paradigm-revising art an act of provocation. Highly atypical and paradigm-revising artworks are therefore frequently mis-recognised and mis-experienced: artworks mis-recognised as non-artworks; artworks failing to elicit positive aesthetic responses in an audience or an audience failing to experience artworks aesthetically for contingent prototype-dependent reasons. The phenomenon discussed here is theoretically interesting for receiver-oriented and institutional approaches to art, and is also bi-directionally relevant to cognitive science in terms of the operations of the human prototype detector and their application to the way humans receive, recognise, categorise and experience art.

The story need not only involve highly ground-breaking art. To the extent that artistic innovation involves revising synchronically established paradigmatic exemplars and familiar types of aesthetic response, the likelihood that the artwork will be to some degree mis-recognised, mis-received and mis-experienced increases. Receivers enter the global art event bringing into play their individual cognitive environment and horizons of expectations that are nurtured and generated by institutional and cultural conventions as well as recent genre history. When receivers say they like 'poetry', in reality, unbeknownst to them, they more

often than not use the lexical item 'poetry' to pick out a much narrower concept POETRY AS AN ESTABLISHED SET OF PROTOTYPICAL FEATURES DETERMINED BY CONVENTIONS OF RECENT GENRE HISTORY. And conventional sets of prototypical features go hand in hand with established horizons of expectations and established types of aesthetic experience they give rise to. Literary and art criticism and literary and art award committees are no exception to this canon. They too often, unbeknownst to them, enter the reception process with aesthetic expectations determined by established genre practices; it is no wonder, for instance, that in the short lists of the various annual national-scale literary awards in Greece in recent years – to refer to my own artworld context as a Greek poet and performance artist– a good number of the poetry works nominated every year belong to a taxonomic category that one could refer to as good poetry without any risk; works that undoubtedly have high aesthetic credentials, but at the same time stick to ground that has already been staked out, do not endanger or jeopardise the already established genre practices of immediately previous generations and the prototypical genre features they involve (e.g. the inventive 'one' line, the strong arresting image, the moving uncanny metaphor). A bet placed by every new generation of artists and writers concerns precisely how prototypical genre features can be extended or upended, opening up the literary and art event to new forms, contents, raw materials and characteristic types of aesthetic response. It is an intriguing institutional fact that the poetic voices that pioneer the way in this direction very often do not feature in the annual award lists. In her inaugural talk as a co-ordinator of the Young Authors Festival of the 14<sup>th</sup> International Thessaloniki Book Festival in 2017, the most prestigious book festival in Greece today, the poet Katerina Iliopoulou made a passing remark that fleshes out this recurring institutional and art-historical fact: 'our aim in the Young Authors Festival is not simply to present good books but also and mainly books that dare to take risks and challenge current genre practices'.

Concept recognition, categorisation and aesthetic response are all dynamic processes that involve a pro-active engagement of the receiver, and this engagement may take unexpected directions or go completely astray for contextual or entirely subjective reasons. No two human cognitive environments are completely identical. As receivers we bring our cognitive environment into play in assessing and evaluating experiences against its background. Sometimes an artwork might fail to elicit a positive aesthetic experience in an audience for reasons that are totally independent of the artwork, itself and only relate to the inter-subjectivities of the cognitive environments of individual receivers and interpretive communities, with their idiosyncratic abilities and preferences. This is not to say that

aesthetic response is entirely subjective. The notion of a cognitive environment is fundamental to understanding and explaining the cognitive infrastructure of interpretive and aesthetic divergence as much as that of *convergence*: it is an empirically attested fact that an artwork can cause different recipients and audiences to have surprisingly similar perceptual, affective, conceptual and aesthetic responses. The interplay between artworks and shared elements of the cognitive environments of individuals and communities accounts for interpretive and aesthetic convergence. The interplay between artworks and non-shared elements of the cognitive environments of individuals and communities accounts for intersubjectivity in responses and interpretive and aesthetic divergence.

It is also possible that audiences might mis-recognise a mere thing for an artwork, and might in fact get to experience this mere thing in an aesthetic way, attributing it to an assumed mediating artistic consciousness. In spring 2016, seventeen-year-old TJ Khayatan was visiting the gallery of the San Francisco Museum of Modern Art with friends and was left unimpressed by some of the modern art on display. The student and his friends decided to pull a prank and lay down a pair of glasses on the floor to see how visitors would react. According to the *Daily Mail* article<sup>69</sup>, within seconds the new 'exhibit' attracted a swarm of art lovers keen to get a glimpse of the 'artwork', and some are even alleged to have begun snapping pictures of it. Later in my discussion, I will look more closely into how the function of our prototype detector and the parallel mediated nature of aesthetic experience allow for such types of misrecognition and misattribution. The main point at this stage of my discussion is that, for whichever reason, audiences who get to mis-recognise a mere thing for an artwork, also get to 'mis-experience' this mere thing in an aesthetic way and attribute an aesthetic value to an object that is only a mere thing or an artwork simulacrum rather than actually being an artwork.

In any case, my entire discussion here goes to show that aesthetic experience is a characteristic but not a necessary condition for arthood. Aesthetic experience and response are characteristic of the way we receive and respond to artworks, but are not ontologically essential to them or indicative of the object's essence. It is possible, in some contexts, for something to be an artwork and not cause an aesthetic response, and for something to cause an aesthetic response without being an artwork. While the mental engineering of the creation of literature and art has a part to play in determining its ontological essence, the same cannot be said about aesthetic reception. There can certainly be art and artwork without aesthetic reception, let alone a positive one.

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<sup>69</sup> Resourced from: [www.dailymail.co.uk/news/article-3609779/What-spectacle-Student-glasses-floor-pretended-art-people-immediately-started-cooing-taking-pictures.html](http://www.dailymail.co.uk/news/article-3609779/What-spectacle-Student-glasses-floor-pretended-art-people-immediately-started-cooing-taking-pictures.html). Accessed August 12<sup>th</sup>, 2019.

## **Art without artwork**

*A Nonsite, Pine Barrens, New Jersey* (1968) is the first in the 'sites'-'nonsites' series of artworks by land-artist Robert Smithson that appeared in his 1968 exhibition at Dwan Gallery, New York City, challenging conventional notions of sculpture and contemporary art by taking art out of the stifling confines of the gallery and into the rugged non-urban landscape of industrial wastelands and rock quarries. Organic raw materials such as rocks, pebbles and earth are combined with maps, diagrams, ground plans and street plans of the location the materials come from, as well as bins or mirrors, creating a dialectic between the 'site', the place from which the organic materials were collected, and the 'nonsite', the indoor placement of these materials. In April 1970, the Virginia Dawn Gallery of New York funded the creation on the northeastern shore of the Great Salt Lake just off Rozel Point in Utah Smithson's most acclaimed earthwork, the *Spiral Jetty*. Built of 6650 tons of mud, salt crystals, basalt rocks and dirt, the *Spiral Jetty* is a 1,500-foot-long (460 m) and 15-foot-wide (4.6 m) coil, a static cyclone jutting from the shore. Built during a drought, however, the spiral was soon submerged once the water levels returned to normal, and remained so for three decades, re-emerging during another drought in 2004. For over thirty years no one saw it. The *Jetty* appears and disappears depending on the lake level and its physical appearance changes dramatically through the eroding powers of nature: when it re-emerged in 2004, the original black basalt rocks of the *Jetty* had been covered with white salt encrustations and the red-brown water of that part of Salt Lake, which in Smithson's conception alluded to human blood and the primordial seas, now had a pink hue to it. The *Spiral Jetty* and the 'sites'-'nonsites' series are underpinned by the same theoretical implications: in Smithson's work, the artwork is indeterminate, non-definitive, its boundaries fluid and elusive to the point of leaving totally unclear where the work begins or ends, what falls and does not fall within it. Are the 'sites' or the routes to the 'sites' also part of the artwork? Is the artwork at the 'nonsite' or in the dialectic between the 'site' and 'nonsite'? Which parts or locations or materials in particular from the 'sites' should be seen as admitted into the work? How about the *Jetty* and its physical transformations? The unpredictability of its disappearing and re-emerging? Are they part of the artwork? If the jetty submerges and does not re-emerge again is the work present or non-present (from both a topological and ontological point of view)? Where is the work? And which is the work?

Smithson's work can be seen as a metaphorical contemplation of a particularly intriguing ontological question: can there be art without artwork? In the cognitive and

mentalistic perspective introduced in this book the answer can only be, ‘it certainly can’. My analysis this far offers an explanatory account of why ART and ARTWORK are not overlapping concepts. ART is a distinct and unique human action and ARTWORK is the output of this action. A descriptively and explanatorily adequate philosophy and ontology of art should be able to accommodate a range of different instances, where a complete or partial rupture occurs between the action ART and its output ARTWORK: art with incomplete artwork or disparate constituents of artworks, art with artwork in progress, art with fragmentary artwork, art without external observability (non-externally expressed or externally materialised artwork), art without artwork. Let’s go through these instances one by one from the perspective of a cognitive ontology.

**Art with artworks in progress, incomplete artworks or disparate constituents of artworks:** although it is an introspectively and art-historically documented fact that artistic thought states/ processes can in principle generate complete artworks instantaneously –a phenomenon often followed by a sense impressionistically reported as ‘revelation’ or ‘insight’–, it is more common that the outputs of such states/ processes will be incomplete versions or disparate constituents of artworks that, only progressively and within broader and temporally macroscopic creation procedures, will little by little take the form of a completed artwork. While the work is still in progress, and until the moment that a completed version of an artwork has been created, art as an action with its distinct cognitive engineering does exist, but not an artwork as such. We can also imagine a case where the artist never gets to complete any of the works she has in progress in her mind-internal or physical studio, thereby generating bundles of studies, drafts or disparate constituents of artworks but not (completed) artworks *per se*.

**Art with fragmentary artworks:** most of the poetic corpus of the ancient Greek lyrical poet Sappho, born about 620 B.C. to an aristocratic family on the island of Lesbos and regarded as one of the great poets of world literature, is lost, with only forty fragments and a mere two complete poems extant from what ancient sources suggest must have been a body of nine books of verse. The fragmented remains of Sappho’s poetic milieu are a great exemplar of art with fragmentary artworks. Each of these fragments is a causal output of the action-process that art is. and is causally related to the cognitive history of an artwork –in the same way that the parts of a disintegrating or dismembered organism bear its DNA– although the artwork itself as a whole is accidentally lost.

**Art with artworks without external observability (non-externally expressed or externally materialised artworks):** artworks of various kinds of artforms can be generated and completed in the mind-internal and psychological reality of phenomenal consciousness without necessarily having been expressed or materialised in the mind-external world. In recent years, I almost exclusively ‘work’ on my poems in the mind-internal studio of phenomenal consciousness or *phenomenal language* (i.e. words in the mind), I can completely recall them from memory, draft and redraft, edit and re-edit them in the solitude of own mind, and I only get to write them down (i.e. express and materialise them in the mind-external physical world) at a much later point, long after they have been completed in my mind-internal studio. The poem generated and existing only in my mind-internal studio is a causal output of the action-process that art is, and it is an existing object with the cognitive history and thus the ontology of an artwork, independently of the fact that it only exists in the mind-internal physical reality of phenomenal consciousness and phenomenal language. The fact that it does not have external observability until I get, if I get, to express it is rather contingent and does not affect the ontological status of the output as an artwork. It is anecdotally alleged that Beethoven could ‘hear’ the entire 9<sup>th</sup> symphony ‘inside his head’ as inner hearing in phenomenal consciousness. We can devise a thought experiment where Beethoven never presents this composition to a hearer or audience. If so, this hypothetical mind-internal and only phenomenally expressed and materialised 9<sup>th</sup> *symphony* is as much an artwork as is its mind-externally expressed and materialised equivalent and an articulate exemplar of art without an externally observable artwork.

Many of the instances discussed above can be loosely interpreted as cases of art without artwork. I will therefore claim that not only can there in principle be art without artwork but, actually, there IS art without artwork. But there is no such thing as art without an artist.

### **Why there cannot be art without an artist**

Nothing can be an artwork or constituent of an artwork and not be causally related to the specific cognitive history of artistic thought states/ processes in an agent’s mind, or nothing can have the specific cognitive history of descending from artistic thought states/ processes in an agent’s mind and not be an artwork, or fragment of, or constituent of, or part of an artwork. If there is something that art cannot exist without, if there is a condition that is

necessary for art, it is the agent, the artist. Art is an action, and no action is conceivable without the agent that will bring it to bear.

A highly relevant ‘case study’ concerning the necessity of the agent as a condition for art is the *Xenotext* project by experimental Canadian poet Christian Bök, involving what the poet Theodoros Chiotis, in a pertinent brief talk in 2014 in the Vortex Studio series of lectures, Athens, Greece, described as ‘Bök’s desire to disentangle art from its creator’. Bök has spent more than ten years working on what he conceives as the first example of ‘living poetry’: in the *Xenotext* project, Bök aims to write a short poem about language and genetics and use a chemical alphabet to ‘translate’ this poem into a DNA sequence for subsequent implantation into the genome of an unkillable bacterium –an extremophile microbe called *Deinococcus Radiodurans* which is capable of surviving in the most hostile ecologies, including the vacuum of outer space. The poem is composed in such a way that, when inserted into the gene of the bacterium, it constitutes a set of instructions, all of which cause the bacterial organism to begin to manufacture a viable, benign protein that, according to the original chemical alphabet used, represents yet another ‘poem’. Bök (2011) claims he is ‘engineering a life-form so that it becomes a durable archive for storing a poem, but also an ‘operant machine’, as he has called it, for writing a poem– one that can persist on the planet until the sun itself explodes...’ (Available at [www.poetryfoundation.org/harriet/2011/04/the-xenotext-works](http://www.poetryfoundation.org/harriet/2011/04/the-xenotext-works). Accessed August 11<sup>th</sup>, 2019).

But does the *Xenotext* project and Bök’s desire to create a living form of poetry that will outlast the creator really disentangle art from its necessary condition, the creator? The most intriguing ontological implication of the *Xenotext* project is exactly the opposite, I think. *Deinococcus Radiodurans*, the bacterial organism that will serve as both a host environment for Bök’s original poem and an operant machine for ‘writing’ a new one, is not a creative agent but a mere fabricator, not an artistic consciousness but a ‘blind’ manufacturing device. The artistic consciousness and creative agent behind the operations of *Deinococcus Radiodurans* is and always will be Bök. The living form of poetry that Bök envisaged may indeed outlast its creator, but its outputs will eternally be causally related to this creator’s conception; and their cognitive history will eternally be testable to art-specific efferent activities in this creator’s mind. The very wording used by Bök is highly illuminating of the ontological fact that the bacterial organism is no more than an agent-less fabricator blindly executing instructions testable and attributable to Bök himself: the bacterium is referred to by Bök as an ‘operant machine’ and the poem that Bök will insert in it by means of a chemical alphabet is described as ‘a set of instructions, all of which cause the bacterial

organism to begin to manufacture (...) a new text'. The ontological implication of the *Xenotext* project is exactly the same as that of *computational art*<sup>70</sup>, where computer programming or robotics are used as operant machines for the 'manufacturing' of artworks: the causal history of artworks, manufactured by such operant machines, is originally testable to the art-specific cognitive activities in the mind of the artist, as the agent who chose, programmed, implanted instructions and set into motion the given operant machines, articulating in the most articulate and conspicuous of ways that there can be art without receiver, there can even be art without artwork but there cannot be art without an artist.<sup>71</sup>

#### **4.4 Cognitive objects with an evaluative element: art and aesthetic experience**

Artistic thought states/ processes have inherently *evaluative* content in the sense that they involve a spontaneously caused aesthetic focus and attitude towards, and therefore in some sense assessment of, one's own aspectual representation. Artworks and literary texts as the causal outputs of artistic thought states/ processes can, therefore, be said to be causal objects with an evaluative element.

This assumption can be taken as yet another possible line of approach against the non-aesthetic thesis about art. If the cognitive model I am sketching here is correct, it should be impossible for something to be an artwork in an essential sense and yet be of no aesthetic consequence whatsoever, precisely because aesthetic considerations are quintessential to an artwork's relational essence: they are indispensable components of the artwork's cognitive history, essential hard-wired constituents, that is, of the engineering of the mental states/ processes artworks causally descend from.

The non-aesthetic thesis about art or, in other words, the idea that there can be artworks with no aesthetic value whatsoever is a commonplace shared by a number of theorists, including Danto (1981), Fodor (1993), Kawabata and Zeki (2004) and Zangwill

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<sup>70</sup> Goldsmiths College, University of London and other arts institutions across the world are now launching dedicated master's degrees in computational art, bringing together the category ARTWORK as an open and constantly expanding set of entities with digital technology as a way of intervening in the human cultural environment.

<sup>71</sup> In the case of artworks co-created by more than one artist, the artwork's cognitive history and relational essence consists of more than one causal thread, 'tied' with the mental goings on of more than one creator and extremely intricate feedback relations between how the intra-individual outputs of each creator interact with the observed outputs of the other co-creators in a macroscopic creation process. Participatory artworks where the audience is motivated by the artist to create or co-create the artwork are cases not much different from computational artworks or the *Xenotext* project, the only difference being that the 'operant machine' here is the audience that 'manufactures' an output in a context and with 'instructions' explicitly or implicitly originating in a conception by the artist.

(1998, 2002). Artworks that are perceived as ‘ugly’ and ready-mades using common pre-fabricated or found objects have traditionally been used as paradigmatic exemplars supporting the non-aesthetic thesis. As I have argued in Kolaiti (2019: 84-85), this commonplace is a result of a chain of flawed assumptions, including the implicit view of ART as a conventional category, the view that aesthetic value somehow descends from fabrication and the view that artworks can be ‘ugly’. Let me momentarily focus here afresh on the latter two of these assumptions and explore whether they yield any valid threat to a notion of the aesthetic in literature and art.

The rationale typically followed by the proponents of the non-aesthetic thesis on art goes pretty much like this: since there is nothing about the physical properties of a urinal that has aesthetic value, and since a urinal may well be put forward as a work of art, it has to be admitted that there can be works of art with no aesthetic value. Another typical line of inference is that since the category ARTWORK has members whose physical properties would make us categorise them as ‘ugly’, and since ‘ugly’ entities have no aesthetic value, it has to be admitted that there can be works of art with no aesthetic value. However, these and all other similar lines of inference can be shown to be fundamentally flawed because they involve a theoretically inadequate approach to aesthetic value based on an implicitly structuralist or formalist view of the aesthetic: aesthetic value is implicitly treated as a property of the object’s perceptual (i.e. formal or structural) make-up. Even for advocates of the non-aesthetic view like Fodor and Danto, who nevertheless propose a *relational* story about the essence of art, and therefore defend the idea that the property that makes an artwork the kind of object it is is not part of the object’s formal or structural make-up, when it comes to talking about aesthetic value, their focus all of a sudden reverts wholly to the artwork’s formal and structural make-up. Although they are telling us that the property that makes something an artwork is not to be found in the artwork’s physical properties *per se*, they then contradict themselves by suggesting that a ready-made, say the *Fountain* or *Brillo Boxes*, is of no aesthetic value whatsoever, pointing to the physical properties of this artwork, the physical properties of a urinal or Brillo box.

There is no doubt whatsoever that there is nothing about the physical properties of a urinal, or any other artwork or object *per se* for that matter, that might have aesthetic value: and that is not because of the object’s appearance. It is because, as I suggested in Chapter 3, aesthetic value is not a property of objects *per se* but a property of the relation between the physical properties of objects and the way these objects and their physical properties are *seen* by a mediating consciousness. If you accept a relational story about the essence of art,

independently of what your particular relational story might be, you shouldn't be looking for aesthetic value in the physical properties of an artwork *per se* (e.g. the formal and structural properties of the urinal that constitutes the artwork *Fountain*, or the formal and structural properties of the *Demoiselles d'Avignon*) in the first place. You should stick with your relational story and look for aesthetic value in the relational essence of the artwork: Duchamp's *Fountain* is an object with aesthetic value, not because of any of the physical properties of mere urinals *per se*, but because of the way this mere urinal with physical properties XYZ has been *seen* by Duchamp, i.e. because of the relation between the *Fountain* and its cognitive history. Picasso's the *Demoiselles d' Avignon* is an object with aesthetic value, not because of any of the physical properties of the *Demoiselles d' Avignon* as such, but because of the way the *Demoiselles d' Avignon* with the physical properties XYZ has been *seen* by Picasso, i.e. because of the relation between the *Demoiselles d' Avignon* and its cognitive history. Our aesthetic response to this object is enabled by metacognitive acquaintance with how Duchamp's and Picasso's –and any artist's, for that matter– mediating consciousness can be assumed to have *seen* this object, attributing to an intention formed by this mediating consciousness what we mentally and physically experience when exposed to it.

Try, for instance, to formulate and spell out the experiential and mental goings-on in the San Francisco Museum of Modern Art gallery spectators who in spring 2016 swarmed around the pair of glasses placed on the gallery floor because of the prank by the seventeen-year-old student. The spectators mis-recognised this mere thing (a mere pair of spectacles) for an artwork, and presumably experienced it the way artworks are experienced, aesthetically. Despite being a case of mis-recognition, the example is highly illuminating of the theoretical point I am trying to make here: the key difference in how an audience experiences a pair of glasses that somebody just dropped on the gallery floor and a pair of glasses that somebody puts forward as an artwork, is that in the first case any perceptual or sensory response elicited is elicited directly by the physical properties of the glasses *per se*; whereas in the latter case any perceptual or sensory response elicited is elicited indirectly by means of metacognitive acquaintance with the way the glasses can be assumed to have been *seen* by the mediating consciousness of the artist who invites this audience to allocate attention to and experience this object in a mediated way. All that happens in instances of mis-recognition is simply that the audience, for contingent reasons, attributes the mere thing falsely assumed to be an artwork to an assumed mediating consciousness, and thereby engages in a process of metacognitive acquaintance, trying to experience the object that has been falsely assumed to

be an artwork in a mediated way, i.e. via the assumed mediating consciousness of the assumed artist and her assumed intention that the object should cause the audience to experience what it mentally and physically experiences when exposed to the assumed artwork. The audience is capable of yielding a mediated (aesthetic) experience of that object despite the fact that metacognitive acquaintance was actually triggered by false intention attribution and object mis-recognition, since the object is not really an artwork and was never intended by any mediating consciousness whatsoever to elicit this experience.

In reality, the story is a lot simpler than my philosophical discourse conventions made it sound in the previous paragraph, and the seventeen-year-old student's prank not as clever as it appears at first glance. The famous claim by Jean Clair (1992) in his *Critica della modernità*, that the only thing that differentiates Arman's garbage<sup>72</sup> from the garbage on the streets is the gallery window, is incorrect as an ontological statement but insightful as a claim about artwork recognition. From an ontogenetic point of view, what differentiates Arman's garbage from the garbage on the streets is not the gallery window but the distinct and art-specific cognitive history of Arman's garbage, which only Arman's garbage has, and not the garbage on the streets. But the 'gallery window', and any pertinent institutional art context for that matter, plays a decisive part in whether the given object will be recognised as an artwork and notionally related to its distinct cognitive history. If the ontology of artworks was down to their prototypical formal and structural properties, our prototype detector would simply identify the relevant prototypical features in the object's structure and form and infallibly categorise a given object as art or non-art on the basis of these features. But art is such an 'extreme' case of a fuzzy category precisely because the ontology of artworks is not down to any of their prototypical formal or structural properties as such. The cognitive/causal essence of both fabricated and ready-made artworks is not available to the naked eye but needs to be inferred by the receiver, and institutionally-determined art-contexts play a key role in guiding these inferences. When entering such contexts (be they galleries, or literary journals or art festivals etc), audiences have highly accessible the assumption and expectation that the entities they will come across in these contexts will be artworks, placed there by artists with an intention that these entities will cause a certain experience in the audience (namely, an aesthetic experience). Since there is nothing about the formal or structural

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<sup>72</sup> Jean Clair was referring to 'Accumulation' and 'Poubelle' (French for 'trash bin') of the French-born American artist Arman. He became famous for his accumulations of common and identical objects which he arranged in polyester castings or plexiglas cases.

properties of artworks *per se* that makes them artworks, there is in practice huge room for our prototype detector to draw false inferences about an object's cognitive history, and hence mis-recognise mere things or artwork simulacra as artworks or, conversely, real artworks as artwork simulacra or mere things. Artworks are mis-recognised all the time, because interpretations are inferences to the best explanation and as such always come at a risk. There was no fail-safe way for the San Francisco Museum of Modern Art gallery spectators who 'bought' the seventeen-year-old student's prank to infer with absolute certainty whether the glasses on the floor were an artwork or not, in the same way that there is no fail-safe way for the audience of a contemporary poetry festival to infer with absolute certainty which of the indefinite number of outputs presented and intended by their creators as 'poems' are indeed poems, objects with the cognitive history of a real poem rather than poem simulacra or mere things. If the object is placed in an institutionally-determined art context, inference to the best explanation suggests for the average spectator, hearer, receiver that the object is most probably an artwork. It is this contingent fact about the non-external observability of an artwork's cognitive history and the subsequent need to employ an acute critical eye or critical ear in order to infer it that makes art the particularly interesting fuzzy metaphysical category it is. The glasses on the floor were of course easily mis-recognised as an, and this should come as no surprise, given that just as in the case of the glasses, indefinite amounts of poetic garbage are on a day to day basis mis-recognised as poetry simply because they appear in literary journals, poetry nights or published poetry books –the literary equivalent of 'the gallery window'. It takes a rather acute critical eye and critical ear to differentiate the real poem from the staggering amount of things that purport to be poems but are not, while at the same time it is likely that some degree of mis-recognition might occur even for the acutest of eyes and acutest of ears, or some degree of split opinion between different sets of acute eyes and ears (I recall some hot debates among my fellow poets about the arthood or not of this or that piece of contemporary writing). Indeed, there isn't at the moment an externally observable, empirically testable and fail-safe way of deciding with certainty whether a certain object truly has the cognitive history of an artwork, but the contingent fact that currently we can only rely on inference to the best explanation does not mean that we shouldn't nevertheless 'defend the real poem against the mayhem of things that simply purport to be poems', to quote the way my dearest poet friend Olga Papakosta put it in a recent conversation of ours. In my dual capacity as both a poet and a scientific philosopher, I should perhaps keep dreaming of the day imaging technology will make relational and cognitive essences visible to the naked eye, vindicating the real poem and the real artwork and lifting it

from the garbage. But then again, in my dual capacity as both a poet and a scientific philosopher, I should perhaps not dream of this day at all, because making the ontology of artworks visible to the naked eye would spoil the pleasure of the uncertainty and excitement of the ontological debate that we have so much associated with the process of being exposed to and experiencing art.

To go back to where my discussion started, to the extent that we respond to formal properties of an object *per se*, our response involves perceptual or sensory experience of a certain kind, but does not involve the particular kind of mediated perceptual or sensory experience that aesthetic experience is. An object capable of causing nothing more than perceptually gratifying experience is a beautiful mere thing, a perceptually gratifying object, but works of art are not mere perceptually gratifying objects. Artworks are in principle capable of causing the mediated type of perceptual and sensory gratification that constitutes an aesthetic response, and the contingent fact that non-artworks may for incidental reasons, as we just saw, also elicit this type of experience does not mean that aesthetic experience is not characteristic of artworks. If aesthetic experience is not a response to physical properties of the object *per se*, an aesthetically relevant notion of BEAUTY\* cannot therefore be synonymous with our common-sense, intuitive and pre-theoretical notion of BEAUTY. BEAUTY is a mere physical property of an object's perceptual make-up as such, whereas aesthetic BEAUTY\* is a property of the relation between the object's perceptual make-up and its cognitive history (i.e. how the object and its perceptual make-up have been *seen* by an artist). It might, therefore, just be that the UGLINESS of the so-called 'ugly' artworks stands in an antonymous relation to the common-sense notion of BEAUTY, but is entirely irrelevant to an aesthetic notion of BEAUTY\*. Along the lines I pursued in Kolaiti (2019: 84-85), although there is no doubt that there is nothing BEAUTIFUL about the physical properties *per se* of Witkin's *Woman once a bird*, *Woman once a bird* could still be said to have aesthetic value or BEAUTY\* on the assumption that being physically BEAUTIFUL is not a prerequisite for being aesthetically BEAUTIFUL\*. If aesthetic value does not derive from the physical properties of artworks or objects *per se*, but from the relation between the physical properties of artworks or objects *per se* and their cognitive history (how the objects and their physical properties can be assumed to have been *seen* by the artist) then being BEAUTIFUL is definitely not a prerequisite for being BEAUTIFUL\* and aesthetic BEAUTY\* needs to be once and for all distinguished from BEAUTY.

This is a fine, yet theoretically crucial distinction that might help optimise the experimental settings of current empirical research in neuroscience and neuroaesthetics. In

fact, the investigation of aesthetic BEAUTY\* might be one of the exemplary areas in which neuroscience would benefit greatly from interdisciplinary collaboration with naturalistic theory formation in the arts and humanities, creating a working framework for theoretically sound experimental research. Take for instance the interesting array of experiments conducted by the neurologist Semir Zeki in relation to beauty and the aesthetic. In their paper ‘Neural Correlates of Beauty’, Kawabata and Zeki (2004) aim to identify specific types of neuropsychological activity associated with positive or negative aesthetic evaluations of paintings. However, Zeki and Kawabata set out with a rather problematic understanding of and theoretical framework for aesthetic evaluation in the first place. Subjects in Kawabata and Zeki’s experiment view a large number of paintings and are asked to classify them as ‘beautiful’, ‘neutral’ or ‘ugly’. They then view the paintings again, while being scanned for specific and distinctive visual-brain activity. The design of the experiment skilfully avoids such traps as adopting debatable culture-specific or criticism-created canons and standards of beauty. There is no pre-judgement of which paintings are beautiful or ugly: subjects themselves make the classification depending on individual background and subjective taste, thus allowing for inter-cultural and inter-subjective notions of beauty to come to the surface. Nonetheless, the experiment suffers from a serious shortcoming. The notion of beauty appealed to is conceptually ambiguous; and one of the two senses is, in line with my discussion above, not relevant to aesthetics. The notion of a BEAUTIFUL\* painting, which is the one relevant to aesthetics, is antonymous to the notion of a BAD painting, rather than an UGLY painting.<sup>73</sup> To see this, compare the phrase ‘ugly painting’ with ‘ugly poem’. What in the world could an ‘ugly poem’ be? It is only the notion of a ‘bad poem’ that contrasts in any useful sense with ‘beautiful poem’. Peter Joel Witkin’s photographic art, which I sometimes use as an example in such contexts, often focuses on appalling and disturbing subjects, producing photographs that are atrociously UGLY in terms of content, but simultaneously remarkably BEAUTIFUL\* as works of art. If I were asked to classify Witkin’s photographs as either ‘beautiful’ or ‘ugly’, I would personally have to ask for clarification: I would want to know whether ‘ugly’ is actually intended to mean BAD, and whether my answer would be taken to relate to the particular photograph as mere content or the photograph as a work of art. This confusion between aesthetic BEAUTY\* and mere perceptual BEAUTY persists throughout discussions in the philosophy of art (see, for instance, Zangwill 1998, 2002) and Kawabata and Zeki’s experiment runs into it head on. The notion of beauty relevant to

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<sup>73</sup> An implication of what I have just claimed is that to be a BEAUTIFUL\* artwork is in actual fact to be a good artwork, an artwork of value of a certain kind (aesthetic value).

literature and art is aesthetic BEAUTY\*. In aesthetic terms, BEAUTIFUL\* can only be contrasted with BAD, not UGLY, and because of this crucial detail, Kabawata and Zeki's experiment as it stands is totally uninformative for a theory of aesthetics.

In general, works of art can be divided into two broad categories on the basis of whether they provide *strong* or *weak* evidence of their aesthetic value or BEAUTY\*, and at the same time, strong or weak evidence of the artistic thought states/ processes they descend from. The notion of strong and weak evidence and the neighbouring notion of *manifestness*<sup>74</sup> come from Sperber and Wilson's (1995, 2015; Wilson and Sperber 2012) relevance-theoretic approach to ostensive-inferential communication, which I introduced in the previous chapter. According to relevance theory, many communicative acts performed by humans are ostensive acts, designed to attract the addressee's attention and convey a certain *import* (e.g. Sperber and Wilson 2015; Wilson 2018: 187-188). The notion of an import is broader than the traditional notions of a meaning or message in that meanings or messages are generally thought of as consisting of a single proposition or small set of propositions, whereas imports comprise an array of propositions with varying degrees of manifestness: some propositions might be more salient and strongly evidenced, while others are less salient and more weakly evidenced without any one of them being 'the' correct interpretation. The more weakly evidenced an array of propositions, the more inferential effort is required by the addressee or receiver to achieve some degree of cognitive alignment with the communicator. Ostensive-inferential communication, so defined, goes beyond the narrow notion of speaker's meaning, providing a conceptually unified explanation of a much wider range of communicative acts that fall within the continuum between telling and showing, between determinate and indeterminate meaning, or between determinate and indeterminate showing (Sperber and Wilson 2015: 122-124).

Adapting this perspective to the type of stimulus literature and art is, we can distinguish works of art that provide strong evidence of the artistic thought states/ processes they descend from, and consequently, strong evidence of their aesthetic value or BEAUTY\*. These are the fabricated artworks, objects that in terms of their physicality did not exist prior to an agent's having entertained artistic thought states/ processes. The physicality of these artworks came into existence as a result of artistic thought states/ processes, they were

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<sup>74</sup> A fact is manifest to an individual at a given time if and only if the individual is capable at that time of representing it mentally and accepting its representation as true or probably true. In simpler terms, manifest facts are those facts that are perceptible or inferable. (Sperber and Wilson 1995: 38-39 and 2015: 133).

physically fabricated as a result of the artist's steady aesthetic focus on her own aspectual representations. Thus, the fact that they are descended from artistic thought states/ processes is salient and strongly evidenced by their form, which provides the receiver with nuanced clues to the fact that they are related to an art-specific cognitive history, and therefore nuanced clues to their aesthetic value or BEAUTY\*. An intriguing institutional and recognition-related conundrum here is that the vast majority of objects mis-recognised by receivers as artworks in fact belong to this latter category. The average receiver tends to immediately classify these objects as artworks just by virtue of the fact they have been fabricated, that their physicality came into existence as a result of an act of manufacturing by somebody who purports to be an artist, interpreting the act of fabrication itself as providing guaranteed evidence of aesthetic value or BEAUTY\*. This is why I make the fine terminological distinction and talk about fabrication as providing 'nuanced clues' rather than definitive evidence of the object's aesthetic value or BEAUTY\*: the process required on the receiver's part for deciding whether the object has aesthetic value or not, even in the case of artworks that have been manufactured from scratch by the artist and in principle provide strong evidence of this value, is again entirely inferential. The notion of 'strong' evidence concerns not how guaranteed the outcome of the inference is, but how nuanced the clues are that point towards this inference.

Second, we can distinguish works of art that provide weak evidence of their relation to artistic thought states/ processes, and consequently, weak evidence of their aesthetic value or BEAUTY\*. These are objects that in terms of their physicality existed prior to an agent's relating them to artistic thought states/ processes; they are pre-existing or pre-fabricated by natural or mechanical means, or by an incidental human creator other than the artist. They are the so-called ready-mades. This type of artwork typically has twins, mere thing equivalents. In fact, it was itself a mere thing before it was linked by an agent to an artistic thought state/ process. The existence of aesthetic value and BEAUTY\* in ready-mades is weakly evidenced, in that their form provides the receiver with little or no clue to the relation of the object to some artistic thought state/ process, and so the attribution of this relation depends even more heavily on the receiver's ability to arrive at it inferentially. Sufficient contextual clues to enable, instigate and justify the attribution of a causal relation between this object and an art-specific cognitive history in the mind of an artist are of key importance here. This is where, as I suggested earlier, contextualisation and institutional practices kick in, pointing the receiver's inferential processes towards the assumption that an object, atypical as it may look, might after all have the cognitive history of an artwork, and therefore might be designed and

intended to elicit the mediated type of pleasurable response that BEAUTY\* and aesthetic value seem to elicit.

#### **4.5 Why art is not an unstable object**

Despite appearances, art is not an *unstable* object. Art is indeed an open class concept (Binkley 1976; Davies 2004: 241; Weitz 1956) in that it is open to the addition of an indefinite number of new instances as a result of the artist's creativity; and the same object can indeed be perceived as an artwork in one period, social framework or artworld context and as non-artwork in another; but this does not mean that art is unstable as an object, or that 'art is entirely subjective'. This superficial instability does not have any bearing on what art IS; it only has implications for what art is perceived and recognised as. Or as Margolis (2010: 218) puts it, superficial instability does not preclude all past, present and possible instances from having a common denominator or 'trait'. Art as an action is as stable an object as it gets: a distinct and unique action-process enabled by a spontaneous art-specific type of mental states/ processes in the mind of certain human agents, which possibly amount to evolutionary adaptations or exaptations of some sort, and form the cognitive infrastructure for the selection and propagation of art as one of the most successful and enduring human cultural representations.

Art as an inter-individual occurrence and its outputs (artworks) as publicly available human cultural representations are part of the human social, cultural, political, cognitive, perceptual and affective ecologies. Just like any other type of input, artistic inputs are thus always automatically perceived, assessed and sometimes interpreted by receivers within a given context consisting of assumptions drawn from any of these ecologies. We can speak of artworks being perceived differently by individuals or communities in different contexts. We can speak of artworks being embedded in one context or the other; but we can never speak of artworks as being context-less. Contexts are occasion-specific subsets of our cognitive environment, made up of those externally (perception-driven) or internally (memory-driven) evidenced assumptions that are manifest to an individual at a given time (Sperber and Wilson 1995: 38-46, 137-142). The context can be said to change when the salience or accessibility of these assumptions alters, or new assumptions are added and old ones abandoned. The reason my responses to an artwork, say the *Victory of Samothrace*, might change when I move through space looking at it from different angles, or when I move through time looking at it from the vantage point of different socio-political and historical frameworks, is not that the artwork itself changes, but that the context in which the artwork is being received –the

salience or accessibility of certain contextual assumptions— has altered. Aspects of the global artistic event have changed, not the artwork *per se*.

Pinning down essence is not just a metaphysical matter. The key feature of Putnam's (1975: 139-140) claims about essentialism in nature, for instance, is that an object's biological or chemical essence etc. enables humans to make correct predictions about its behaviour in different circumstances. It is possible that the relational/ causal/ cognitive essence of a work of art yields predictions in similar ways.

In any case, my notions of the artistic condition and artistic thought states/ processes have not fallen like manna from the skies. They bring together into a single framework ideas and intuitions that have been floating around in either literary theory or the philosophy of the arts for the best part of a century. They give a possible insight into what it means for art to be self-reflexive. They account for Shklovsky (1965) and Danto's (1981) intuition that some transfiguration of the common-place into the non-trivial is crucial for art. They assign intentional realism a different –non-essentialist– part in the global event of literature and art. They formalise and systematize crucial introspective evidence from artistic practice into a viable cognitivist theory and ontology of art. They capture ways in which the artistic mind is distinct from the ordinary mentality and other non-artistic types of mind, and suggest that the mental entities that are responsible for the distinctness of the artistic condition and its outputs are metaphysically and psychologically real.

I claimed earlier that the metaphysics of a mind-ful world cannot possibly be the same as that of a mind-less one. I now want to claim that the mind in an art-ful world cannot possibly be the same as the mind in an art-less one. Exploring literature and art as a cognitive object is a theoretical as much as an epistemological venture which does not solely involve understanding literature and art as a phenomenon in its own right. To say that literature and art is a cognitive object in the strong construal of cognitivism I have favoured in this analysis is, in other words, to say that art is so distinct an output of the human mind that, without a systematic cognitively-oriented study of literature and art as an intra-individual mind-internal occurrence, it will be virtually impossible to ever fully understand the mind itself and its place in nature.

## Chapter 5

### How to solve the ontological puzzles

#### 5.1 The concept ARTWORK as a fuzzy set

In Chapter 1, we walked into one of the most fascinating aspects of art as an ontological category, its ‘gallery of indiscernibles’. Mere urinals and Duchamp’s *Fountain*, mere Brillo Boxes and Warhol’s *Brillo Boxes*, a stretch of ordinary discourse and the same stretch of discourse when quoted verbatim in a poetry book as a ‘found text’-poem, a genuine artwork and a perceptually indiscernible perfect forgery, a pretend-to-be-art ‘artwork’ and a real artwork, ‘artworks’ by atypical creators such as neuro-atypical artists with autism, artworks and their mechanical reproductions or replicas authorised by the artist, and finally, animal ‘art’ and ‘martian art’. Most of these twin events serve as compelling arguments against a medium-specific ontology of artworks: if the essence of literature and art was down to its perceptual make-up (i.e. its medium-specific formal and structural properties), and since both the entities that constitute a twin event are formally and structurally indiscernible (e.g. the *Fountain* and a mere urinal from the exact same line of production that the urinal constituting the *Fountain* comes from), then either both entities would have to be artworks or both would have to be non-artworks. Yet, as I have already suggested, this is entirely counter-intuitive. The story remains hopeless even if those opposed to conceptual art suggest that ready-mades simply aren’t real artworks: an *argument from the perfect forgery* –assuming that the forgery is indiscernible from the original in every perceptual respect– would still inadvertently knock down any remaining hope for structural essentialism. From the cognitive standpoint I have been developing in this account, it seems grossly counter-intuitive to group a perfect forgery and its perceptually indiscernible genuine-artwork-equivalent under the same ontological category, while I have already shown convincingly, I hope, why treating the case of ready-mades and other perceptually indiscernible twin events as evidence that there is no essence of art is simply misinterpreting the implications of the collapse of structural essentialism. The concept ARTWORK is such an extreme case of a fuzzy set, not because there is no essence of art, but simply because the ontology of artworks does not rest in their formal and structural make-up. For the exact same reason, our prototype detector cannot safely rely on any specific formal and structural properties to definitively distinguish ARTWORKS from NON-ARTWORKS, generating the long series of mis-recognitions that make art an exemplary case of a fuzzy category.

Artistic thought states/ processes as I have described them are psychologically and metaphysically real entities. If it is right to think that artworks and literary texts are causally related to such art-specific entities, then a cognitive ontology of literature and art becomes possible, offering a way out of –or at least an epistemologically significant new way of tackling– persistent ontological circularities in existing models. Let’s see how the art-specific cognitive history of artworks allows us to solve some well-known ontological puzzles.

## **5.2 Solving some ontological puzzles**

### **The ready-mades puzzle**

Mere urinals and Duchamp’s *Urinal*, mere Brillo Boxes and Warhol’s *Brillo Boxes*, mere accumulations of garbage and Arman’s *accumulations*, young Mendonca’s manifesto of boredom and his *manifesto of boredom* when I quote it verbatim in a poetry book are formally and structurally equivalent objects. What is it that makes these two sets of perceptually indiscernible twins essentially distinct? The problem is interestingly puzzling but not hard to solve. The two sets of objects are essentially distinct, because the latter set has acquired a causal and, more specifically, cognitive history the that former set does not possess: of the two, only the latter set stands in a direct causal relation to artistic thought states/ processes, and thus, only the latter set has the specific relational, causal and cognitive history of a work of art. An artwork and its perceptually indiscernible ready-made ‘twin’ differ in that they have differential cognitive histories: the former is causally related to artistic thought states, while the latter is not.

### **The Art v Forgery puzzle**

The type of relational story about the essence of literature and art that I am proposing here sheds new light on at least one other famous case of indiscernibles: the relation between *art* and *forgery*. In *Languages of Art*, Nelson Goodman (1976: 100) asks what could be the (aesthetic) difference between a Rembrandt painting and a perfect forgery, assuming that the forgery is indiscernible from the original in every perceptual respect. As Leonard Meyer (1983) and Mark Sagoff (1983) point out –and indeed there is strong introspective evidence for this– for some reason, as soon as the forgery is revealed, our ‘visual experience’ of the

original and that of the forgery seem qualitatively different, despite the fact that the two objects are perceptually indistinguishable.<sup>75</sup>

The answer to this problem, I think, is pretty straightforward: the original artwork and a perfect forgery are two essentially distinct objects, since they have distinct cognitive histories. Of the two, only the former stands in a direct causal relation to artistic thought states/ processes, and thus, only the former has the specific cognitive history of a work of art. The causal relation between an artwork and its cognitive history is direct. The forgery too can be said to have a ‘causal’ relation to the artistic thought states/ processes from which the original artwork has descended by means of copying their outputs. But this latter ‘causal’ relation is an indirect one: it wouldn’t exist if the original artistic thought states/ processes that generated the original artwork hadn’t existed, or in other words, the forgery wouldn’t exist if the output of the original artistic thought states/ processes hadn’t been replicated by being copied and forged. The reason our experiences of original and forgery seem qualitatively different as soon as the forgery is revealed, is that we therefore notionally disentangle and *un-relate* the forgery from the specific type of cognitive history that would allow it to be art. A forgery is not the result of the kind of action literature and art is (an action involving artistic thought states/ processes as its minimal causal components) but the result of an action of copying that endows it with a completely different causal and cognitive history, making it exactly the object it is: a forgery.

Meyer (1983) and Sagoff’s (1983) addition of the word ‘visual’ in front of ‘experience’ does not change our explanation in any interesting way. Perception does not function independently of conceptual cognition. It is the interaction between perceptual and conceptual cognition that enables a bundle of undifferentiated two-dimensional projections on the human retina to be conceptualised as this object or that one. It is conceptual cognition –and more specifically the addition to the receiver’s cognitive environment of new information about the distinct cognitive histories of the two objects– that makes the one object ‘seem’ an artwork and the other a forgery. The two objects are differently conceptualised, and also classified as belonging to separate ontological categories, and hence, given the feedback between perceptual and conceptual cognition, they are lived through as if they yielded distinct visual experiences.

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<sup>75</sup> Meyer’s (1983) attempt to resolve the problem by taking relational factors (i.e. factors beyond the perceptual make-up of the painting) into account seems to me pretty much in the right direction; however, his discussion is entirely pre-theoretical.

I would tend to propose that when the forgery is revealed, the two objects are also differently experienced in terms of aesthetic response. Given the mediated engineering of aesthetic experience, as soon as the forgery is revealed, our 'aesthetic response' to the forgery and the process of metacognitive acquaintance that enables aesthetic responses in standard circumstances inherits an extra layer of metarepresentation and intention attribution: the receiver attributes to the forger an intention that the receiver should experience the forged painting aesthetically, falsely attributing the mental and physical goings-on of this experience to the original artist. To the extent that the impressionistic and phenomenological aspects of our aesthetic experience of original and revealed forgery seem qualitatively different, it is clearly down to this additional metarepresentational layer.

Before it is revealed, though, the perfect forgery is an excellent instance of why aesthetic experience is only a characteristic rather than a necessary condition of arthood, since it may result from cases of mis-recognition. Our aesthetic experience of a non-revealed forgery is one such case of mis-recognition: our prototype detector has no way to tell that the object is a perfect forgery, since by virtue of being perfect, it is formally and structurally indiscernible from the original. We therefore mis-recognise it as an original artwork and, via metacognitive acquaintance, we falsely attribute to the intention of the assumed artist of this assumed original artwork whatever we get to mentally or physically experience when exposed to it. As a result, the aesthetic experience elicited by an original artwork and by its perfect forgery involves in principle the same range of possible mental and physical goings on, and can therefore be said to be the same experience.

### **Fodor and the Greek pots, or the arts v crafts controversy**

In 'Déjà vu all over again: how Danto's aesthetics recapitulates the philosophy of mind' Fodor (1993) draws on some implicit notion of practical usefulness and utilitarian function with the aim of distinguishing between artworks and mere perceptually gratifying objects. Greek pots, for instance: are they artworks? Fodor (1993: 46) suggests they are not on the grounds that '...[Greek pots] were intended to put (the Greek equivalent of) Brillo in'. The implicit notions of practical usefulness and utilitarian function that concern Fodor underlie the broader *arts v crafts controversy* and can be traced back to Kant's *Critique of Pure Reason* (1781), where Kant refers to the arts as geared towards creating objects devoid of purpose and utility, and to the crafts as fraught with utility and purpose (see also Risatti 2007: 71).

The arts versus crafts distinction and the ensuing subordination and marginalization of crafts can be said to originate in the Renaissance, when a first division was made between the ‘liberal’ and ‘mechanical’ arts, with ‘liberal’ arts encompassing painting and sculpture and ‘mechanical’ arts corresponding to what we would nowadays describe as the crafts. By the mid-eighteenth century the division between arts and crafts was fully established, based on prototypically-determined criteria such as practical usefulness, utilitarian purpose, dexterity and skill, and adherence to recurring formal patterns inherited by tradition (Ługowska 2014: 285-286). The institutional establishment of the arts versus crafts divide is attested mainly in the exclusion of crafted objects from existing historical canons of ‘high art’ and the modern history of Western art (Auther 2010: 15). Despite the efforts undertaken by artists, craftspeople and initiatives like ‘the arts and crafts movement’ in the 19<sup>th</sup> century to draw attention to the possible arbitrariness of the hierarchical relation imposed by the divide, let alone the arbitrariness of the divide itself, the arts v crafts controversy still occupies a quite marginalized place in contemporary ontological enquiry. The most thought-provoking recent ontological challenges to the divide arise from the borderline works of contemporary artists who use fibre –a medium traditionally associated with craft– to negotiate the ontological soundness and boundaries of the arts v crafts divide. Ługowska (2014: 294) suggests:

Even a cursory glance at contemporary artists working in fiber and needlecraft techniques reveals a whole array of diverse artists applying fiber. Elaine Reichek’s embroidery, Anna Wilson’s creation and dissection of black lace, Charles Le Dray’s exploration of the self and masculinity through the manipulation of clothing, Hu Xiaoyuan’s embroideries of body fragments sewn with her own hair in traditional Chinese technique or Darrel Morris’s embroidered explorations of class relations in the USA, could serve as a case in point. The works of these artists and many others show how craft not only continues to be used to address issues of gender, race and personal experience, originating in the feminist appropriation of the material, but have widened its scope to incorporate issues of hybridity, sexual identity, activism, tradition, cultural collision, globalization [etc].

To the same end, the School of Fine Art at the University of Brighton is now pioneering the way towards a negotiation of this conventional divide by including subjects such as commercial and non-commercial fashion, textile history and industrial design in the history of art syllabus. Let us therefore try and momentarily put the divide under ontological scrutiny.

Despite my sheer admiration for anyone who can come up with a conception as brilliant as ‘the Greek equivalent of Brillo’, I must suggest that the rationale behind Fodor and Kant’s attempt to base the arts v crafts distinction on prototypically-determined criteria such as usefulness and utilitarian function is slippery. Is having a practical or utilitarian function enough to stop a perceptually gratifying object from also being a work of art? And is being a work of art a condition that excludes a parallel practical or utilitarian function? In ‘Seedless grapes: nature and culture’, Dan Sperber (2007) discusses how it is quite standard to think of objects as having several functions. From this standpoint, it is easy to deflate the standard claim that it is a necessary condition for artworks not to have a practical purpose: if it is acceptable to think of objects as having several functions, then having a practical function does not exclude the possibility of the same object also having a parallel aesthetic one and the other way round.

Imagine an odd philosophical case. Da Vinci decides to create the *Mona Lisa* not with the intention of showing or exhibiting it, but with the intention of covering a wall damaged by erosion and mould. Strong introspective evidence again suggests that this practically motivated *Mona Lisa* is, nevertheless, far more than a perceptually gratifying object; that it is, indeed, a work of art. If Greek pots aren’t artworks, this is certainly not because they were intended for the practical purpose of putting (the Greek equivalent of) Brillo in; and, having been intended for the practical purpose of putting (the Greek equivalent of) Brillo in doesn’t necessarily mean that Greek pots aren’t artworks. The paucity of the ontological debate on the arts v crafts divide has, in my view, been perpetuated to a great extent by the unavoidable circularity of the prototypically-determined approach, and this is precisely where a cognitive ontology of art can potentially radicalize both philosophical discussions and existing art canons on an entirely new ground.

All existing canons of art are based on prototypically-driven judgements. And indeed, from a prototype-driven standpoint it makes some sense to initiate some conventional divide between the set of entities out there in the world we traditionally call crafted objects and the set of entities we call artworks, on the assumption that crafted objects are characterised more frequently than artworks by a focus on practical usefulness and utilitarian purpose. It is also true that by tradition and institutional convention, artworks and crafted objects are embedded in different types of global event: artworks are entrenched in an ostensive global event where the artwork is used as an ostensive stimulus that attracts a receiver’s attention and through metacognitive acquaintance allocates it to an assumed intention of the artist that the object should be experienced aesthetically. Crafted objects, because of their parallel utilitarian

function, are by definition embedded in a palpably different type of global event. Initiating a conventional divide is very far from making a valid ontological claim. And needless to say, the event you traditionally and conventionally embed objects in might be characteristic of these objects but affects their ontology as much as incorporating a pillar from an ancient Greek temple into building a goat barn would dissociate the incorporated object from its ontogenetic descent as a pillar from an ancient Greek temple.<sup>76</sup>

On the other hand, the cognitive perspective and the cognitive approach to the ontology of artworks makes it possible to renegotiate institutional and conventional divides from a causal standpoint: it is highly likely, if not absolutely certain, that many more objects out there in the world are artworks than the ones currently grouped under existing prototype-driven canonical taxonomies, and perhaps many objects grouped under such taxonomies might in fact not be artworks. Kant, for instance, listed gardens as artworks (Freeland 2001: 46), and why not? If a certain garden is created in such a way as to causally relate to the specific cognitive history of artworks, then it is art. We might speculate that some Zen gardens are no less artworks than the *Victory of Samothrace*. From the standpoint introduced in this analysis, whether something is an artwork or not depends on the object's causal, and more specifically, cognitive history. At this point in epistemological history, the cognitive history of an object is still to some extent speculative, since the mind internal goings on it involves are not externally observable, but nevertheless, they are empirically testable to a significant degree via the use of backward speculative assumptions and empirical traceability in presumed future experimental settings. Simple empirical observation, for instance, suggests that many objects conventionally grouped in the category of crafted objects can be speculatively considered to have the cognitive history, and therefore ontology, of artworks. Think of iconic objects of modern design or crafted objects from antiquity to the present day that could be assumed to provide strong clues to highly non-trivial aspectual representations involved in their inception and aesthetic responses by their creator to her own aspectual representations. Could Philip Stark's *Alessi Juicy Salif* (citrus squeezer), or Verner Panton's S-shaped plastic *Panton chair* be assumed to have the cognitive history of a work of art? Should the iconic Classic Mini be in a museum of Modern Art? This is not to say that all crafted objects and objects of design have the cognitive history of a work of art; it is possible that the vast majority of them are mere functional or perceptually gratifying objects. But the

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<sup>76</sup> If you are familiar with Greece, you must have repeatedly witnessed how elements from ancient ruins were embedded in subsequent centuries in the construction of Byzantine chapels and public buildings through to private houses and stone-built goat barns.

answer to this question certainly does not depend on their having a practical or utilitarian function. From a causal and cognitive standpoint, the ontology of crafted objects and objects of design, and the extent to which they can be considered works of art, depends on the engineering of the action-process that brings them into being, and whether and when and to what extent this action-process involves artistic thought states/ processes as its minimal components. The issue is relevant to metaphysics as much as to the empirical study of human creativity, and raises the same intriguing questions as other ‘hybrid’ areas of human performance that can be considered to cross borderlines with art, such as artistic gymnastics and architecture. As I will suggest in Chapter 7, focusing on the cognitive, perceptual and neural engineering that enables the outputs of such hybrid areas and makes them the kind of objects they are will not only facilitate a new way of thinking about their ontology, but also a radically revised way of thinking about human creativity in the first place.

### **‘Autistic art’**

Perhaps much can be learned about the cognitive ontology of artworks from allegedly atypical cases such as ‘autistic art’, and perhaps much can be learned about allegedly atypical cases of artistic action-processes such as ‘autistic art’ from the vantage point of the cognitive ontology of artworks. Here, I will adopt the convention of putting the category ‘autistic art’ into inverted commas, aiming to invoke an element of doubt as to whether there are sufficient grounds for treating the artworks created by *neuro-atypical* or *neuro-diverse* agents like people on the autism spectrum as a separate category from mainstream art –in this context, art created by neuro-typical agents.

The insulation of ‘autistic art’ from mainstream art is almost always followed by a subordination of the former to the latter and an under-valorising of autistic artists and their outputs, on the assumption that autistic artworks are motivated by neuro-atypical mental processes such as exceptional visual memory, which enables the artist to reproduce complex visual representations (e.g. complex architectural scenes) with staggering attention to realistic detail (Crespi 2016; Sachs 1995). The ‘autistic’ v mainstream art divide has been founded on an alleged set of prototypical features that cut across ‘autistic art’, such as the tendency to create highly reality-based, representational and realistic artworks or the tendency to generate artworks based on rule-based repetition patterns for filling space (Crespi 2016). The systematic work carried out by Roth (2007a: 277-306, 2007b, 2014, 2018) on ‘autistic painting and poetry’, however, put these assumptions to the test and provides palpable comparative evidence that the outputs of autistic painters and poets in fact demonstrate

greater multiplicity and diversity than is standardly thought. More specifically, in her 2007ab and 2014 studies, Roth carries out line by line close-text analysis of poems by five autistic writers with an interest in recurring stylistic patterns of both form and content that could evidence and justify a genre or category of ‘autistic poetry’. At the same time, Roth compares the ‘autistic poetic outputs’ to work by neuro-typical poets of pretty much the same age and educational level as the autistic ones. The study did not deliver clear and conclusive evidence for an identifiable unified genre or category of autistic poetry, since the prototypical stylistic features of the works examined were in fact mixed. In her 2018 paper ‘Autism, Creativity and Aesthetics’ and her 2019 plenary talk at the Cognitive Futures in the Humanities Conference in Mainz, Germany, Roth also challenges the ‘autistic’ v mainstream art divide from a visual art standpoint. As Roth convincingly suggests, current explorations of ‘autistic drawing’ (e.g. Mullin’s collection ‘Drawing Autism’ (Mullin 2009)) focus and highlight specific attributes broadly consistent with the notion of systemising that is cognitively linked with autism spectrum mental traits such as repetition and rule-based space filling, but at the same time ignore a whole host of drawings that are abstract, figurative, cartoon-like, or surreal, and therefore are not characterized by the assumed attributes. Roth’s deflationary approach, suggests that while some autistic poetry and visual art displays prototypical features consistent with a certain mind style currently attributable to autism, ‘the body of work as a whole defies an overly unified portrayal’ (Roth 2018: 5) and makes any attempt to single out ‘autistic art’ as an identifiable unified category quite reductionist.

If Roth is right and ‘autistic art’ is not a prototypically identifiable unified category, is any divide between ‘autistic’ and mainstream art ontologically and empirically justified? There are two possible ways to address this question. If ‘autistic art’ is not defensible as a prototypically unified category, then it is possible that singling out such a category is as irrelevant as, say, singling out a category of ‘art produced by individuals with blood type A’. You might produce a collection of their artistic outputs, and even get to identify some recurring stylistic features in them, but it still raises the question of whether a category of ‘art produced by individuals with blood type A’ is in any way a theoretically meaningful and useful notion for a philosophy of art.

In line with the cognitive perceptive introduced in this book, however, there is one other possible way to address the given question: to ask whether ‘autistic art’ is a distinct category of art or not, is perhaps not a question about prototypical features but one about cognitive engineering. In this sense, the cognitive ontology of artworks and the distinct mechanisms of art as an action-process open the way for an entirely new research programme

in the study of ‘autistic’ and more broadly, ‘neuro-atypical art’. The questions to ask in this new research initiative concern the extent to which the (prototypically identified) artistic outputs of neuro-atypical artists (e.g. artists in the autism spectrum) have the same cognitive history, and are generated by the same minimal and universal cognitive components (artistic thought states/ processes), as the artistic outputs of neuro-typical artists. A programme of this sort would depend heavily on two-way interdisciplinary collaboration with current developmental and cognitive research in autism, with different theoretical models of autism yielding correspondingly different sets of implications and predictions about ways in which the cognitive engineering of ‘autistic’ artworks overlaps or departs from the causal mechanisms that generate artworks in neuro-typical artists. Research in psychology and cognitive science in the last twenty-five years or so has produced a number of competing explanatory frameworks on the nature and causes of autism (from Baron-Cohen’s (1995; Baron-Cohen et al. 1985) *mindblindness* theory to his later *empathising-systemising* approach (Baron-Cohen 2009), to Happé and Frith’s (2006) *weak central coherence* model, to Murray et al.’s (2005) *monotropism theory*) that differ significantly in their explanatory accounts and, therefore, in their assumed predictions about the cognitive history of ‘autistic’ artworks.

To give just one very crude example of such predictions, let’s momentarily turn to the mindblindness approach (Baron-Cohen 1995). Mindblindness is a state where the Theory of Mind capacity (ToM) is impaired in an individual, inhibiting her ability to metarepresent and sense the mental states, desires, beliefs and vantage point of others, as well as dissociate them from her own. According to Baron-Cohen (1995), the poor performance of autism spectrum children in the Sally-Ann test –a psychological test designed to investigate ToM– indicates that autism is most probably the result of mindblindness and ToM impairment. So, given that ToM is implicit as a presupposed capacity in the cognitive history of (neurotypical) artworks, because, as I extensively argued in Chapter 3, an element of metarepresentation and intuitive awareness can be assumed to be among the minimal constituents of artistic thought states/ processes, then the cognitive history of an ‘artwork’ produced by a neuro-atypical creator whose ability to metarepresent is significantly impaired could presumably be assumed to have different causal engineering and a different ontological status as a result. The mindblindness theory has been criticised from various standpoints in the psychological literature, and Baron-Cohen himself in (2009) moved on to a new empathising-systemising approach; the aim here is not to explore the causal engineering of ‘autistic art’, but just to

provide a simple illustration of how the cognitive perspective enables entirely new takes in research endeavours on the question of art and autism.

### **Proto-art, prehistoric art and the case of the *moai***

Although until the time machine is invented we have no clear evidence for it, we can safely speculate that there must have been a day in the history of Homo Sapiens when the first ever individual of our species endowed with the genetic mutation that made possible the kind of action that art is entertained the first ever artistic thought state/ process. From an internalist, mentalistic and cognitivist viewpoint, this was the first ever moment that art emerged as a distinct and unique human action, and we can refer to this moment as the inaugural intra-individual occurrence of proto-art. The questions of how and when the first ever publicly observable output emerged from proto-art, and how and when at least one of its publicly observable outputs was for the first time shared with at least one other human individual, and finally, how and when at least one of its publicly observable outputs started to become embedded for the first time in what could be described as a culturally and sociologically entrenched global art event, are fascinating speculations, with equally fascinating implications for the evolutionary (intra-individual) and socio-cultural (extra-individual) success of literature and art. What can be established through archaeological findings is that about 40,000 years ago<sup>77</sup> our species underwent a cultural explosion some of whose surviving outputs prototypically resemble the outputs we refer to as artworks today. In *New Perspectives on Prehistoric Art* (Berghaus 2004), a collection of essays from evolutionary biology, cognitive anthropology, feminist and ritual studies present prehistoric art as a culture-specific form of activity that shouldn't be assessed by modern art criteria. From a cognitivist viewpoint, the spiritual dawn of prehistoric art might have involved a somewhat different global event and somewhat different conventions and practices, at least as far as the use of artworks as ostensive stimuli is concerned, but in its fundamental cognitive infrastructure, the universal and minimal mechanisms that enabled its outputs could not have been any different from the universal and minimal mechanisms that enable art as an

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<sup>77</sup> There are various perspectives on what should be regarded the emergence of art in the species Homo species and whether it was the Sapiens that should be credited with the 'invention' of art, or whether the non-functional artifacts produced by the Neanderthals, or even Homo Erectus, and dating back some 200,000 or 300,000 years should be regarded as art (Bahn 1998: XV). These archaeological and art-historical questions are not central to the present discussion and make little difference to the present argument, but are integral to a discussion of the possible evolution of art as an intra-individual occurrence and its evolutionary precedents.

occurrence within the individual consciousness today. In the Cambridge *Illustrated History of Prehistoric Art*, Bahn, (1998), makes an assumption that is a case in point:

it is not simply that primitive hunters, 15,000 years ago, were motivated to depict the animals that inhabited their world, but that they did so with such flair and artistry. The challenge we face when evaluating these astonishing works is not merely anthropological, it is also a matter of aesthetics. (...) Why did these prehistoric artists (...) create works of art that went far beyond the merely functional[?] But instead they laboured away in the dimly lit recesses of their caves recreating details of shape and form that would do credit to artists of any epoch in the history of painting. (...) The conclusion contains an important truth, namely that the aesthetic urge in Homo Sapiens is not some recent refinement of civilization, but part of a deep-seated need of our species.

In Chapter 6, as well as in future work on the evolution of art and aesthetic experience, I will return many times to this insightful realisation by Bahn. These early laborious attempts of our ancestors to render with astounding vivacity in charcoal and hematite the heads and bodies of bisons and horses for some reason go beyond the merely functional, suggesting the existence of the internally motivated need for artistic creation that is inherent to how we intra-individually experience art as an action in the present day. It is not, therefore, just the external prototypical resemblances of certain outputs of prehistoric and cave art but also an assumed rudimentary resemblance in the laborious aesthetic action process.

But just as it is certain that at least some of the outputs of prehistoric and cave art must have had the cognitive history of artworks, so it is the case that some of the outputs that almost always feature in illustrated editions and discussions of prehistoric art couldn't possibly have had the distinct causal history of art. One archetypal such case in my view is that of the *moai*. On Easter Island in eastern Polynesia between the years 1250 and 1500, the Rapa Nui people carved and transported more than nine hundred monolithic statues of human figures known as the moai, symbolising the living faces of deified ancestors (Fisher 2005). The production, transportation and erection of the moai, the tallest of which was ten metres high and weighed eighty-two tonnes, is a remarkable and until recently mechanically inexplicable feat (Young 2006). Although the moai are typically grouped under the category artwork, one particular aspect of them makes it unlikely that any of the moai, except perhaps for the very first one, could have the cognitive history of artworks: despite slight differences in facial expression and features, all the moai are variations on the same theme. A monolithic statue, with an overly large head about three-eighths the size of the whole statue and roughly the same overall outline. The moai are more indicative of an action-process of partial

replication of an original archetype than of an artistic action-process as such, involving a non-trivial aspectual representation and a positive aesthetic response of the agent to the non-trivialness of her representation; the creators of the moai are, therefore, better conceptualised as manufacturers, reproducers and replicators rather than artists. An interesting question is whether the first ever moai to be conceived and created was an artwork or not, and the answer there can only be that, if the conception and creation of the first ever moai had the cognitive history of an artwork, then the first ever moai was an artwork –and this is at the present moment in epistemological history left to speculation to the best explanation– but the same definitely cannot be said about the 899 moai variations that followed: these variations or near replicas could not possibly be said to have the cognitive history of an artwork.

### **The broken ready-made and the *Fountain* replicas: can artworks have tokens of the same type?**

Let's devise a thought experiment.<sup>78</sup> In our thought experiment Duchamp's *Fountain* is selected by the 1917 committee of the inaugural exhibition of the Society of Independent Artists and is put on display at The Grand Central Palace in New York. On the night before the exhibition opens, the cleaning crew of The Grand Central Palace accidentally breaks the *Fountain*. Duchamp sues The Grand Central Palace and asks for an astronomic compensation, and The Grand Central Palace responds by offering to replace the *Fountain* with another urinal from the exact same production line. The artist refuses the offer, claiming that the 'original artwork' has been destroyed and cannot be replaced by any other urinal, even if that happens to be a urinal from the same production line as the one used for the *Fountain*. The Grand Central Palace lawyers reject Duchamp's claims, arguing that since the artwork is a ready-made and has not been manufactured by the artist himself, any other urinal from the same production line could replace it. Who is right? Duchamp or The Grand Central Palace lawyers? The story is not all that fictional. In recent years, the Internet has been flooded with reports about this, that or the other cleaner in contemporary art museums or art galleries binning or ruining or cleaning to utter destruction installations and other works of visual art they have mistaken for garbage. How are we to resolve the Duchamp versus Grand Central Palace hypothetical debate?

There are all kinds of things we don't know about cognitive essences. One crucial thing we don't know is whether cognitive essences leave material traces on the entities out

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<sup>78</sup> Many thanks to Iana Boukova for giving me the idea for this thought experiment.

there in the world they relate to. Think of a futuristic scenario where a form of technology is developed that makes cognitive essences visible. And assume that by making them visible we are able to see if the relational thread between an object out there in the world and the way it has been *seen* by the consciousness of some artist leaves an identifiable material trace on this particular object. If cognitive essences are found to leave identifiable material traces on the objects they relate to, then Duchamp deserves his compensation, as only that particular *token* of an object that bears the material trace of its cognitive essence can be regarded as the artwork, and no other perceptually indiscernible object can replace it. In this case, artworks are a case of an entity that only has *types*, without any possible tokens of this type being of the same ontological status as the type. If cognitive essences do not leave identifiable material traces on the particular token of the object they relate to, then The Grand Central Palace wins the debate, as any token of the same type could replace the ready-made artwork. The reason I love this little chunk of philosophical science fiction so much is because it captures a valid epistemological truth: after 4,000 years of the history of human science from the Mesopotamians to the present day, our knowledge about the universe and the world we inhabit, our understanding of the behaviour of matter, let alone our insight into the workings of a natural object like the mind, which only came under scientific scrutiny a mere fifty years ago, are still in an embryonic state. The vastness of the things we still don't have the slightest clue about is overwhelming as much as fascinating, and a consequent epistemic truism is that answers to an indefinite number of investigative questions raised in the arts and humanities today will require parallel scientific breakthroughs in empirical and cognitive domains that we might be years or decades or even centuries away from. However, scientific optimism faces this as a deep-seated and inevitable fact in the human search for truth and understanding, and acknowledges that the attempt to make even minute steps towards truth and understanding by means of empirical observation, close theoretical argument and rational speculation based on inferences to the best explanation is a venture laudable enough in its own right.

The question of whether cognitive essences leave identifiable material traces on the entities out there in the world they relate to touches on one other instance, this time an actual one. After the end of the 1917 exhibition of the Society of Independent Artists, Duchamp's original *Fountain* was lost. But, as it appears, Duchamp then authorised another seventeen replicas of the *Fountain*. The replicas would be seventeen tokens of the same type (*Fountain*). The issue this raises for the ontology of art is whether artworks are types of entities that can indeed have tokens with the same ontological status as the type, and the

puzzle here can obviously be traced back to the question of whether or not cognitive essences leave identifiable material traces on the particular token of an object that has been *seen* by an artist in a certain non-trivial way. Just as in the thought experiment above, if cognitive essences leave material traces on the particular token of an object that was *seen* by the artist in a certain way, then only the 'original' *Fountain* that was lost was an artwork, and no other token of this ready-made type can claim the same ontological status. If cognitive essences do not leave material traces on the particular token of an object that was *seen* by the artist in a certain way, then any other token of this ready-made type can in principle claim the same ontological status. In any case, from a cognitivist viewpoint it doesn't seem ontologically reasonable or feasible that the artist could in any way 'authorise' that only seventeen tokens of the ready-made type will have the same ontological status as the type itself and all remaining tokens will not, precisely because arthood is not the result of a conventionalised or institutionalised act of 'naming' an object as such and such, even if the person 'naming' it happens to be an artist. The authorisation of the seventeen replicas by Duchamp is an act permitted by the conventions of the institutional context of the artworld, but potentially clashes with the cognitive essence of artworks and the possible ways this cognitive essence will be found to behave at the level of matter.

## Chapter 6

### Literature, art and relevance

#### 6.1 Evolutionary and cognitive conundrums revisited through the dual nature of art

We can safely speculate that there must have been a moment in human evolution when art as a distinct and unique human action occurred for the first time in our species. The elusive chronology of this moment, if it could be pinned down at all, is a task for palaeontology and the history of art. But the content of that moment is as much a task for the philosophy of art. The action-based, mentalistic and cognitivist approach to literature and art that I have sketched in this book makes it possible to form a range of new hypotheses about the content of the moment art may have emerged for the first time in our species, and has an array of substantive interdisciplinary implications for current research in cognitive science, cognitive anthropology, cultural studies, evolutionary psychology and cognitive pragmatics. Let us take a brief detour through this fascinating conundrum which, as I will show next, is as much a cognitive puzzle as an evolutionary one.

The standard question that all extant evolutionary scenarios about literature and art (Boyd 1998; Cave 2016; Pinker 2007) have so far tried to answer is about why the mind-external stimuli that we refer to as artworks survived in the evolution of the human species as enduring and strikingly successful publicly-situated cultural entities. However, my dual approach to literature and art as both as an intra-individual and an inter-individual occurrence allows us to refine this question by embedding it under two distinct but mutually informing theoretical problems. The one problem indeed concerns the evolutionary success of art as a shared, public inter-individual entity, but this is only half of the story. The other half of the theoretical puzzle concerns the evolutionary success of art as a private, mind-internal, intra-individual entity. To put it differently, half of our scenario should be able to account for why the intra-individual phenomena I have referred to as artistic thought states/ processes survived in the evolution of our species as enduring and strikingly successful private operations of the human mind-internal reality.

From a chronological point of view, we might speculate that this latter problem took precedence over the first one. The dual nature of literature and art entails that the first ever occurrence of human art was not in the first ever shared public stimulus that had the cognitive essence of an artwork, but rather in the first ever aesthetic response of a non-naïve agent to a private aspectual representation in her own mind, the first ever moment, that is, that an artistic thought state/ process was experienced by one of our early ancestors. We can assume

that the distinct kind of action that art is occurred at the very moment when an unknown ancestor became able for the first time to entertain an artistic thought state/ process. Were the outputs of this first ever artistic thought state/ process physically materialised in the mind-external reality of the agent, and also, were they immediately shared with others? Well, perhaps. But we could equally speculate that that for an indefinite amount of time artistic thought states/ processes could have remained unexpressed private entities in the mind-internal reality of human agents, or that for an indefinite amount of time artistic thought states/ processes were physically materialised in the mind-external reality of agents, but without necessarily being shared with others.

This vantage point refines and breaks down into three hypothetical stages the anthropological and evolutionary path between the moment when the first ever public entity that merits the name of the first shared proto-artwork occurred, and the earlier moment when a human agent became endowed with the type of cognitive engineering that made art as an action possible for our species. The first stage requires a genetic mutation that enables a human agent to entertain an artistic thought state/ process for the first time. The second stage involves an elusive period during which the outputs of this newly acquired ability remain private, either because they are mere unexpressed ideational outputs in the inner mentation of human agents or because, albeit physically materialised in the mind-external reality, they are nevertheless not shared by their creators with others. It is possible, in other words, that for an indefinite amount of time proto-artworks might have been created without being shared or shown, thereby remaining private, non-culturally situated entities. And finally, we can speculate on a third stage in which a proto-artwork is at last shared with and shown to someone other than the creator. It is from this latter moment that art begins its evolutionary journey as an inter-individual, publicly available and later, culturally-situated occurrence.

The two evolutionary sub-problems, the intra-individual and the inter-individual one, seem to me to stand in a fruitful and mutually informing relationship. It is possible, for instance, that whatever it is about literary texts and artworks as publicly-situated stimuli that made them worth the attention of both individual receivers and cultural communities, might also provide a causal explanation of why the particular type of mental engineering involved in the creation of literary texts and artworks made artistic thought states/ processes worth the attention of the individual mind of creators. And conversely: whatever it is about the particular type of mental engineering involved in the creation of literary texts and artworks that made artistic thought states/ processes worth the attention of the individual mind of creators might also provide a causal explanation of why individual receivers and cultural

communities found literary texts and artworks worth entertaining, attending to and seeking to revisit, to the point where art evolved into one of the most enduring human cultural phenomena.

In other words, to account for the evolutionary success of art, we must account for why an artist's minimal mind-internal operations (artistic thought states/ processes) were relevant enough to the human mind/ brain to be as worthy of its sustained attention as the public stimuli of artworks themselves. The evolutionary account made possible by this outlook would start with mind-internal phenomena and end in the realm of shared public representations, allowing thereafter for a series of possible hypotheses about the inter-individual story of art and the macro-mechanisms (Sperber 1996: 50) that enabled it to be incorporated into and propagated as part of the process of human cultural transmission. Which aspects of art as an action have a bearing on its selection and propagation as a central part of human public life? What is it, about the particular type of action that art is, that led to artworks being amongst humanity's most successful and enduring cultural representations?

Notice that these questions are evolutionary as much as cognitive. Their evolutionary aspect concerns the reasons for the evolutionary success of literature and art as an intra-individual and inter-individual occurrence. The cognitive aspect concerns the reasons why literature and art as an action, on the one hand, and its distinct outputs (artworks and literary texts), on the other, are relevant for and merit the continuous attention of the human cognitive system. The apparent non-utilitarian nature of literature and art and its distinct outputs – which is widely acknowledged in pertinent evolutionary research – makes the questions about attention allocation and evolutionary success even more fascinating and perplexing.

In the rest of this chapter, I will draw on relevance theory and recent findings in cognitive neuroscience to show that as far as literature and art is concerned, the cognitive and evolutionary questions are inseparable, with the cognitive question potentially shedding explanatory light on the evolutionary one. I will also show how the dual vantage point I have tried to establish on art as an intra-individual and inter-individual occurrence broadens the interdisciplinary implications of the cognitive question, enabling –among other things– backward effects on the relevance theoretic edifice itself, and potentially broadening its existing theoretical machinery. The aim of this analysis is not to spell out a full-fledged evolutionary scenario about the origins of art, or articulate a full-blown hypothesis about why art merits the attention of the human cognitive system. In future research, I will address these issues in detail, aiming to develop a full-fledged naturalist and cognitivist evolutionary account of the origins of art and aesthetic experience. I would nevertheless like to make here

some provisional suggestions to this end, which among other things highlight an aspect of artistic thought states and processes that I deliberately did not discuss in Chapter 3: their relevance-yielding aspect. Building on the two-way interdisciplinary methodology that underpins the intellectual commitments of this book, I will try and demonstrate the wide bi-directional interdisciplinary implications that the relevance-yielding aspect of literature and art has for current theory development in a range of pertinent empirical or quasi-empirical disciplines, from pragmatics and relevance theory through to cognitive anthropology, cognitive cultural studies, neuroscience, cognitive science and developmental psychology. Needless to say, I take such bi-directional implications as tangible examples of the gains to be made from two-way interdisciplinary research programmes between the arts and humanities and the empirical and cognitive sciences (for detailed discussion see Kolaiti 2019: 95-129), where the arts and humanities do not merely draw on but also contribute decisively to hypothesis-formation in the empirical and cognitive sciences through up-to-date naturalistic and empirically and cognitively informed research.

## **6.2 Artistic thought states/ processes as relevance yielding phenomena**

A fundamental assumption in relevance theory (Sperber and Wilson 1995) is that human cognition has evolved in the direction of increasing efficiency. The human cognitive system tends, as Sperber and Wilson (1995: 38-46, 260-66) put it in their *cognitive principle of relevance*, to be naturally geared towards the maximisation of relevance, in managing its expenditures of mental effort and making the most productive use of its attentional and other resources. Relevance is technically defined as a relation between effort and effect such that the greater the (positive or worthwhile) effects of an input –assuming that effort remains constant– the greater its relevance for an individual at a time, and the smaller the mental effort required to process it –assuming that effects remain constant– the greater its relevance for an individual at a time.

The cognitive principle of relevance *inter alia* explains how human cognition avoids a computational explosion. It explains why our cognitive systems do not pay the same amount of attention to each of the indefinite number of inputs out there in the world and/ or internal to our minds and bodies: that is, the indefinite number of facts that are perceptible or inferable at any time in our physical, bodily, mental, and cultural environment. It also, and more crucially, explains why we attend to the particular facts that we do: for an input (be it a

phenomenon or stimulus)<sup>79</sup> to merit the attention of the human cognitive system, it must seem relevant enough to be worth attending to.

Sperber and Wilson would therefore say that in order to survive, public cultural stimuli have to hold inter-individual and collective attention and yield a good payoff for the processing effort required. Artistic phenomena and stimuli (including literary ones) merit the attention of the human cognitive system at various time-scales (momentary, developmental, evolutionary), to the point of art being among the most enduring and successful constituents of human public, cultural and mental life. Given the dual nature of art as an intra-individual and inter-individual occurrence, and its consequence that artworks and literary texts are public cultural stimuli and at the same time causal objects with a specific cognitive history, to ask why art merits the selectivity of human cognition is a twofold question: the one question is why public stimuli like artworks and literary texts merit the attention of human receivers; the other is why literary and artistic creation as a particularly laborious and effortful area of human action and performance merits the sustained attention and active engagement of human creators. From the viewpoint of Sperber and Wilson's cognitive principle, to say that an agent allocates steady and recurring attention on a process of literary and artistic creation is in other words to say that the agent derives considerable relevance from this process. Sperber and Wilson's perspective could, therefore, be reformulated as the following assumption: in order for the type of causal objects that artworks are to survive, the mental operations involved in their cognitive history (artistic thought states/ processes) would have to hold the intra-individual attention and yield a good payoff for the processing effort required.

Artistic thought states/ processes are psychologically real entities, and can be characterized as spontaneously arising complex mental states in which an agent allocates steady and recurring attention to her intuitive awareness of the non-trivial aesthetic nature of some of her aspectual representations.

For an artist, being in an artistic thought state/ process, a state of sustained attention allocation and aesthetic focus on one's own aspectual representations, is indispensable and intrinsic to her specific mind-set. In my own case, to be a poet is, amongst other things, to make huge investments of attention and processing resources in my own aspectual

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<sup>79</sup> By 'phenomenon' I refer to any occurrence internal or external to the information-processing device, which occurs naturally or automatically or involuntarily and that the device processes as input. By 'stimulus' I refer to any occurrence external to the information-processing device designed to be perceived and that the device processes as input.

representations, which for the most part occur as phenomenal consciousness, words in the mind.<sup>80</sup> Fragments of auditory, visual, tactile, olfactory and kinaesthetic phenomena, half-forgotten or unfinished poems, flashes of conceptual ideas, self-reflexive beliefs about the aims of literature, art and poetry writing, memorised words or phrases from various communicative registers, mental imaginings, affective states, unlexicalized bodily sensations, fragments of encyclopaedic knowledge, and all the assumptions about the physical and human world that surrounds me that become manifest in my cognitive environment are constituents of internal mentation that float at any one time in my mind, integrating themselves in my aspectual representations and demanding notice and consideration. Why does my cognitive system not discontinue this activity, but rather returns to it with the regularity and constancy with which every artist returns to the laborious enterprise that the creation of an artwork is? And ultimately, why does it find this laborious and, apparently at least, non-utilitarian process intrinsically pleasing? It is fascinating that these exact same questions extend equally to that early unknown ancestor, the first human individual who experienced for the first time this intrinsic form of pleasure by focusing on a distinct type of inner mentation similar enough to mine to be able to adequately describe her experience as the first incidence of art as an intra-individual occurrence in the evolutionary history of our species.

From the viewpoint of Sperber and Wilson's cognitive principle of relevance, to say that an agent allocates steady and recurring attention to her aspectual representations as aesthetic objects is, in other words, to say that the agent derives considerable relevance and positive or worthwhile effects from this mind-internal operation. Artistic thought states/processes can therefore be described as characteristic of a distinct type of mentality, of a mind-set for which, *inter alia*, maintaining a steady focus on one's own aspectual representations as aesthetic objects must achieve considerable relevance and worthwhile effects. If this mind-internal operation did not yield relevance and positive effects for this particular mentality, the cognitive system would ultimately divert attention elsewhere; art would not have been possible either as an intra-individual or an inter-individual occurrence.

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<sup>80</sup> However, other types of creative mental conceptions which do not take the form of aspectual representations are also integral to the production of art, and serve as objects of attentional investment. An artist handles a vast array of considerations in developing her work, from conceptual issues to how she manages and organises her material to issues of installation and presentation, etc. All these considerations are part of the practical reasoning process involved in art formation, and deserve a place in an explanatory model of art as an occurrence internal to the individual mind.

Artistic thought states/ processes are relevance-yielding mental operations. Artistic thought states/ processes are phenomena. They occur naturally, automatically and involuntarily within the individual mind. Artworks are stimuli. A stimulus is an occurrence designed to be perceived. We can speculate that artworks and artistic thought states/ processes share a good part of the engineering that makes them capable of yielding relevance and causing the type of positive or worthwhile effects they cause, enough to be worth the steady and recurring attention of the individual and collective mind. Because the intra-individual aspect of art chronologically precedes the inter-individual one, it seems reasonable to suppose that artworks inherit the capacity to cause the type of positive or worthwhile effects they cause from the properties of artistic thought states/ processes. But what types of effects might these be? In the framework I am considering here, to ask what types of effects these might be is synonymous with asking what types of relevance these effects might be claimed to yield.

To address this question, I will turn again to Sperber and Wilson's (1995) relevance theory, along with recent findings in cognitive neuroscience and experimental psychology, but in a two-way interdisciplinary methodology. The insights provided by relevance theory and current experimental findings will allow me to start shedding light on this question in explanatory and psychologically realistic terms, while at the same time, my attempt to shed light on this question in explanatory and psychologically realistic terms will lead to backward interdisciplinary effects for current hypotheses in relevance theory and cognitive neuroscience. So let's start delving more deeply into the question of possible types of effects and relevance.

### **6.3 Art, agency and attention: relevance beyond cognitive effects?**

In discussing what makes a phenomenon or stimulus relevant to an individual mind, Sperber and Wilson (1995) adopt the *computational* or *representational theory of mind* (Fodor 1975, 1981, 1983), according to which the facts that are manifest to an individual at a time and make up what in earlier chapters I referred to as this individual's 'cognitive environment' or 'background' are computed and processed by the human mind in the form of *mental representations*, or *propositions* or *sentences in the language of thought*.<sup>81</sup> In line with Fodor (1983), echoed in Sperber and Wilson (1995: 71-72), not all mental representations are conceptual representations. The representational theory of mind also covers linguistic (e.g.

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<sup>81</sup> Sentences in the language of thought are logical forms made up of concepts, and should not be thought of as synonymous with natural language sentences, which are made up of words.

phonetic, syntactic, semantic), as well as perceptual (e.g. visual and auditory) representations. So, for relevance theory, the inputs to cognitive processes can be any type of representation – perceptual, sensorimotor, conceptual, etc. In this light Sperber and Wilson (1995: 153) note that:

A stimulus is a phenomenon designed to achieve cognitive effects. Relevance for a stimulus is thus the same as relevance for any other phenomenon (...).

And relevance of a phenomenon is defined as follows:

**Relevance of a phenomenon (classificatory)**

A phenomenon is relevant to an individual if and only if one or more of the assumptions it makes manifest is relevant to him.

**Relevance of a phenomenon (comparative)**

*Extent Condition 1:* a phenomenon is relevant to an individual to the extent that the positive cognitive effects achieved when it is optimally processed are large

*Extent Condition 2:* a phenomenon is relevant to an individual to the extent that the effort required to process it optimally is small. (Sperber and Wilson 1995: 265-6).

It is clear from this quote that for Sperber and Wilson (1995), relevance involves a balancing of mental effort and a particular type of positive or worthwhile modifications or effects, *cognitive effects*. Sperber and Wilson (1995: 109) assume that within the range of possible modifications of the physical environment, there are cognitive modifications, and within the range of possible cognitive modifications, there are positive cognitive modifications which lead to improvements in knowledge: that is, to worthwhile cognitive effects. They then refine and illuminate their notion of cognitive effects by identifying the following three types of such effect:

- a) more or less strongly or weakly evidenced *contextual implications* which result from interaction between new and old information used as premises in an inference process (Sperber and Wilson 1995: 109),
- b) *strengthening* of old assumptions by new information which provides further evidence for them (Sperber and Wilson 1995: 109),
- c) *contradiction* of old assumptions by new information which provides evidence against them and may lead to their *abandonment or revision* (Sperber and Wilson 1995: 109).

Note also that relevance is treated as both a classificatory and a comparative concept (Sperber and Wilson 1995: 129). In the comparative sense, an organism assesses the relevance of an input intuitively on the basis of expectations about the cognitive effects to be achieved and the effort required. In the quantitative sense, relevance might be testable by, say, counting the number of contextual implications achieved by adding an assumption to a context, and measuring the effort required to derive these contextual implications.

I would like to momentarily draw a number of pertinent theoretical and epistemological inferences about the relevance theoretic framework based on Sperber and Wilson's notion of relevance as a balancing between effort and cognitive types of effect. As I have suggested elsewhere (Kolaiti 2019: 116-120) *Relevance* was not merely a new theory about human communication but a significant epistemic step which –amongst other things– broadened the range of explanations available to the humanities by drawing on the paradigm of the natural sciences and allowing phenomena to be accounted for in psychologically realistic terms through a body of testable Theoretical<sup>82</sup> suggestions compatible with the scientific method. From an epistemic viewpoint, *Relevance* was a ground-breaking step for the parallel reason that it was not just a theory of communication but also made some basic assumptions about cognition. Sperber and Wilson founded their model of human ostensive inferential communication on a refined view of human cognition, making the most of research in psychology and cognitive science on how the mind works, and with relevance theory itself entering the interdisciplinary discussion about the workings of the mind by introducing a range of theoretically significant cognitive notions: the cognitive principle of relevance is the backbone of the relevance theoretic contribution to understanding the nature and evolved tendencies of human cognition, while the notions of a cognitive environment and positive or worthwhile effects on an individual organism's cognitive environment at a given time are fundamental to any psychologically realistic and explanatory account of how our cognitive system interacts with the ecology of our physical and cultural surroundings. At the same time, it might be argued, though, that the inception and framing of relevance theory under a strong influence by the representational view of the mind (Chomsky 1980; Fodor 1975, 1980, 1981, 1983, 2000)<sup>83</sup> has so far limited the exploration of potential

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<sup>82</sup> In line with Kolaiti (2019: 108-120), I use the convention of rendering 'Theory' and 'Theoretical' with a capital 'T' when I want to contrast Theory compatible with the methods and claims of the natural sciences to pre-theoretical discourse.

<sup>83</sup> Sperber and Wilson have been influenced by the Fodorian view of the mind but have also diverged from Fodor on a huge number of points (such as massive modularity, the possible existence of conceptual modules, pragmatic influences on truth-conditional content and the relation of concepts to

interdisciplinary effects of relevance as a theory of cognition and attention within representational cognition, while –as I will try to show next– the relevance-theoretic perspective to attentional selectivity may be equally integral to also explaining partly or wholly non-representational cases of relevance and effects. This latter epistemic point is inextricably tied to my questions about types of effects and relevance motivated by the distinct kind of phenomenon and stimulus that literature and art is as an intra-individual and inter-individual occurrence, and the extent to which a relevance-based theory of attention and agency may also be compatible with *embodied* and *enactivist* views of cognition. But before moving on to these suggestions, let me draw few more crucial inferences that will help us refine our understanding of the epistemic underpinnings of relevance as a theory of cognition.

The relevance-theoretic notions (Sperber and Wilson 1995; Wilson and Sperber 2012) of relevance in relation to a cognitive context or cognitive environment, and the derivation of positive or worthwhile effects for an individual organism at a given time as a cognitive type of effects, in my view imply an underlying view of human agents,<sup>84</sup> human cognizers and human individual organisms as *cognitive organisms*. On the assumption that they are cognitive organisms, human agents interact with the ecology of their natural, bodily, mental and cultural environment guided by expectations and forces guided principally by the system that composes a cognitive organism, that is the *cognitive system* as a knowledge acquisition and knowledge management device. According to the representational or computational theory of mind endorsed by relevance theory, knowledge is assumed to be represented in the device in the form of mental representations. Hence, the *selective* interaction of the cognitive organism with her surrounding natural and cultural environment in terms of attention allocation is assumed to be guided by expectations of what to my mind seems, clearly, a case of *cognitive relevance* resulting from a range of positive or worthwhile cognitive modifications that allocating attention to certain phenomena and stimuli can bring about in the knowledge stored within the cognitive organism's memory. Notice here how the element of selectivity in attention allocation and the organism's management of its resources makes the cognitive strand of relevance theory integral to the extant discussion about possible *theories of attention*. In fact, relevance theory has described itself from the start as a theory of how attention and processing resources are allocated. I would propose that it could be more specifically described as a 'worthwhile cognitive effects theory of attention'.

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words), and can be said to have been just as much influenced by Chomsky's representational view of the mind (e.g. Chomsky 1980).

<sup>84</sup> Where by 'human agent' I refer to an individual organism capable of deliberation and action.

In the light of my discussion above, it makes perfect sense, I think, why all three types of cognitive benefit determined by Sperber and Wilson (1995) and Wilson and Sperber (2012) are propositional/ representational types of effects, and involve improvements in knowledge. The type of relevance yielded by such effects could quite legitimately, I guess, be described as a case of cognitive relevance, since the pertinent worthwhile modifications affect solely the organism's knowledge acquisition device or cognitive system so to speak. And for a cognitive organism, these would indeed be the reasonable types of relevance and effect to seek for. Meaning-related propositional effects resulting from the interpretation of literature and art are a conceptual type of effect that falls clearly under Sperber and Wilson's cognitive effects and (cognitive) relevance account. For a cognitive organism, these latter meaning-related propositional effects would be precisely the kind of effects to look for and expect in its interaction with artworks and literary texts, and the (cognitive) relevance yielded by this interaction would be a good enough payoff for the cognitive organism's effort in processing a literary text or artwork. It is unclear from Sperber, Wilson and Carlson's existing writings, if this underlying view genuinely reflects their perspective of human individual organisms or if it is a contingent fact resulting from mere distribution of labour: to put it differently, it is unclear if relevance theory has so far discussed solely cognitive, propositional and representational types of effects and relevance because it believes that these are the only existing types of effects and relevance, or because it has merely divided labour by investigating the propositional and cognitive types of effects and relevance without nevertheless denying the possibility of non-propositional and non-cognitive ones.

Before attempting a range of novel speculative suggestions that might perhaps broaden this picture, let me sketch in even more detail Sperber and Wilson's epistemic and cognitive framework with reference to more recent developments within relevance theory. It is worth noting that Sperber and Wilson occasionally allude to the possibility that there may be more ways of achieving cognitive effects than the three mentioned above. In *Relevance* (1995: 66), for instance, there is a brief reference to other types of cognitive effect, such as reorganisation of knowledge. Also, in 'Truthfulness and Relevance', Sperber and Wilson (2002: section 4) write:

Here we will consider only one type of cognitive benefit: improvements in knowledge (theoretical or practical). This is plausibly the most important type of cognitive benefit. There may be others: improvements in memory or imagination, for example (although it might be argued that these are benefits only because they contribute indirectly to improvements in knowledge; better memory and imagination lead to better non-demonstrative inference, and therefore to better knowledge).

In more recent work, Sperber and Wilson (2015) and Wilson (2018) use a broader notion of inference, encompassing a much wider range of inferential procedures compared to the one adopted in early work in relevance theory. On this broader view of inference (see Mercier and Sperber 2011, 2017), cognition involves going well beyond the information available to the senses, integrating sensory stimulations at millions of nerve endings both to identify events in the environment and appropriately respond to these events by means of inference; memory and perceptual processes are therefore seen as involving a substantial element of inference, kinesic and sensorimotor mechanisms are treated as inferential, and relevance-yielding processes are explicitly referred to as inferential processes whose output is an indefinite *array* of propositions, with propositions construed in a much broader sense than that of natural language sentences so that they make room for the elicitation of images and phenomenal states. Sperber and Wilson (2015), Wilson (2018) and Wilson and Carston (2019)<sup>85</sup> draw on this broader notion of inference in order to elaborate on ideas that were alluded to in early work in relevance theory (e.g. about indeterminacy of meaning, impressions consisting of a vast array of propositions etc.) and accommodate within a unitary account the three types of cognitive effects outlined earlier and a further type of so-called ‘*non-propositional*’ effects that often involve and are enabled by the parallel activation of perceptual/ sensorimotor and emotional mechanisms. In contrast with cognitive effects that are robustly propositional, ‘non-propositional’ effects do not constitute a meaning or message or import that can be rendered as a single proposition (or even small set of propositions) but amount to an indefinitely rich and complex array of propositions –with propositions construed in a much looser sense than that of natural language sentences, thereby making room for the evocation of unlexicalized *ad hoc* concepts, images and states of mind.<sup>86</sup>

This recent work by Sperber, Wilson and Carston accounts for one of the possible roles of perceptual/ sensorimotor and emotional mechanism activation during utterance interpretation, as well as for cases of embodied representationalism (Bolens 2012) in, say literary comprehension and interpretation. However, even this latter type of ‘non-

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<sup>85</sup> It should be noted that there is nothing in this recent work by Sperber, Wilson and Carston that was not alluded to in the first edition of *Relevance*. So, their recent work is in fact an elaboration or development of earlier ideas, rather than something entirely new.

<sup>86</sup> It is important to distinguish here the claim that propositions evoke or are evoked by images –which relevance theory has always endorsed– from the claim that propositions consist of images, which relevance theory denies. In line with this, unlexicalised concepts can be part of propositions but images can’t.

propositional' effects arising from the mobilisation of sensory, kinesic and affective information during utterance interpretation are still clearly a case of representational, conceptual and as such, propositional and hence, cognitive effects.<sup>87</sup> Notice that the so-called 'non-propositional' effects are non-propositional merely in the sense that they do not constitute a meaning or message or import that can be rendered as a single proposition or small set of propositions. But still, the domain of operation of 'non-propositional' effects is yet again an indefinite array of propositions in the cognizer's cognitive environment, in which an indefinitely complex array of worthwhile modifications can be supposed to occur as a result of a 'non-propositional' type of effects enabled by the parallel mobilisation of the perceptual/ sensorimotor and affective systems during utterance interpretation. 'Non-propositional' effects are therefore 'non-propositional' only in a very loose sense: Sperber, Wilson and Carston are in fact talking about a type of effect that perhaps would have been much better described as weakly propositional rather than 'non-propositional' –or, to use Wilson and Carston's (2019: 11) expression, as 'arrays of weakly communicated propositions'.<sup>88</sup> The notion of 'non-propositional' effects allows the explanatory mechanisms of relevance theory to account for embodied representationalism during utterance interpretation. The same could perhaps be argued for the neighbouring notion of *poetic effects*, developed within a relevance theory framework by Pilkington (2000). Still it could be argued that even these types of effects do not indicate a significant departure from or broadening of the epistemic and theoretical implications of the cognitive aspect of relevance theory as I have sketched them so far.

The cognizer is still under scrutiny in her capacity as a cognitive organism. The selective interaction of this cognitive organism with competing physical, bodily, mental and cultural inputs in terms of attention allocation is guided by relevance-yielding inferential processes whose output is an indefinite array of positive or worthwhile cognitive modifications to an indefinite array of propositions in the cognitive organism's cognitive environment. These positive modifications are seen as optimising the function of the cognitive organism's knowledge acquisition and knowledge management device in terms of identifying events in the environment and appropriately responding to these events by means

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<sup>87</sup> The same claim is made in Sperber and Wilson (1995: 24). And, in fact, this is precisely the reason why Sperber, Wilson and Carston have adopted the typographical convention of putting the term 'non-propositional' effects in inverted commas.

<sup>88</sup> The same claim is made in Sperber and Wilson (1995: 24). And, in fact, this is precisely the reason why Sperber, Wilson and Carston have adopted the typographical convention of putting the term 'non-propositional' effects in inverted commas.

of inference. After the addition of ‘non-propositional’ effects to the relevance theoretic framework, just as before it, the human agent or cognizer is still attracting Sperber, Wilson and Carston’s theoretical attention as a cognitive organism whose attentional and other resources are directed by cognitive types of effects and cognitive considerations of relevance. However, Sperber, Wilson and Carston have never so far explicitly precluded the possibility of other non-cognitive and non-representational types of effects, while the existence of such effects does not necessarily stand in competing relation to a representationalist approach to effects and relevance. To explain how that might work, I would now like to turn again to literature and art in the light of recent neuroscientific and psychological findings and start making a number of suggestions about possible types of effects and relevance that, amongst other things, could complement and extend the current machinery of relevance theory as a theory of cognition and attention, as well as feed back to neuroscience, psychology and other extant theories of selective directedness through a re-interpretation of these exact same findings from a relevance-theoretic perspective.

Artistic thought states/ processes are phenomena. Artworks and literary texts are stimuli. Artistic thought states/ processes and artworks and literary texts attract and merit the attention of human agents. As I have provisionally argued in Kolaiti (2019: 76-91), a crucial implication of a robustly representationalist approach to worthwhile effects and relevance is the counterintuitive assumption that mind-internal phenomena like artistic thought states and stimuli like artworks and literary texts merit an individual organism’s attention merely because they give rise to improvements in knowledge –even if such improvements in knowledge can be said to arise in the form of an indefinitely rich and complex array of ‘non-propositional’ effects via the mobilisation of the perceptual/ sensorimotor and affective systems during art reception.

From a literary-theoretic and art-philosophical point of view, a theoretical edifice that does not also involve non-cognitive types of effects and relevance could be seen as making the following two predictions: a) that artworks and literary texts are stimuli of the exact same kind as mere utterances, i.e. *ostensive stimuli* (Sperber and Wilson 1995: 152-153), and b) that artworks and literary texts exhaust their *raison d’être* and are worth the attention of the individual organism principally or solely because they give rise to enough improvements in knowledge to offset the processing effort required. Both predictions can be shown to be counterintuitive.

The primary function of ostensive stimuli –e.g. utterances, gestures such as pointing or showing, imitations or demonstrations, etc.– is communicative: they are used to make an

informative intention mutually manifest or in simpler words, used to let the audience know that the communicator intends to inform them of something. To achieve this goal, they must satisfy two conditions: they must i) attract the audience's attention and ii) focus it on the communicator's informative intentions. Crucially for our discussion, Sperber and Wilson (1995: 152-153) propose that the best ostensive stimuli are entirely irrelevant unless they are treated as ostensive. Mere utterances are ostensive stimuli. Mere utterances, like any ostensive stimulus, achieve relevance by attracting the audience's attention, focusing it on the communicator's intention and giving rise to improvements in knowledge by means of cognitive effects effects –and are indeed entirely irrelevant unless they are treated as ostensive. It should be quite uncontroversial that artistic stimuli fall at least partially within the scope of ostensive stimuli: artworks and literary texts may well be *used as* ostensive stimuli, i.e. *used* to make an informative intention mutually manifest and give rise to improvements in knowledge by means of cognitive effects. The problem with a theoretical account that does not predict other types of effects beyond cognitive ones is that, in such an account, artistic stimuli would be assumed to be relevant to the individual organism solely on the grounds of giving rise to improvements in knowledge by means of cognitive effects – since cognitive effects are the only type of effects that make a stimulus relevant to an individual organism. Now, given that this is precisely what ostensive stimuli do and given that artistic stimuli have an ostensive function, then artistic stimuli would be seen as fully accounted for by the notion of an ostensive stimulus: artistic stimuli would be seen as nothing more than an instance of ostensive stimuli. Given that the best ostensive stimuli are entirely irrelevant unless they are treated as ostensive, it would follow that artistic stimuli –being nothing more than ostensive stimuli– are entirely irrelevant unless they are treated as ostensive. This latter implication, however, appears counterintuitive: artistic stimuli seem to have *intrinsic value* of a certain kind. Unlike ostensive stimuli, artworks and literary texts appear to be perceptually and aesthetically pertinent to the organism independently of having or not having a parallel incidental ostensive function, they are pertinent to the 'senses', they are there to be experienced by and through the body, eliciting the fundamentally embodied type of characteristic experience we intuitively and pre-theoretically refer to as aesthetic experience. If so, then artistic stimuli cannot be adequately described as being nothing more than an ostensive stimulus and therefore, cannot be convincingly said to exhaust their *raison d'être* simply and solely in giving rise to the types of effects (cognitive effects and improvements in knowledge –even in the sense of an indefinitely rich and complex array of weakly propositional types of effects–) that ostensive stimuli give rise to.

My claim here is not that artworks and literary texts do not amongst other things give rise to improvements in knowledge, or do not yield (cognitive) relevance and cognitive types of effects, but that they are not principally, solely and necessarily relevant to human agents as a result of any (cognitive) relevance and cognitive types of effects they might happen to yield. And if so, artworks and literary texts can be seen as exemplary case studies of alternative, non-conceptual reasons why various phenomena and stimuli merit the sustained attention of human agents.

The picture becomes even more challenging if we shift the focus to phenomena like artistic thought states/ processes and the kind of action that the creation of art is. It would be grossly counterintuitive to claim that the early laborious attempts of our ancestors, tens of thousands of years ago, to depict in the dimly lit recesses of their caves the animals that inhabited their world, with a flair, artistry and astounding vivacity that went far beyond the merely functional and recreate details of shape, movement and form that would do credit to artists of any epoch in the history of painting (Bahn 1998), were processes that merited the vast attentional effort of the creators mainly and solely because they gave rise to improvements in knowledge, i.e. to (cognitive) relevance and cognitive types of effects.

To rephrase: if artistic thought states/ processes and artworks and literary texts are phenomena and public stimuli, respectively, that merit an individual organism's attention, but cannot be said to yield a payoff solely –if at all, in some cases– in the form of cognitive types of effects, then existing explanatory accounts of the relevance of a phenomenon or a stimulus for an individual at a time must somehow be expanded, complemented or reformulated to accommodate further non-representational, or at least, minimally representational types of effects that would explain the payoff produced when a human agent responds to, maintains attention on and recurrently returns to the intra-individual phenomenon and/ or the inter-individual stimulus that an artistic thought state/ process and an artwork and literary text are.

Phenomena like artistic thought states/ processes and stimuli like artworks and literary texts seem to raise constructive questions about the causal mechanisms behind the selective directedness of our mental lives, which can be further generalised to a vast range of other phenomena and stimuli, including areas of human action and performance, bodily and intellectual.

As Deirdre Wilson suggested in a recent conversation on the matter, there are two separate possibilities here: (a) attention is only ever allocated for reasons of relevance, so we may need to expand the definition of relevance to cover every case of attention allocation, (b) attention is allocated not only for relevance reasons, so we may need to find what else it is

driven by. My suggestion to follow that the definition of relevance needs be expanded to cover other cases of attention allocation beyond the ones already accounted for by (cognitive) relevance and cognitive effects, does not in any way exclude the possibility that scenario (b) might as well be the case. In fact, it is highly likely that even an extended relevance-based theory of attention and agency will tell part of the story behind attention allocation, and that other reasons too, beyond relevance-related ones, may also be shown to drive human selective directedness; from this perspective, an extended relevance-driven hypothesis of attention and agency should not be thought of as an exhaustive account but as standing in a complementary relation to other currently proposed hypotheses of attention allocation that, when combined with the relevance-driven one, could account for the whole picture about the causal mechanisms of human selective directedness. If so, the aim of articulating an extended relevance-based theory of attention and agency should be seen as a twofold aim: (a) to the extent that attention is allocated for reasons of relevance, we need to investigate if it is empirically sound to claim that the type of relevance driving attention allocation is not solely of a representational and cognitive sort. My discussion to follow taking phenomena like artistic thought states/ processes and stimuli like artworks and literary texts as its case study will propose that it seems empirically sound to make this claim; (b) to the extent that attention is allocated not only for relevance reasons, we need to investigate and chart the interplay between an extended relevance-based account of attention and agency, and other causal mechanisms behind attention allocation that could be said to operate in parallel.

Recent work by Wu (2011ab, 2014) framed as the ‘many many problem’ (2011a), for instance, emphasizes the crucial connections between attention and agency, presenting a new handling of Neumann (1987) and Allport’s (1987) selection-for-action approach, in which the need to maintain coherent courses of action is assumed to place constraints on attention and cognition. The idea has long intellectual precedents, going as far back as William James’ (1890: 424) claim in *The Principles of Psychology* that ‘volition is nothing but attention’. Wu’s approach focuses on the essential interplay between perceptual attention and the attentional selectivity required by agency, to the point where even the automatic and involuntary allocation of attention to perceptually salient stimuli is understood as involving an element of readiness to act. The crucial link between attention and action is also central to recent approaches to perception and attention as processes of Bayesian inference (Clark 2013, 2016, 2017; Hohwy 2012, 2013) that attempt to account for cognition, perception, attention and action within a unified expectation-driven and hypothesis-testing Bayesian model. These recent approaches can be seen as providing valuable conceptualizations of the functional role

of attention not only in the overall human mental economy but also in the selective directedness of human action and performance. This outlook is particularly important for the present analysis, precisely because the cognitivist and mentalistic account of art I have tried to develop in this book is an action-based one, and as a result questions of attentional selectivity and selective directedness of action and performance are integral to it from a two-way interdisciplinary perspective. To ask why literature and art merits the voluntary and involuntary<sup>89</sup> attention of the human cognitive system as an intra-individual and inter-individual domain of human action and performance is in fact only a starting point for asking why any other domain of human action and performance merits the voluntary and involuntary attention of the human cognitive system, from going for a hike, to dancing in a techno party, to making a clay pot, to playing the guitar, to just staring out of a window etc. Although relevance theory is not standardly known as or regarded a theory of attention, Sperber and Wilson have nevertheless always thought about it in this way, making an important contribution in this field of enquiry by means of the formulation of the cognitive principle of relevance and by identifying one of the principal sources that guide voluntary and involuntary attention: the individual organism's expectations of and search for cognitive effects and (cognitive) relevance.<sup>90</sup> As I will argue next, the constructive challenges that phenomena like artistic thought states/ processes and stimuli like artworks and literary texts seem to pose to any exclusively propositions-oriented accounts of attentional selectivity could serve as a starting point for extending the descriptive and explanatory machinery of relevance theory as a theory of cognition and attention, enabling it to account for a much wider range of mechanisms behind the selective directedness of our mental lives, and make further contributions to emerging hypotheses about agency and attention, as well as hypotheses about situated and embodied cognition. My aim here is to start making a number of tentative proposals about other possible types of effects and relevance beyond cognitive ones. I am currently in the process of applying for a three-year research project that will survey a wide array of pertinent neuroscientific findings from artistic creation and reception in order to attest these tentative assumptions and turn them into concrete suggestions. The aim of the present chapter is not to offer definitive conclusions but to generate provisional, yet

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<sup>89</sup> Artistic thought states/ processes arise spontaneously in the human mind-internal reality and, in the first instance at least, claim involuntary attention. The agent may then choose to sustain voluntary attention on these states/ processes or ignore them.

<sup>90</sup> See, for instance, Sperber and Wilson's (2002) paper 'Pragmatics, modularity and mind-reading', which explicitly traces the cognitive principle of relevance to the 'bottleneck of attention', leading to the development of heuristics for allocating attention in the most productive way.

constructive, discussion in what I see as a new fascinating area of interdisciplinary investigation on the interface of literary and art study, relevance-theoretic pragmatics and the cognitive and affective sciences.

#### **6.4 Art, relevance and the human composite organism: on perceptual and affective effects**

In Chapters 3 and 4 I discussed in some length how, originating in the ancient Greek word ‘aestheses’, the notion of the aesthetic aims to capture the intuition that art and perception are somehow inextricably intertwined, that art even in its conceptually nuanced literary forms is primarily about the senses, and suggested that aesthetic experience is integral to the production of artworks as much as to their reception. Even a pre-theoretical understanding of an aesthetic experience as the characteristic kind of pleasurable perceptual and sensory response an agent has when experiencing an artwork is enough to shift my search for alternative types of positive or worthwhile effects and consequently types of relevance that would be more appropriate to the kind of entity that literature and art is in the direction of the human perceptual and sensorimotor system. Could we make a valid claim for perceptual types of worthwhile effects and how could they be determined?

In response to this question I would like to propose (in line with early suggestions made in my PhD, Kolaiti: 2009) that a striking range of emerging findings in cognitive neuroscience and experimental psychology could be more adequately re-interpreted as describing different types of positive or worthwhile effects of the kind of entity literature and art is on the perceptual/ sensorimotor system. Let me briefly go through some pertinent findings.

In their article ‘The Science of Art’, Ramachandran and Hirstein (1999: 15-51), for instance, present a particular set of neuroscientific findings from the perceptual brain –with a particular focus on visual perception and the visual brain– and suggest that certain sets of visual stimuli seem to be more ‘interesting’ for the brain, in the sense that the brain tends to allocate attention to them, preferring them to other competing sets of visual stimuli. The ‘interesting’ stimuli often elicit a pleasant ‘aha!’ sensation, caused perhaps by activation of the (limbic) reward system by the temporal lobe cortex. They then go on to propose that these interesting and inherently pleasing sets of visual stimuli can be grouped under eight *heuristics* or *laws* or *principles*, as they call them, that in their view are either consciously or subconsciously universally deployed by the visual arts to optimally activate the visual areas of the brain, and can therefore be seen as a type of artistic universal. They call these universal

heuristics '*Eight laws of artistic experience*' and proceed to describe and group them as follows:

-1<sup>st</sup> law: The 'peak shift effect'

If a rat is taught to discriminate a rectangle from a square and is rewarded for the rectangle, the rat will tend to respond even more vigorously at the sight of a rectangle that is longer and skinnier than the prototype, i.e. a rectangle that has an exaggerated form of rectangularity. In Ramachandran and Hirstein's (1999: 15) view, the exaggerated rectangle functions like a super-stimulus, and super-stimuli have been found to excite the visual brain more strongly than normal stimuli. This is the psychological phenomenon from which, as they suggest, not only caricatures, prehistoric fertility figures, African art and some of Picasso's work must have sprung but subsequently, much –if not all– of art.

-2<sup>nd</sup> law: Perceptual grouping and binding

According to Ramachandran and Blakeslee (1998) the process of discovering correlations and the process of grouping and binding the correlated features to create unitary objects or events must be reinforcing for the brain. Consider, for instance, the famous hidden Dalmatian dog task, initially seen as a jumble of splotches. The number of potential groupings of these splotches is infinite but once the splotches are grouped together in the correct sort of way in order to see the Dalmatian, a pleasant 'aha!' sensation is caused, perhaps by activation of the limbic system by the temporal lobe cortex (Ramachandran and Hirstein 1999: 21). Perceiving a cubist painting, for instance, may be seen as involving similar universal grouping and binding operations.<sup>91</sup>

-3<sup>rd</sup> law: Isolating a single visual module and allocating attention

According to Ramachandran and Hirstein (1999: 24-25), isolating a single visual modality such as 'form' or 'depth' allows one to direct attention more effectively to this one modality and source of information. This explains why outlines are effective in art, in cases like line drawings, Indian art etc, while additional evidence for this view comes from the savant syndrome –autistic children who are "retarded" and yet produce beautiful drawings: '(...) this

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<sup>91</sup> Ramachandran and Hirstein acknowledge that the idea that visual art deploys perceptual grouping and binding is not new, but what they add to existing discussions on the matter is that the aesthetic experience that results from seeing a visual artwork as pleasing must result from such physiological and neural operations.

is because the fundamental disorder in autism is a distortion of the “salience landscape”: they shut out many important sensory channels, thereby allowing them to deploy all their attentional resources on a single channel’.

-4<sup>th</sup> law: Discarding redundant information and extracting contrast

In line with Ramachandran and Hirstein (1999: 25), discarding redundant information and extracting contrast prior to grouping is also reinforcing: cells in the retina, the lateral geniculate body (a relay station in the brain that receives information from the retina) and the visual cortex tend to respond mainly to edges (step changes in luminance, regions of change) rather than to homogeneous surface colours, possibly because information exists mainly in such regions and it makes sense that they would, therefore, be more attention grabbing and interesting. Edges and contrast extractions are also intrinsically pleasing to the eye (hence the efficacy of cartoons and line drawings). A Monet, or any other impressionist painting for that matter, would be an excellent exemplar of discarding redundant information and extracting contrast.

-5<sup>th</sup> law: Symmetry

Unlike the previous laws, symmetry is not reinforcing in itself but attached to evolutionarily significant traits (Ramachandran and Hirstein 1999: 27): most biologically important objects such as predator, prey or mate are symmetrical and in this sense, the search for symmetry may be a perceptual mechanism geared towards discovering interesting biological objects in the world. At the same time, it has recently been shown experimentally that both animals and humans prefer symmetrical to asymmetrical mates, and evolutionary biologists have argued that this is because parasitic infestation –detrimental to fertility– often produces lopsided, asymmetrical growth and development. Symmetry is also aesthetically pleasing and Islamic art is a paradigmatic exemplar that Ramachandran and Hirstein draw on.

-6<sup>th</sup> & 7<sup>th</sup> law: The generic viewpoint and the Bayesian logic of perception

According to Ramachandran and Hirstein (1999: 30), our visual system abhors interpretations which rely on a unique vantage point, it abhors suspicious coincidences. However a pleasing effect can be produced by violating this principle: ‘For instance, there is a Picasso nude in which the improbability of the arm’s outline exactly coinciding with that of the torso grabs the viewer’s attention (...). (...) [Also] an object discovered after a struggle is more pleasing

than one that is instantly obvious (...). (...) Perhaps the struggle itself is reinforcing (...).’ (Ramachandran and Hirstein 1999: 30)

-8th law: Art as metaphor

Ramachandran and Hirstein’s last law concerns art as metaphor. However, as I do not endorse the view of art as metaphor and also, adopt the deflationary relevance-theoretic account of metaphor as a case of loose use, I find Ramachandran and Hirstein’s last law irrelevant to the present analysis and of a completely different order to their earlier suggestions. I will therefore not discuss it or consider it here.

The main thread, in my view, running through some of Ramachandran and Hirstein’s findings, is sub-attentive improvement of certain functions of the perceptual mind/ brain which are either evolutionarily significant in themselves (e.g. perceptual grouping and binding), or attached to other evolutionarily significant traits (e.g. symmetry). Ramachandran and Hirstein (1999) themselves refer to the modifications underlying their findings as ‘reinforcing’ for the perceptual brain. Even in those cases where conceptual/ cognitive outputs might also occur –the perceptual grouping and binding process, for instance, results in object recognition, i.e. in classifying the splotches as a Dalmatian, which is clearly a conceptual representation– Ramachandran and Hirstein’s claim for perceptual brain reinforcement through attending to certain stimuli seems to me to still be a valid claim for at least two reasons: first, if we use the nature of the output as the sole determinant of the nature of the process then all processes should ultimately be thought of as enactivist. The ultimate output of perceptual, conceptual and affective processing is a more efficient engagement of human organisms with possibilities of action and a more sustainable and homeostatic exchange with their environment. Second, the key point in my view in Ramachandran and Hirstein’s findings, just as in other findings from music and kinaesthetic perception that I will briefly refer to next, is that attending to certain stimuli improves and reinforces the ability of the perceptual brain to perform certain functions, independently of whether performing these functions might also trigger parallel conceptual activation and improvement of conceptual processes too. In fact, the *composite* nature of humans as organisms composed by complex interactions among a perceptual, conceptual and affective system makes rather self-explanatory the expectation that activation in the one system would elicit parallel activation in one, or both, of the other two systems (e.g. see Asari et al. 2008

for evidence of heightened affective activation during unique perception tasks).<sup>92</sup> But while it could be claimed that perceptual, conceptual and affective activation is always composite (that is, it is always in reality a case of co-activation), it could also be claimed that in different instances there is differential involvement and therefore differential potential improvement of each of the three systems. Ramachandran and Hirstein have not discussed why they describe their laws as perceptual brain reinforcing despite the fact that in some cases there is obvious involvement of conceptual cognition, but I think the answer is pretty straightforward: what they seem to suggest is that critical improvement as a result of attending to artistic stimuli occurs not so much in any perceptual or conceptual representations *per se* but in the perceptual brain's functions and processes through which these representations are yielded – from effectiveness in allocating attention to the speed with which a process is performed, etc.

Intriguingly, Ramachandran and Hirstein (1999: 25) suggest that processing artistic stimuli results in what we impressionistically experience as sensory pleasure, on the grounds that this exposure somehow contributes to or improves and reinforces the perceptual mind/brain's aptitude for such processes. And that it may not be coincidental that what the brain cells find 'interesting' is also what the organism as a whole finds 'interesting', and perhaps in some circumstances 'interesting' for the brain translates into 'pleasing' for the organism as a whole.

Ramachandran and Hirstein can clearly be said to have found a variety of worthwhile effects that are, nevertheless, of a perceptual rather than conceptual, or at least purely conceptual nature. I would therefore like to propose that Ramachandran and Hirstein's (1999) laws of aesthetic experience are better understood as describing different types of positive or worthwhile perceptual effects of the kind of stimulus literature and art is on the human perceptual/ sensorimotor system rather than as laws of some kind or other, or as ontological claims about the essence of art, as Ramachandran and Hirstein seem to suggest. Also, it seems that we are actually looking at many more types of perceptual effects than the ones identified in Ramachandran and Hirstein's laws. Recent neuroscientific research into music and dance shows marked differential ability between experts and non-experts in sound and kinaesthetic perception and execution tasks. Jola et al. (2011), for instance, has found that expert dancers show better integration of local proprioceptive signals than non-dancers, which can be attributed to perceptual effects resulting from engaging with the type of action

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<sup>92</sup> The interplay between perception and cognition is not a case of 'either or'; so, a relevant question here is whether there can be perceptual or other types of effects without a minimal at least activation of cognition. In Kolaiti (2009), I have made preliminary suggestions on the matter.

and performance that dance is on the organism's ability to be in fine-grained informational states of a proprioceptive type. Similar evidence also emerges from the neuro-cognitive study of the 'expertise-effect' in music and dance: findings of longitudinal studies suggest that musical training<sup>93</sup> increases auditory discrimination indicated by corresponding neural markers (Putkinen et al. 2014), enhances the automatic encoding and discrimination of pitch contour and interval information (Pantev et al. 2003), while auditory-motor pathways are enhanced in musicians compared to non-musicians (Volpe et al. 2016), enabling for example the particularly complex forms of acoustic, visual and kinesic co-ordination we see in ensemble musicians or group jazz improvisation. Further 'expertise-effect' studies involving musicians (Tervaniemi 2001, 2009; Tervaniemi et al. 2015) and dancers (Calvo-Merino, Glaser, Grèzes, Passingham, & Haggard 2005) suggest that music and dance training leads to genre-based selectivity in perceptual sensitivity, which can be interpreted as different sets of perceptual effects arising in a genre-dependent way across areas of human performance: gleaned from the brain activity of classical, rock and jazz, musicians as well as non-musicians in terms of the accuracy of neural encoding in relation to deviations in tuning, rhythm, timbre, melody transpositions and contour, evidence suggested that only classical musicians were selectively attuned to tuning variables and only jazz musicians showed the same selective sensitivity for transposition. Jazz and rock musicians exhibited equally heightened sensitivity for melody contour, while classical and jazz musicians demonstrated selectivity for timing (Tervaniemi 2001, 2009; Tervaniemi et al. 2015). In my view, the evidence amongst other things suggests that sustained attention allocation through engagement with different types of stimuli and areas of action and performance (e.g. music and dance), as well as with different genres within the same broader type of stimulus and area of performance, corresponds to distinct sets of perceptual effects leading to distinct types of neural and perceptual/ sensorimotor improvement and optimisation.

I would therefore propose that perceptual effects are neurologically and physiologically real effects/ improvements in an individual organism's perceptual and sensorimotor organisation and functioning that result from allocating and sustaining attention on certain types of phenomena and stimuli, including active engagement in certain types of action and performance.

Although the allocation of attention to such phenomena and/ or stimuli and/ or types of action and performance might incidentally also give rise to at least minimal parallel

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<sup>93</sup> Training is relevant to our discussion, because it is a form of sustained and recurring attention allocation to a certain stimulus including various types of action and performance.

cognitive effects,<sup>94</sup> the phenomena and/ or stimuli in question are nevertheless principally relevant to the organism because of the substantial worthwhile modifications that occur in the organism's perceptual/ sensorimotor organisation and functioning. They are therefore for the most part perceptually relevant to the organism, yielding a type of relevance beyond the standard cognitive type so far explored in relevance theory: I will refer to it as *perceptual relevance*.

Perceptual effects, I would therefore suggest, constitute a plausible and neurologically real set of perceptual and sensorimotor system-improving modifications that can make an input relevant to an individual organism at a time, explaining –to some extent at least– why human agents find mind-internal phenomena like artistic thought states/ processes and public stimuli like artworks and literary texts and the characteristic (aesthetic) type of experience they elicit rewarding enough to be worth attending to and revisiting or repeating. The existence of perceptual effects seems to capture in empirically and explanatorily testable terms the intuition that the *raison d'être* of the kind of stimulus an artwork is is to elicit a characteristic type of response or experience (aesthetic experience) that is fundamentally sensory or perceptual in nature.

The fact that perceptual effects do not occur exclusively in literature and art but also in non-artistic types of phenomena and stimuli –e.g. in quiz games like the dog in splotches (see Ramachandran and Hirstein 1999)– which, although they elicit pleasurable ‘aha’ sensations, nevertheless cannot be said to elicit full-blown aesthetic types of pleasurable experience, raises the question about whether artistic phenomena and stimuli can be fully accounted for by perceptual relevance. Is it possible that in the case of art perceptual relevance has been further particularised into, say, an aesthetic variety of relevance whose machinery is perhaps very similar but not identical to that of generic perceptual relevance? I am only articulating this question at speculative level and do not purport to know the answer at this moment but certainly find this to be a fascinating area for future interdisciplinary research.

The idea that artistic thought states/ processes as mind-internal phenomena, and artworks and literary texts as public stimuli, give rise to perceptual effects and aesthetic relevance provides a novel vantage point for explaining both the intra-individual and inter-

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<sup>94</sup> The interplay between perception and cognition is not a case of ‘either or’; so, a relevant question here is whether there can be perceptual or other types of effects without at least a minimal activation of cognition. In Kolaiti (2009), I have made preliminary suggestions on the matter, while in forthcoming work I will discuss at length my notion of *minimal cognitive effects* which aims to account for this interplay.

individual evolutionary adventure of art, and sketches a convincing scenario about why artistic thought states/ processes merited the attention of the human cognitive system as mind-internal phenomena before proto-artworks became public and shared, never mind culturally situated entities.

One other pertinent interdisciplinary question concerns whether there might exist more types of effects and relevance beyond cognitive and perceptual ones and how such effects might relate to artistic phenomena and stimuli. In recent work, Wharton and Strey (2019) and Wharton and de Saussure (forthcoming) draw on Rey's (1980), Cosmides and Tooby (2000) and Tooby and Cosmides (2008) approach to emotions to address the relative ineffability of what they loosely call 'emotional communication'. By 'emotional communication' the authors refer to those vaguer aspects of communication discussed in Sperber and Wilson (2015), including descriptively ineffable emotional states that are too nebulous to be paraphrased without loss in finite propositional terms. Emotional communication is seen as operating on a number of different levels, such as interjections, facial expression and affective tone of voice, which lead to either a single, determinate proposition or small set of propositions or contribute to altering the salience of a vast array of propositions (i.e. yielding a continuum of cases of cognitive effects of different strengths). Central to the authors' argument about what is communicated by emotional communication is the idea that the traditional relevance-theoretic notion of positive cognitive effects needs to be complemented by a new notion of *positive emotional effects*.<sup>95</sup> Although I have various complementary suggestions as far as their currently proposed definition of positive emotional effects is concerned, I nevertheless find the rationale that leads the authors to the suggestion that an affective type of effects might be theoretically necessary and psychologically and physiologically plausible both exciting and convincing.<sup>96</sup> In fact I would tend to propose that,

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<sup>95</sup> Similar suggestions have been made by Gutt (2013) and Strey (2016).

<sup>96</sup> Spelling out in detail my complementary suggestions about the possible content of an affective type of effects is not relevant to the aims of the present analysis. Tim Wharton and I are currently in the process of exploring the possibility of a joint research endeavour that will focus exclusively on refining the notions of perceptual and affective effects and tracking their shared implications for current selectivity research in the cognitive and affective sciences. Let me just say at a preliminary level that the key issues that, in my view, need to be addressed in future research for determining a theoretically robust affective type of effects are: i) having used emotional communication as their case study and laid particular emphasis on the issue of effability of emotional states, in their current discussion of emotional effects the authors seem in reality to be discussing the role the activation of emotions during communication plays in eliciting descriptively ineffable emotional states in the receiver and enabling an otherwise non-accessible range of cognitive effects, which in my view is clearly a different question from the possible existence or not of a parallel affective type of worthwhile modifications and effects. Similarly, the mobilisation of, say, mental imagery and

if an affective type of effects is psychologically and physiologically plausible, this would entail that an affective type of relevance of a phenomenon or stimulus for an individual organism at a given time should also be psychologically and physiologically plausible. I would also tend to propose that literature and art could prove an exemplary case study on this front too, enabling a range of new insights that can then be transferred to other phenomena and stimuli such as emotional communication for instance. Emerging research (Bal and Veltkamp 2013; Djikic et al. 2013; Kidd and Castano 2013) on the interface of literary response and cognitive science suggests short term effects of literary fiction as opposed to non-fiction and non-literary fiction on affective and cognitive empathy and the ToM capacity, while longitudinal studies (e.g. Mar et al. 2006) on the effects of fiction versus non-fiction on empathy again suggest that lifetime exposure to fiction as opposed to non-fiction is a positive predictor of higher scores in empathy and social-acumen. I take such findings to be simply a lead and starting point for what could be an exciting enquiry into the possible affective effects of literature and art, which can thereby provide empirical grounds for some aspects of the so-called affective theories of literature and art.

The most crucial of theoretical implications, however, do not follow either from perceptual effects or affective effects in themselves but from their joint consequences. If perceptual and affective effects do exist in a robust sense of the term, yielding perceptual and affective types of relevance for an individual organism at a given time, as seems to follow from the kind of phenomenon and stimulus that literature and art is, and if these types of effect and relevance are also applicable to other phenomena and stimuli and areas of human action and performance, then we are looking at a case where selective directedness in human agents is guided by perceptual and affective as much as cognitive forces. This latter fact has wide interdisciplinary consequences: it enables an extended relevance-driven ‘worthwhile effects theory of attention’ in which selectivity is amongst other things the result of a human

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perceptual phenomena during communication can be said to play a central role in eliciting descriptively ineffable perceptual states in the receiver and enabling an otherwise non-accessible range of cognitive and non-propositional effects, but this is a different question from the possible existence or not of a parallel perceptual type of worthwhile effects, and ii) if affective types of effect exist in a theoretically robust sense of the term –and I think that the authors are right and that affective types of effects do exist– then an affective type of relevance for the individual organism should by necessity follow from them and needs be accordingly defined, and finally iii) the question to ask is not what affective types of effects and the activation of emotional states communicate but what they DO – to the affective system and perhaps, to other systems too. The same goes for all types of effects: cognitive (including ‘non-propositional’) effects and perceptual effects DO something: the former bring about concrete positive modifications in representations in the human cognitive background, the latter enable neurologically and physiologically real positive modifications on the perceptual/sensorimotor system. What do affective effects DO?

agent's search for and expectations of relevance across the systems that compose a human individual organism, that is, the cognitive, perceptual/ sensorimotor and affective system. It also provides a robust argument in favour of the situated view that human individual organisms are not merely cognitive organisms but *composite organisms* as I would tend to call them: organisms composed of at least three distinct sets of systems (cognitive, perceptual/ sensorimotor and affective) that maintain their individual properties and scope of operation<sup>97</sup> but at the same time stand in extremely complex feedback relations, resulting from co-activation patterns, feedback loops of top-down and bottom-up processes etc between embodied and conceptual aspects of the organism. The idea of human agents as relevance-driven composite organisms whose cognitive system has been geared by evolution to allocate voluntary and involuntary attention to phenomena and stimuli that can yield positive effects across the systems that compose the organism offers a new extended view of the forces guiding the selective interaction of individual human organisms with the ecology their physical, bodily, mental and cultural environment, and a new type of robust theoretical argument in favour of the *embodied thesis* on cognition (e.g. see Clark 1997; Thompson and Varela 2001; Varela et al. 1991): perceptual and affective effects are embodied or partly embodied types of effects; to show that human cognition has been geared by evolution to allocate voluntary and involuntary attention to phenomena and stimuli that yield not only cognitive but also embodied types of effects is in other words to show a possible area where the operations of human cognition are guided by and entrenched in the fact that the organism has a body.<sup>98</sup> The view of humans as relevance-driven composite organisms aligns with Andy Clark's suggestion in a recent talk at the University of Sussex Centre of Cognitive Science that biologically evolved intelligence makes the most of mind, body and world with unexpected solutions that take shape at multiple time-scales, evolutionary, developmental and temporary, and enables a unification of accounts of humans as agents with accounts of humans as embodied cognizers and perceivers.

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<sup>97</sup> Evidence from psychopathy and autism spectrum disorder (e.g. Jones et al. 2010) suggests, for instance, a dissociation between affective and cognitive empathy, since psychopaths seem to demonstrate defects only in affective but not in cognitive empathy. Examples of this sort suggest that the systems that compose the composite organism are distinct systems, and hence, my choice of the term 'composite', which comes from material industry and refers to a material made from two or more constituent materials with significantly different physical or chemical properties that, when combined, produce a material with characteristics different from those of the individual materials.

<sup>98</sup> With fruitful questions arising about whether the cognitive principle of relevance can be said to operate in a uniform way upon these systems, the potentially different types of machinery and engineering pertaining to yielding relevance in each system (i.e. cognitive, perceptual and affective) and the particular engineering in each system that makes an agent eventually divert attention elsewhere and stop the search for further effects.

## 6.5 Suggestions for future research

As neurobiological research on visual perception, tactile perception and proprioception, mirror neuron function, action observation and the expertise-effect, as well as findings on music perception, prosody, expressivity and the music of speech<sup>99</sup> rapidly grows, in years to come we are likely to be able to consider an enormous array of positive modifications, carried out by the perceptual and affective systems, and thus start isolating and charting a diverse range of perceptual and affective effects that causally relate to the pleasurable nature of the characteristic kind of experience that artworks and literary texts elicit in ways broad enough to apply to all forms of human art, past, present and possible, as well as all manifestations of the same art form across cultures.

A fascinating possible strand of future research might focus on exploring how the notion of perceptual effects and the pertinent empirical findings from visual, sound, tactile perception and proprioception can be extended to find analogues in literature. A decisive set of literature-related perceptual effects could perhaps be associated with the *mirror neuron* function. It is almost certain, for instance, that the intense internal perceptual activity so characteristic of literature –mental imagery and inner vision, inner hearing, kinaesthetic metaphors, etc– is associated with, and therefore reinforcing of, specific mirror neuron functions or specific modules and submodules of the perceptual mind/ brain through targeted inner perception activation. As Wilson (2018: 199) notes: ‘literary passages (...) are full of tiny muscle tensings, explosive leaps, gingerly steps, sudden starts and irruptions, violent hand gestures, snatch raids, arrested movements, creeping, dragging, and so on, which have been shown to activate sensorimotor mechanisms even when encountered only indirectly, via a linguistic description’ (see, for example, Bolens 2012). The sensorimotor and kinesic information these mechanisms provide can be assumed to give rise to perceptual effects of one sort or the other, and if so, the systematic study of universal patterns of presenting sensorimotor, kinesic and more broadly, perceptual information in literary texts and the types of perceptual effects these patterns could yield is bound to be a fruitful domain of future interdisciplinary enquiry.

It is also likely that artistic production and reception involve a diverse range of sub-attentive forms of mental simulation (Matlock 2004) as well as diverse forms of mental-

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<sup>99</sup> Wharton (2009, 2012, 2016).

rehearsal<sup>100</sup> enabled by the mirror neuron function, thereby improving and reinforcing in critical ways the mirror neuron function itself, or the neural infrastructure that enables capacities like the Theory of Mind capacity (ToM). Intuitive reference to mental rehearsal underlies various recent hypotheses on the evolutionary origins of literature (e.g. Boyd 1998, Cave 2016, Pinker 2007), while mental simulation is considered central to fictional literature (Hogan 2013: 1-26; Zunshine 2006): a domain of enquiry worth pursuing here is that literary texts across cultures elicit types of mental rehearsal and simulation that yield perceptual and affective effects, thereby extending and intertwining the neurophysiological study of the human perceptual and affective system with the study of literary universals.

Exploiting modules would be another good way both to attract the attention and to get the input processed at little cost, and an investigation of perceptual and affective effects as resulting from artistic and literary universals that involve optimization of module function is an exciting and promising area of interdisciplinary research: in various lectures, for instance, Dan Sperber has pinpointed the activation of the face-recognition module as a possible sub-attentive pay-off that explains why masks are amongst the types of cultural artefact to occur in most human cultures. Perceptual effects might involve optimization of the face-recognition module function or the function of the prototype detector through linguistically describing faces and facial expressions in literary texts, or through the literal and metaphorical description of real-world objects and entities whose category the reader is expected to infer by activating the prototype detector module. The increased activation of affective processes during various visual perception tasks (Ashari 2008) might be a clue that the optimization of modules and operations associated with perception and the kinesis system might owe a lot to parallel affective processes and effects.

The investigation of perceptual types of effects in literature and art could be extended by considering whether, exploiting the conceptually nuanced medium of natural human language, perceptual effects could perhaps find equivalences and analogues in the area of conceptual cognition (e.g. grouping and binding in conceptual terms).

Finally, the investigation of affective types of effects in literature and art might help comprehend in empirically testable terms the exact contribution of cognitive, perceptual and

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<sup>100</sup> The idea here is something along the following lines: having spent a whole evening mentally rehearsing your tennis forehand, the next day in the tennis match you find that your forehand has actually improved. Mental rehearsal has led to improvement in a kinaesthetic area of performance without your engaging in actual bodily activity at all.

affective effects to the characteristic type of experience that aesthetic experience is, accounting for varied degrees of cognitive, perceptual and affective involvement.<sup>101</sup>

The notions of perceptual and affective effects and relevance deepen our understanding of the operations of the human composite organism and provide a promising common ground for two-way interdisciplinary neurobiological, evolutionary, linguistic, cognitive, literary and aesthetic research. The investigation of the ways in which literature and art as an action across eras and cultures exploits cognitive and embodied operations that yield perceptual and affective effects can be seen as one of the paradigmatic fields of enquiry in which interdisciplinary interaction in the future would be bound to have precious bi-directional implications for research in both empirical and literary/ artistic domains, shedding new light on the evolutionary success of art as an intra-individual and inter-individual occurrence, the nature of aesthetic experience and the nature of the human composite organism as an organism driven by the search for cognitive, perceptual, affective and perhaps other types of effects and relevance –such as aesthetic relevance for instance.

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<sup>101</sup> The idea that emotional involvement is integral to aesthetic experience is central in Hogan's (2016) empirical approach to aesthetic response alongside information processing and non-habitual pattern recognition.

## **Chapter 7**

### **Interdisciplinary effects on the psychology and neuroscience of creativity**

#### **7.1 A hands-on example of two-way interdisciplinarity**

In line with the commitment to interdisciplinarity sketched in the introduction to the present book, in this chapter I will try to discuss some of the bi-directional implications my cognitive and action-based account of the essence of literature and art and my notion of an artistic thought state/ process have for current research in creativity.

Investigating the relationship between creativity and artistic creation promises rich bi-directional effects: it is impossible to grasp the kind of doing that art is without a parallel understanding of the exact role that creative ideation, plays in it, while at the same time it is impossible to arrive at an understanding of the nature of the human ability for creative ideation without exploring in depth the way it manifests itself in the distinct and unique type of human action-process that literature and art is. At the same time, my theoretical claim that literature and art is a distinct action-process, and that the artwork or literary text is a distinct causal output of this action, is crucially enriched by exploring how our ability to perform the minimal cognitive operation that a spontaneous artistic/thought state process is interacts with fundamental human cognitive affordances, the human ability for full-blown creative ideation, the individual aptitudes, gifts and talents of , and the genetic infrastructure of human performance. And it is precisely this twofold aspect of the present chapter and the previous one that fleshes out my methodological claim for a two-way or bi-directional interdisciplinarity.

It is worth stressing that, since the aim of this book is not to develop a new theoretical account of creativity but to propose an account of the ontological essence of literature and art as a unique output of human cognition, my suggestions about creativity will at this stage be quite speculative. However, speculative does not necessarily mean theoretically insignificant: I certainly hope that the discussion to follow will help illuminate theoretical fallacies and reassess existing definitional and taxonomic tendencies, laying the groundwork for a future more refined and theoretically adequate investigation of creativity-related phenomena. It will also help identify where the distinct kind of human creative performance I referred to in Chapter 3 as aspectual creativity, asserting that is shared across prototypically determined domains like art, theoretical science and philosophy, is located within the broader spectrum of human cognitive properties such as productivity and generativity as well as differential distribution of types and qualities of human ideational and physical performance. Finally, it

might help refine the picture of other new notions introduced in this book, such as the artistic and scientific conditions, incidental and naïve creatorship, and their potential bi-directional effects on empirical research.

It is also worth stressing that many of the backward interdisciplinary implications to be charted here follow precisely from the unique vantage point provided by the distinctness of literature and art as an investigative object. In Kolaiti (2019: 95-129), I point out the imperative need for paradigm-transforming interdisciplinary practices in the arts and humanities, with a focus on the rich backward effects naturalised and genuinely interdisciplinary theory-development in these areas may have for hypothesis formation and theory-development in the empirical and cognitive sciences. In this chapter and the next, I hope to flesh out these ideas in more detail and provide a hands-on example of my vision of a two-way interdisciplinary relationship between the arts and humanities and the empirical and cognitive sciences. At the same time, I will flesh out my vision of an epistemologically robust arts and humanities which will be able in the 21<sup>st</sup> century not only to draw on, but also to decisively affect theory formation in empirical and cognitive domains.

## **7.2 Is there such thing as creativity?**

If there is a typical example of what it means to be a field whose object of enquiry is entirely elusive, it should certainly be the study of creativity. Delving into the last thirty years of empirical research in the psychology and neuroscience of creativity left me with an abiding sense that if there is one thing to be certain about, it is that it is totally unclear what the study of creativity is a study of; I don't mean this in only the macroscopic sense of asking what creativity is, but also in the more microscopic sense of asking whether individual empirical studies on various aspects and components of creative thinking do indeed test and investigate what they seem to think they investigate. It also raises the question whether existing theoretical models and classifications of creativity (e.g. domain-specific classifications such as 'literary creativity' or 'artistic creativity') involve notions that are theoretically adequate and necessary, never mind notions that have any psychological and neurological reality at all. Creativity has become what Toolan (2012: 19) referred to as 'a word or idea so indiscriminately invoked so as to be of limited value in any analytical enquiry'.

A number of psychologists and neuroscientists (see e.g. Abraham 2018) seem to be not only aware but also critical of this fact, pinpointing two key features of the empirical study of creativity that make it elusive and hard to pin down as an investigative object: for one thing, creativity in its most robust and theoretically interesting interpretation is a state: it

is a case of spontaneous, or at least semi-spontaneous, behaviour which largely occurs in an unexpected and involuntary way, giving creative states an element of ephemerality and unpredictability that makes them difficult to investigate and capture in controlled laboratory settings. The main bulk of existing empirical research, however, does not seem to take the fact that creativity is a state, and the theoretically significant distinction between spontaneous and deliberate or forced forms of ideation (for a similar distinction see Dietrich 2004), into consideration at all, with obvious implications not only for whether empirical findings based on investigating creativity in its deliberate forms have any theoretical value for understanding spontaneous creative states<sup>102</sup>, but also for the adequacy of the experimental designs and tasks that bring these findings to light. And even though in principle neuroscientists at times explicitly acknowledge that since creativity is a state, it cannot be adequately and sufficiently investigated in controlled laboratory settings (Abraham 2018: 79), in practice it seems that almost all existing empirical research in the field is actually carried out in such settings.

The other conspicuous epistemological issue concerns the scarcity of new theoretical models that would allow empirical researchers to investigate creativity in more refined and up-to-date terms. Although some exiting new theoretical contributions have been made in recent years (e.g. Boden 2004; Dietrich 2004; Dunbar 1997; Runko 2007), the empirical and neuroscientific study of creativity seems to be for the most part still very firmly tied to older theoretical accounts, be they accounts of the nature, types and causation of creativity itself or of phenomena deemed in existing research to be ‘creativity-related’ –such as the ability for semantic and lexical association-making, or the way conceptual knowledge is represented and stored in the mind– often resulting in the paradox of up-to-date neuroscientific investigations of outdated theory.<sup>103</sup>

For many decades, the term ‘creativity’ has been used as a convenient intuitive or pre-theoretical summary label for what in my view is an extremely complex and disparate set of cognitive, perceptual, motivational, attentional and affective processes, something MacKinnon (1970: 18) was already stressing in the early 1970’s. It has also been

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<sup>102</sup> Or, for that matter, for an understanding of creativity in general. As I will suggest later in this discussion, there are good reasons to assume that creativity in a full-blown sense of the term is manifested mainly in spontaneous or semi-spontaneous forms; if so, then it raises the question of what it is that we are actually testing when we test deliberate forms of ideation. Are we testing creativity or something else? I will come back to this in more detail later.

<sup>103</sup> So it is not uncommon that empirical research on creativity often draws on models that date as far back as the 1970’s, such as Campbell’s (1970) Blind-Variation Selective-Attention (BVSA) account of creative thought, or equally dated models of semantic and lexical association-making and conceptual knowledge representation such as Mednick’s (1972) early Semantic Network Model.

interchangeably –and mistakenly, if I am allowed to prime the suggestions to follow– used as a theoretical synonym for notions such as art, innovation, imagination, inspiration, genius, problem-solving, and open-ended idea generation, referred to in the literature as *divergent thinking*. Creativity has also, more often than not, been implicitly treated as synonymous with production, with all new non-nonsensical products of human ideation processes being treated as *prima facie* creative without considerations or differentiations on the basis of product value.<sup>104</sup> Finally, creativity has standardly been treated as a universal species-specific capacity common to all human individuals, explicitly or implicitly assuming that all human beings are creative, and differ only in the degree or quality of their creativity (e.g. Gardner 2011; MacKinnon 1970). I would like to challenge and reassess these and many more tendencies and assumptions and see what my cognitivist model of literature and art as an action process has to contribute in re-adjusting the theoretical picture about creativity. But let's take things from the beginning.

### **7.3 Mere production vs creative creation: considerations of relevance**

I will start from the assumption that creative thinking, whatever it may be, involves a form of internally directed attention resulting in ideation, where by 'ideation' I refer to the capacity for self-generation of ideas. Do not construe the notion of an idea in narrow conceptual terms. An idea need not be a full-blown conceptual representation in the language of thought. Moment-by-moment subconscious decision-making when producing a piece of musical or dance improvisation, or when sculpting an object, or spontaneously inventing a new and unexpected stroke in a tennis match, can also be thought of as involving ideation in a broader sense of the term.

These self-generated ideas are new objects in the mind-internal reality, mental outputs that come into existence within an individual consciousness. These mind-internal outputs might also take the form of publicly situated stimuli in the mind-external reality by being instantiated in externally observable objects –always in the broad construal of OBJECT that I have been using from the start of this book. As I suggested at length in the previous chapter, the question of whether or not a mind-internal output will be materialised and instantiated into a mind-external one is entirely contingent, and does not in any way affect the mind-

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<sup>104</sup> As I clarified in Chapter 3, in early versions of my account of literature and art as a cognitive object I myself was talking interchangeably about 'creator' and 'producer' and was treating creativity and production in an undifferentiated way. Here, I will revise this approach by systematically drawing a theoretically significant distinction between the two.

internal output's ability to qualify as a novel object or a proper instance of human creative ideation materialised solely within the psychological or mind-internal reality.

As it is, however, this preliminary definition of creative ideation is quite unrefined, and allows for an exceedingly disparate set of outputs to be classified as creative ideation. All it does is distinguish the human ability for ideation from memory and recall processes. At the same time, early studies in creativity back in the 1950's (e.g. Barron 1955: 479; Stein 1953: 212) had already pinpointed, for instance, that being a new object is certainly a necessary, but not a sufficient condition for an output to be adequately classified as a novel object, and therefore, a proper case of creative ideation: nonsensical or delusional ideas, or ideas that proceed from ignorance, are also new objects in this rudimentary sense of being mental objects that come into existence and did not exist before.

Trying to tackle this classificatory problem, theorists proposed from quite early on that for an output to be adequately classified as creative ideation, it should be considered not only novel but also appropriate or relevant in a given context (e.g. Runco and Jaeger 2012; Stein 1953; Wharton and Strey 2019). The combination of 'novel' plus 'relevant' in a given context is uncontroversially accepted in the study of creativity as a step in the right direction, and indeed it seems to be so. However, refining this approach further by looking into relevance as a notion that involves a gradient of different degrees and at least two distinct directionalities (internal and external relevance) is important for pinning down the nature of creative ideation in a theoretically robust sense of the term. I will, therefore, draw extensively on relevance theory (Carston 2002; Sperber and Wilson 1995; Wilson 2018; Wilson and Sperber 2012;) in order to systematise how the relevance of an output is to be perceived and tracked down within an explanatorily adequate theoretical framework.

In what ways do the outputs of creative ideation differ from nonsensical or delusional outputs or outputs that proceed from ignorance? Relevance theory makes this latter question empirically testable by allowing us to turn it into a question about worthwhile or positive effects (Sperber and Wilson 1995: 109, 265-266). Within the range of possible modifications of the physical environment that may function as stimuli, there are those which lead to improvements of some sort, that is, to worthwhile or positive effects. Since relevance theory is a theory of cognition, Sperber and Wilson's notion of a positive or worthwhile effect is cognitive in nature and amounts to cognitive improvements. The stimuli that lead to cognitive improvements are relevant stimuli. So, in this light, to the extent that an ideational output is not just new—in the weak sense of being a new object that simply comes into existence—but is also minimally relevant in the sense of yielding minimum worthwhile or positive effects of

a certain kind in a given context, all we can claim to have managed to distinguish is delusional and nonsensical outputs from non-delusional and non-nonsensical ones. By yielding minimum relevance in a given context, the output might be neither delusional nor nonsensical, but still it may well be contrived, trivial or commonplace. Such an output is an instance of mere production, an instance of mere creation of a certain kind, but not necessarily an instance of creative creation/ production.

The relation between mere creation/ production and creative creation/ production is one of partial inclusion or hyponymy: while all instances of creative creation/ production are cases of creation and production, not all instances of creation and production are necessarily creative. They may simply be cases of trivial creation/ production, where by trivial I pre-theoretically mean something along the lines of commonplace. A distinction between mere creation/ production and creative creation/ production, therefore, needs be made on the basis of relativistic considerations of non-trivialness, where by non-trivialness I pre-theoretically mean something along the lines of non-commonplace. This distinction is theoretically necessary both for sketching a descriptively adequate framework for the empirical study of creative ideation, but also for assessing the adequacy of a range of experimental settings and designs that do not seem to take this borderline into consideration.

It is highly likely, however, that any distinction between trivial and non-trivial creation/ production is not in reality down to a sharp and definitive borderline between two different cases of ideation; rather there is likely to be a continuum of cases, from outputs that are highly trivial mere products, to borderline cases that involve trivial elements combined with non-trivial ones, and highly non-trivial outputs that are paradigm exemplars of creative creation in its optimal sense. We must also acknowledge a significant degree of intersubjective and context-sensitive variation in judgements about the trivialness or non-trivialness of a given output.

In any case, it is impossible to talk about creative ideation in a robust sense of the term and not consider non-trivialness as a differentiating parameter among the various potential outputs of the human ability for ideation. Or, conversely: there is empirical and introspective evidence that the various potential outputs of the human ability for ideation demonstrate palpably different degrees of intuitive trivialness and non-trivialness, so it follows that the descriptive and classificatory frameworks we develop for investigating creative ideation should somehow accommodate this empirical fact. An intuitive notion of trivialness and non-trivialness was integral to the model I set out in Chapter 3, because

aspectual representations are quintessentially non-trivial representations of a certain kind, and are therefore creative representations in the full-blown sense of the term.

A crucial question here is what forms non-trivialness might take and how it can be delimited. In *Relevance*, Sperber and Wilson (1995: 97) tried to pin down what makes certain types of logical implication intuitively ‘trivial’ by asking what sort of logical implications and logical consequences would count as non-trivial in spontaneous forms of inference. Sperber and Wilson’s discussion is largely embedded within continuing debates among philosophers, psychologists and logicians about the types of inference rules humans naturally think with (see Sperber and Wilson 1995: 75-108) and argues that non-trivial logical implications are those derived by the use of *elimination rules*, i.e. rules that interpret, explicate or analyse the content of the assumption taken as premise in an inference process and therefore derive useful logical implications rather than leaving the premise unchanged. Let’s take the conditional premises ‘if P then Q’: with input (P) ‘Fido is a dog’ and the inference rules for DOG ‘X – DOG – Y’ – ‘X – ANIMAL – Y’: the rule generates the spontaneous logical implications ‘if Fido is a dog then Fido is canine’ or ‘if Fido is a dog then Fido is an animal’ and so on and so forth. Imagine an instance where you are ready to board a train with Fido on his leash and you hear the announcement, ‘Passengers with animals please board the train from the last coach’. The useful spontaneous conclusion ‘I must board the train from the last coach’ results from the elimination rules sketched above: ‘Fido is a dog’ ⊢ ‘Fido is an animal’; ‘Passengers with animals must board the train from the last coach’, therefore ‘I must board the train from the last coach’.

Standard logics contain elimination rules which are linked only to logical terms like ‘and’, ‘or’, ‘not’, ‘if... then’, ‘some’, ‘all’, etc, but Sperber and Wilson take a Fodorian line and argue that there are masses of elimination rules, which (for instance) interpret, explicate and analyse ‘bachelor’ as ‘unmarried & human & adult & male’ or ‘mother’ as ‘female parent’ etc. Sperber and Wilson take the logical implications spontaneously derived by use of elimination rules to be non-trivial ones, and illuminate the non-trivialness of such conclusions by contrasting them with a class of implications derived by use of a different type of inference rules discussed by logicians<sup>105</sup> which are logically valid but intuitively trivial: for instance, the inference rule that permits the derivation of ‘Either P or Q’ from the premise ‘P’. This rule allows the premise ‘The prime minister has resigned’ to give rise to the logically valid but trivial conclusions ‘Either the prime minister has resigned or it’s a little

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<sup>105</sup> These are the so-called *introduction rules*, e.g. ‘From any premise ‘P’ it is valid to infer: ‘P and P’, ‘P or Q’, ‘P and (P or Q)’, ‘Not not P’, ‘If Q then P’ (Sperber and Wilson 1995: 95-97).

warmer today’, ‘Either the prime minister has resigned or it’s my mother’s birthday’, and so on. Sperber and Wilson argue that implications derived by use of introduction rules are trivial in that they leave the content of the premises unchanged and merely add further arbitrary material that is intuitively unrelated to that content. Their hypothesis is that the only inference rules spontaneously used by humans are those that yield non-trivial implications. For the purposes of our discussion, let’s say that the notion of non-trivialness sketched up to this point in our discussion is non-trivialness in the most minimal sense of the term and one that is adequate to pin down the conditions that make an implication non-trivial in spontaneous inference.

Then, Sperber and Wilson (1995: 108-117, 263-266) go on to propose that when non-trivial implications and conclusions result from adding new information to a context of assumptions manifest in an individual’s cognitive environment, this amounts to a positive modification or improvement of that context. These improvements might take various forms, which I provisionally brought into the picture in Chapter 6 in discussing (positive) cognitive effects: let us say roughly that strengthening old assumptions or leading to the abandonment of old assumptions are two indicative types of positive modifications that might result from deriving non-trivial implications in a given context. The relevance of an input for an individual at a time is thereby determined as a balancing between the cognitive effects yielded by processing the input and the effort required for processing it. The less the effort and the greater the effects, the greater the relevance of an input for an individual at a time.

In line with the relevance-theoretic framework, therefore, non-trivialness can be thought of as a property of an input that follows from two parameters: the relative size of the set of non-trivial contextual implications (cognitive effects) this representation has in a given context, and the relative accessibility of the set of non-trivial contextual implications (cognitive effects) this representation has in that context at that time. The larger the size and the lower the accessibility of the contextual implications (cognitive effects) brought into play by an input the higher the non-trivialness of the input. With processing effort remaining constant, highly non-trivial inputs should under standard circumstances also be highly relevant ones for an individual at a time.

Now, this latter version of non-trivialness is no longer a minimal one, and is certainly much closer to a full-blown notion of non-trivial inputs that might be a useful starting point in our attempt to peel apart trivial mere products of human ideation from non-trivial, and in this sense, creative ones in any theoretically useful sense of the term ‘creative’. And this is a twofold story: it is a story about the non-trivialness of the creative ideas *per se* as entities that

function as an input within an individual consciousness and are then self-evaluated as trivial or non-trivial by that consciousness, as much as a question about the outputs of creative ideation that then function as non-trivial publicly situated inputs for the consciousness of the receiver.

The relevance-theoretic model allows us refine our discussion even more by assessing the conceptual non-trivialness of an input at two possible levels, internal and external, against a background of corresponding *internal* and *external* considerations of conceptual relevance (Kenny 2018; Sellevold 2018; Sperber and Wilson 1987; Uchida 1998; Williams 2018; Wilson 2018). In discussing the relevance of fiction, Wilson (2012: 8-9) proposes that literary text create internal expectations of relevance in the context of the preceding text which in turn might guide the interpretation and expectations of relevance of subsequent text. Wilson (2012) notes that works of fiction seem to raise a problem for relevance theory, because according to Sperber and Wilson (1995: 270-277) for an act of communication to be relevant, it must carry warranted contextual implications (or other positive cognitive effects) in the context of the audience's real-life beliefs and assumptions about the world. But how can works of fiction achieve 'external' relevance by carrying any positive cognitive effects at all in the context of real-life assumptions about the world that the reader has, since they are not presented as true descriptions of the actual world? Sperber and Wilson (1987: 751) offer an answer to this, proposing that an author may be simultaneously performing acts of communication on two different levels: a lower-level act of describing a fictional world and raising internal expectations of relevance, and a higher-level act of showing this world to the reader as an example of what is possible, which raises external expectations of relevance.

What other forms might internal and external relevance take, when, for instance, other types beyond communicative stimuli are concerned? A creative idea occurring in a creator's mind might be thought of as a mind-internal stimulus that merits the attention of the creator's cognitive system and, in relevance-theoretic terms, it will deserve and sustain this attention to the extent that it is conceptually non-trivial and relevant for the creator's individual consciousness at the given time. Or the individual mind may be that of the actual or hypothetical or ideal receiver of the publicly expressed outputs of this creative idea. Could these be thought of as internal forms of relevance yielded by the relative non-trivialness of creative ideational outputs for an individual consciousness, or would we need to coin a new term, e.g. intra-personal relevance?

Then it seems that non-trivial ideational stimuli and their outputs may also have non-trivial conceptual implications upon wider, more macroscopic, collective, inter-personally

embedded and culturally situated real-world contexts and states and affairs in the outside world. Genuinely creative ideational outputs always have at least some, even if rather minimal, effects on the broader external-world domain they prototypically belong to, by making at least minimal contributions that to some degree progress or alter this domain: to say that a poetic ideational output is non-trivial and creative is to say that to some, even if very minimal, degree it progresses or alters the established domain of the poetic tradition it belongs to, if not poetry as a whole, if not literature as a whole, if not art as a whole. Ground-breaking ideational outputs are exceptionally non-trivial and creative outputs that among other things have maximal and radical domain-altering effects that change the face of this domain forever. The history of human ideas abounds in maximally non-trivial outputs of human creative ideation that revolutionised fields of human thought, instigated scientific and social revolutions, changed decisively the face of one artform or other, or ultimately, what we have come to perceive as art and non-art in general, led to ground-breaking innovations after which human reality will never be the same. Non-trivial ideational outputs with maximal domain-altering effects occur across the whole range of possible areas of human intellectual and physical performance from sports to economics, from fashion to sociology and from cookery to gardening. Some of these effects are conceptual in nature because they involve collective representations of, say, what can or cannot be perceived and recognised as art at a given time. Could these effects be a form of external relevance resulting from external non-trivialness of a certain kind?

It is theoretically significant to stress here further the claim I made above about how a genuinely creative ideational output is by definition an output that will have some parallel domain-progressing effects and macroscopic (external?) non-trivialness even if extremely minimal. When it comes to ideational outputs, the relativistic non-trivialness of a creative ideational output that is relevant in an intra-personal (internal?) sense is impossible to exhaust its relevance solely and exclusively at an intra-personal level. In its most rudimentary form, macroscopic (external?) non-trivialness will amount to the ideational output in question demonstrating at least *creative potential*. The notion of creative potential (Runco 2007a) is an important recent contribution to the study of creativity employed to capture the creative element in the ideational and performative output of young children where it is often difficult to evaluate creative ideation and performance by means of complete and tangible non-trivial products. I would like to adjust this notion a bit here and accommodate it in the relevance-based descriptive framework of the non-trivialness of creative ideation I have been sketching so far. In principle at least, and to the extent that the individual is not mis-evaluating the non-

trivialness of her ideational output, intra-personally non-trivial ideational outputs, minimally non-trivial as they may be, will involve at least weak signs of creative potential, which can in turn be interpreted as potential to produce more macroscopic domain-progressing non-trivial outputs in the future.<sup>106</sup> I will therefore suggest that those ideational outputs that are intra-personally non-trivial even to a minimal degree are also by necessity to some degree macroscopically relevant and non-trivial as well, by virtue of embedding a ‘promise’ for non-trivial domain-altering implications in pertinent outer-world contexts. Of course, creative potential is subject to gradation, as intra-personally non-trivial ideational outputs may demonstrate greater or lesser creative potential, greater or lesser promise for macroscopic non-trivialness, with the intuitive evaluation of this creative potentiality depending on person-specific factors such as the age of the creative agent, the extent to which they have received prior training in a given area of performance or are entirely novice and untrained etc. Whether the creative potential will indeed be materialised in the future as tangible achievement out there in the world through the creation of macroscopically non-trivial publicly available outputs is entirely contingent and subject to other person-specific or context-, culture- and time-dependent parameters that cannot be in any way be seen as part of the creative potential itself but are constituents of a broader person-ecology interaction.

In fact, I would be tempted to say that the interplay between intra-personal and macroscopic non-trivialness and relevance of creative ideational outputs is a story of mutual feedback crucially embedded in the very maturational process of creative ideation across areas of human performance. Maturization at any level of human creative ideational performance to a great extent involves becoming intuitively and at times, even reflectively aware of the degree of macroscopic relevance and non-trivialness of a so far intra-personally non-trivial ideational output. Being able to adequately evaluate macroscopic non-trivialness and relevance feeds back into the capacity of the individual mind to produce creative ideational outputs with even higher levels of macroscopic and intra-personal non-trivialness. Empirical studies in psychology and neuroscience show the importance of idea self-evaluation in the process of creative production (Hao et al. 2017; Kleinmintz et al. 2014;

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<sup>106</sup> Boden’s (2004) notions of P-creativity (personal creativity) and H-creativity (historical creativity) depending upon whether the idea is valuable only to the person generating it or valuable in a more macroscopic sense by virtue of no one else ever having generated it before bear some remote resemblance to my notions of intra-personal and macroscopic non trivialness in the sense that Boden pins down an intra-personal and an extra-personal level against which the outputs of creative ideation may be evaluated. The difference between my suggestion and Boden’s is my claim that if an ideational output is genuinely creative or genuinely demonstrates creative potential, it is impossible for this output to be non trivial solely and exclusively at an intra-personal level.

Mueller et al. 2014; Steele et al. 2018). Idea self-evaluation at a conceptual level amounts to an intuitive assessment of the size of the set of non-trivial implications yielded by an ideational output at the macroscopic and intra-personal level and the degree of their accessibility. A crucial aspect of training is often precisely to enrich domain-specific background knowledge, cross-disciplinary and intertextual reach and critical awareness, thereby optimising the ability for adequate idea self-evaluation that can motivate correct consideration of the macroscopic non-trivialness and relevance of creative ideational outputs.

A common misconception in the empirical neuroscientific literature is that the ability for idea self-evaluation is treated as a constituent of the ability for creative ideation itself rather than a constituent of the broader process of creative production (e.g. Hao et al. 2017; Steele et al. 2018). Simple real-life examples can be used to disconfirm this. I very often have long exciting conversations with fellow artists on theoretical issues and listen to them with awe elaborating on a range of highly innovative and non-trivial theoretical ideas. In a long conversation, however, it happens that not all ideas expressed by my fellow artists will be highly innovative and non-trivial. Some will inevitably also be somewhat more contrived and commonplace. I have repeatedly been surprised by incidents where my fellow artists decide to set out on writing theoretical texts elaborating on their ideas, and often dedicate the entire analysis to the contrived, commonplace and most trivial ones. The explanation is rather straightforward: my fellow artists, despite being theoretically and critically aware, lack the level of systematic theoretical and scientific training that would enable them to adequately self-evaluate the differential macroscopic non-trivialness of the range of ideas they are capable of coming up with, but this latter ‘inefficiency’ in idea self-evaluation during the tangible process of production does not nevertheless eradicate the fact that they were in the first place able to come up with the whole range of ideas just mentioned, from highly non-trivial to commonplace ones. Idea self-evaluation affects the degree of non-trivialness of the final product of a creation process but is not indicative of the degree of non-trivialness of creative ideation itself: the agent is able to conceive both highly non-trivial and somewhat contrived ideas but inadequate or inefficient idea self-evaluation in the creative production process leads in the materialisation of the more contrived ones. If highly non-trivial ideas occur in the mind of a given agent with regularity and systematicity, they cannot possibly be attributed to chance, either in those cases where the agent demonstrates weak self-evaluation ability or in those of entirely naïve agents of highly creative ideational outputs, like young Mendonca in the thought experiment described in my previous chapter.

The relevance-theoretic approach to non-trivialness offers solid ground for contemplation, touching on the non-trivial nature of both ideational types of stimuli as much as their publicly available products. In reality, however, the project of pinning down non-trivialness in a manner adequate for a philosophy of art and for an understanding of the aesthetic non-trivialness of certain aspectual representations, as well as the aesthetic non-trivialness of the outputs of artistic thought states and processes, has a very long way to go. Sperber and Wilson's notion of non-trivialness is a fully conceptual one that applies to conceptual representations, or assumptions, so to speak. The relevance-theoretic distinction between strong and weak types of contextual implications (e.g. Cave and Wilson 2018; Sperber and Wilson 2018; Wilson and Carston 2019) and internal and external ways in which inputs can be non-trivial and relevant are particularly important for our aesthetic project but still, a full-blown notion of non-trivialness that could be adequate for the aesthetic requires considerations of ways in which stimuli can be non-trivial beyond conceptual terms.

In Chapters 3 and 6, I made a number of provisional suggestions to this direction by looking at how the composite nature of aesthetic experience as a fundamentally perceptual and sensory type of response, followed by parallel conceptual and affective activation, offers a fruitful starting point for extending non-trivialness and relevance in perceptual and affective terms. It is also worth noting that when it comes to creative ideational outputs like the ones occurring in the kind of action-process that art is, the relative non-trivialness of an input is sometimes better assessed not against the background of the actual context of an individual experiencer at a given time but the idealised context of the so-called ideal receiver. Let me just underline that the relevance-theoretic approach enables a rather refined and empirically testable explanatory framework of conceptual non-trivialness that accounts for why different inputs can have relative differential degrees of conceptual non-trivialness and why these inputs are intuitively perceived by the experiencers of the input as having relative differential degrees of *value* a lot better than any other available alternative account.

Boden's (2004) account, for instance, where non-trivialness is assessed on the grounds of an output eliciting to a greater or smaller extent a phenomenological element of surprise, is introspectively well evidenced –indeed non-trivialness seems positively associated with a phenomenological experience of surprise– but tends to assume that surprise is a sufficient condition of non-trivialness when it's not: merely unexpected stimuli that might qualify as non-trivial in a minimal but not full-blown sense may also cause the phenomenological experience of surprise. Seeing you all of a sudden in front me while I'd thought you were in the room next door is a stimulus that will certainly elicit a sense of

surprise, and it could be claimed to be an input yielding minimally non-trivial implications of spontaneous inferencing, but we wouldn't want to treat this stimulus as a non-trivial one, or one of value, as in the full sense of non-trivialness and value that would be relevant to understanding human creative ideation and production. It is also worth questioning whether the phenomenology of surprise can even qualify as a necessary condition. The ability to conceive and monitor the non-trivialness of an input often crucially depends on domain-specific expertise and pertinent background knowledge, and this fact alone is enough to suggest that for those experiencers who lack either of the two, the input, although highly-non trivial, may fail to elicit a corresponding phenomenological surprise response.<sup>107</sup>

Is it theoretically useful to narrow down creativity only to valuable stimuli? Of course it is. Not all new ideational products are products of value. There are products of value and products of no value, and among products of value there are those of greater or lesser value. We therefore need a theoretical term that will pick out ideational products that are of value and distinguish them from mere ideational products of non-value. I nail two wooden sleds together and show the resulting product to you. Functioning as input, my product might lead to spontaneous implications, such as 'she knows how to use a hammer and nails', 'she can nail two wood sleighs together'. But what in the world is the value of my two sleighs nailed together? It is a new product in the sense that it did not exist prior to my act of fabricating it, it is an output of my idea to nail two sleighs together, but intuitively speaking my product is nonetheless of no value. It is trivial. It is a new but not novel object. It is an object of mere production rather than creative production. A model that does not differentiate mere production from creative production on the basis of value resulting from some form of non-trivialness or other, and does not predict differential degrees of the possible value of creative production, is a model that does not see a difference in value between my two wood sleighs nailed together and Vermeer's the *Girl with a Pearl Earring*. And such a model is both inadequate and counter-intuitive.

To say that not all new ideational products are products of value might sound like a truism, but the amount of empirical and neuroscientific research on creativity that does not take this simple fact into consideration at all in designing experimental settings –I will discuss pertinent examples later in this chapter– makes a truism like this theoretically

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<sup>107</sup> The phenomenological experience of the 'aha!' sensation and its association with creative insight (Runco 2007b: 108) is equally treacherous, as earlier neuroscientific research (Ramachandran and Hirstein 1997) has positively associated the 'aha!' sensation with kinds of discovery following struggle –e.g. spotting the dog among the splotches– that do not necessarily involve inputs that could be adequately described as creative insight.

necessary. Boden (2004) makes a very significant contribution to the recent study of creativity by bringing into play the notion of value as a necessary descriptor of creative ideational stimuli and outputs, which crucially differentiates them from non-creative ones. I would like to refine this approach by proposing that value is neither single nor unitary as a notion. There are numerous types of value, VALUE\*, VALUE\*\*, VALUE\*\*\* etc, and numerous ways an ideational stimulus and its outputs can be of value. Relevance theory provides an excellent starting point for empirically investigating conceptual types of relative value on the grounds of relative conceptual non-trivialness: the more non-trivial an ideational stimulus and its outputs, the greater their conceptual value, and conversely. It also offers a brilliant methodological exemplar of how we could in the future set about investigating other possible types of non-trivialness and value beyond conceptual ones.

Without a differentiation between ideational outputs that are mere products of the human mind and outputs that are valuable products of the human mind, a descriptive and explanatory framework for investigating creative creation would fail to account for the intuitively and introspectively evidenced fact that that not all products of the human ability for ideation are products of value. And if not all products of human ideation are products of value, then our descriptive and explanatory frameworks should somehow account for this. I would, therefore, like to separate sharply here mere production/ creation as a neutral term involving either trivial or minimally non-trivial ideational stimuli and outputs (merely new objects) from creative production/ creation as a value term involving highly non-trivial, and therefore valuable in a robust sense of the term, ideational stimuli and outputs (novel objects).

My notion of aspectual creativity as introduced in Chapter 3 falls under the value term of full-blown creative production/ creation, highly non-trivial and therefore valuable ideational stimuli and outputs that by being aspectual in nature generate novel objects of an aspectual kind. Depending on the type of value these aspectual ideational stimuli and outputs have, they might fall under the characteristic value of artistic ideation and artistic outputs (aesthetic value) or that of scientific or philosophical ideation and outputs.

I would now like to frame my distinction between mere production/ creation as a neutral term, and creative production/ creation as a value term, within a discussion about the locus of creative ideation in the wider framework of the plasticity and productivity of the human mind, which came into theoretical focus through Chomsky's work on human natural language.

#### **7.4 Constraint-governed productivity/ plasticity**

After the publication in 1957 of Noam Chomsky's *Syntactic Structures*, the field of linguistics underwent remarkable developments, instigating what we have come to refer to in subsequent decades as the cognitive revolution: the Chomskian paradigm for the study of human natural language brought the notion of mind into discussions on language and communication (Chomsky 2000: 4), and extended the set of theoretical implications of linguistic study beyond the mere understanding of the human language capacity *per se* and towards a parallel wider understanding of the generative and causal cognitive mechanisms that underlie this remarkable capacity, which is unique to the human species. The study of mind enabled novel insights into the human language capacity, which in turn enabled striking backward insights into the nature of the cognitive system that underpins the capacity to acquire, produce and comprehend language. The study of natural human language has ever since served as a window onto the study of mind.

One of the key properties of human natural language that came into focus through Chomsky's cognitive programme in linguistics is *productivity*, or *plasticity*. fifty years of empirical work in linguistics have revealed that human natural language, unlike the 'languages' found in various non-human animals, does not rely on a limited and finite set of fixed signals or signifiers paired with a finite set of meanings or signifieds, but crucially involves an ability to easily and effortlessly produce and comprehend an infinite number of *novel sentences* through an open-ended process of constraint-based syntactic combinations and re-combinations of the same finite set of linguistic elements governed by the I-language or Universal Grammar. The I-language or Universal Grammar dictates the constraints that determine what is grammatical and ungrammatical in any given language, but the process is nevertheless open-ended, as the speakers of any given language are able to produce and comprehend an infinite number of novel sentences in that language. In fact, the ability to produce novel sentences is far more extensive in human linguistic communication than was initially thought, with the vast majority of sentences produced and understood in our daily give and take being novel sentences. It is important to note, though, that the term 'novel' in linguistics is not used in the value sense of NON-TRIVIAL or INVENTIVE that I have been using in my analysis, but in the more basic, rudimentary and neutral sense of merely NEW sentences we have never heard before as such, irrespective of any value judgement.

Linguistic productivity and plasticity can thus be seen as a prime area where the cognitive property that we might refer to as *constraint-governed productivity/ plasticity* manifests itself. With the backward evidence arising from the study of human natural

language as a paradigm exemplar of the scope and manifestations of this uniquely human cognitive property, it appears that constraint-governed productivity/ plasticity is a universal property that cuts across the human species (species-specific), manifests itself at the level of the human language capacity and is part of the cognitive endowment of all non-cognitively impaired human beings in an equipotential way.

If for some reason we had to use the term ‘creativity’ to refer to this ability, it would be important to make clear that we only use it loosely and in a rather weak sense to mean something along the lines of constraint-governed open-endedness and plasticity that generates an infinite number of new mere products. The idea that ‘creativity’ is the mark of the mental, celebrated in cognitive research over the last 30 years as a hallmark of the plasticity and richness of human mental representations (Pinker 1994; Turner 1997; see also Kolaiti 2019), is in reality is loosely used to refer to this latter generic, universal, species-specific and uniquely human cognitive property of open-ended constraint-governed productivity. For reasons of descriptive clarity, I would therefore suggest that we should avoid using the term ‘creativity’ to refer to this property, or should at least use it in inverted commas to indicate its loose use.

### **7.5 Context-sensitive productivity/ plasticity**

In recent decades, the pragmatic approach to linguistic communication, and particularly the inferential model developed within relevance theory, has shown that the richness of what humans can contextually infer from the relative poverty of the linguistically encoded evidence they are presented with in natural language sentences –a phenomenon known as the underdeterminacy relation between linguistic meaning and communicated meaning or the so called ‘semantics-pragmatics distinction’ (Carston 2002: 15-93)–, is built into the nature of human linguistic communication.

Linguistic communication, it seems, is a much more flexible, creative and context-dependent process than code-based semiotic approaches assumed. Contrary to the standard assumption of code-based models, the relationship between words/ sentences and the thoughts they communicate is not one-to-one but one-to-many. Human communication is not vervet-like: vervet monkeys are a species that possesses something apparently akin to a language. The alarm calls of vervets to alert their peers to the presence of predators can be seen as a language in the semiotic sense, as they involve fixed pairings between signals and the meanings these signals encode. Human communication is not vervet-like. Thanks to the human *pragmatic ability*, thoughts are not encoded by the word or sentence itself but inferred

by a hearer's mind in a context-sensitive way, using the word or sentence as starting point in a flexible inferential interpretation process (Sperber and Wilson 1995; Wilson and Sperber 2012). The relevance-theoretic account of speaker meaning (see Sperber and Wilson 2018) moves radically away from the fixed pairings of the semiotic legacy by replacing the traditional notion of a speaker's intended meaning with the much more flexible notion of the (intended) import of a communicative act. At the same time, the developing field of lexical pragmatics (Blutner 1998, 2002; Carston 2002; Carston and Uchida 1997; Kolaiti and Wilson 2014; Sperber and Wilson 1998; Wilson 2003) shows how the richness of what addressees can contextually infer from a relatively impoverished repertoire of linguistically encoded meanings applies not only at the level of whole utterances but also at the level of individual lexical items. Words do not necessarily communicate on every occasion of use the 'literal' meaning assigned to them by the grammar, but rather provide context-sensitive access to a striking richness of fine-tuned occasion-specific or *ad hoc* (as they are called) concepts (Carston 2002; Kolaiti and Wilson 2014; Sperber and Wilson 1998, 2008; Wilson 2003; Wilson and Carston 2007). This view directly challenges the rigidity of code-based models and highlights the productivity, plasticity and sophistication of human linguistic communication. To use Deirdre Wilson's words from her lectures on lexical pragmatics at UCL in 2005:

(...) words are often used in ways that depart (sometimes a little, sometimes a lot) from their 'literal' meanings, the ones assigned them by the grammar. We invent new words, and people understand us. We blend two words together, and people understand us. We use nouns, adjectives or prepositions as verbs, and people understand us. We borrow words from other languages; we use words approximately, metaphorically or hyperbolically. As children or adults, we pick up the meanings of unfamiliar words without being taught, just by hearing them uttered in context. We see words come into fashion and vanish; we see them acquire new meanings and lose old ones.

In the descriptive framework I'm trying to sketch here, I would suggest that the productivity, flexibility and plasticity of the human pragmatic ability reflects another crucial human cognitive property that we might refer to as *context-sensitive productivity/ plasticity*. Pragmatic plasticity, as reflected in human (linguistic and non-linguistic) ostensive inferential communication could be seen as a paradigm exemplar of the context-sensitive productivity/ plasticity of the human mind, resulting from the combination of this latter cognitive property with other key cognitive properties and abilities: the property of a constraint-governed

productivity/ plasticity that I discussed earlier, the Theory of Mind capacity or ToM (i.e. the capacity to meta-represent or in other words, sense and reflect on our own mental states and those of others), the pragmatic ability (i.e. the dedicated ability to use inference in order to bridge the gap between what is said and what is meant in a communicative act) and the ability for *ad hoc* concept formation (i.e. the ability of the human mind to construct concepts spontaneously in occasion-specific ways). Let us stay with *ad hoc* concept formation a bit more.

The explanatory accounts developed by inferential pragmatic models in recent decades, particularly lexical-pragmatic models, draw heavily on theoretical arguments and experimental evidence of the last thirty years that human cognition does not rely solely on a limited stock of innate, prefabricated concepts already stored in the mind, as was assumed by earlier models,<sup>108</sup> but is also able to construct an open-ended range of *ad hoc* concepts that are formed on the spot in a flexible, occasion-specific and context-dependent way (Barsalou 1987, 1992). In the studies carried out by Barsalou, the subjects are asked to construct as many examples as possible for, say, the *ad hoc* concept OBJECT YOU WOULD STAND ON TO CHANGE A LIGHT BULB and seem to generate their answers easily and effortlessly. It is counterintuitive to assume, given that the brain is a limited device, that humans have already stored in the mind such unlikely concepts, and it is more reasonable to conclude instead that the mind has the plasticity to construct these concepts *ad hoc* in a context-sensitive way. *Ad hoc* concept formation could be seen as yet another paradigm exemplar of the context-sensitive productivity/ plasticity of the human mind, as a key property this time reflected at the level of human conceptual organisation and the ability for concept formation.

Notice also that the occasion-specific and open-ended way our mind is able to *ex impromptu* generate new concepts has much in common with the open-ended and context-sensitive way it has been shown by empirical research to be able to generate multiple solutions to occasion-specific problems or produce an indefinite range of occasion-specific ideational outputs, an ability referred to in the psychological and neuroscientific literature as *divergent thinking* (a term coined by Guilford 1950; Guilford et al. 1970). In simple terms, divergent thinking involves the ability to generate an open-ended number of valid answers to

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<sup>108</sup> E.g. the definitions theory of concepts assumed that all concepts are stored in the mind in the form of definitions. attacks against this model by Fodor did not deny that primitive concepts are innate but argued that there were many more primitive concepts than definitional theorists did (for discussion see Chapter 1, 'Concepts and Cognitive Science' from Margolis and Laurence (1998)); the prototype theory of concepts that emerged in the 1970's (Rosch 1975) assumed that concepts are stored in the mind as prototypes, i.e. prototypical representations of paradigmatic exemplars of the given concept.

a given question, or solutions to a given problem, in a context-sensitive way: the classic divergent thinking task of finding as many possible uses for a newspaper is clearly indicative of that. Divergent thinking could therefore be seen as yet another area where the cognitive property of context-sensitive productivity/ plasticity manifests itself, this time at the level of problem-solving and idea generation.<sup>109</sup>

This raises the question of whether the property of context-sensitive productivity/ plasticity manifests itself in other domain-general cognitive skills that have been understudied and undervalued by existing creativity research. While a staggering amount of empirical investigation in the psychology and neuroscience of creativity has focused on divergent thinking, the parallel human ability for *convergent thinking* –the ability to generate a single solution to a single problem– has received little attention. Abraham (2018: 72-73, 77-78) offers illuminating reflections on why the study of convergent thinking should be thought of as no less integral to the enterprise of comprehending human creativity, and I would like to spend a moment here to build further on Abraham’s insightful perspective by offering a couple of arguments to pretty much the same end.

A fundamental problem in the way convergent thinking is treated by current empirical research is that the experimental settings used don’t seem to take into account an introspectively and empirically relevant fact: a single solution to a single problem may be more or less inventive. If so, the human ability for creative ideation and the property of context-sensitive productivity/ plasticity must somehow manifest themselves in the ability for convergent thinking too. Comparative variability in single-solution inventiveness should not be left unaccounted for, otherwise we are looking at the process involved in coming up with single solutions and its relation to creative thinking in a reductionist way: *Problem X has solution Y. The subject reached solution Y. The subject is therefore creative.* Well, no... The use of ‘creative’ here is again loose. Single solutions to single problems can often be reached in diverse ways and through palpably dissimilar paths, and in general, we are able to form intuitions about the comparative level of innovation and inventiveness of each of these ways and paths. Intuition often indicates that some of these ways or paths amount to staggeringly

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<sup>109</sup> Later in my discussion I will try and illustrate how recent findings by the *Big-C Project* at the University of California seem to confirm my present claim that divergent thinking must relate to the cognitive property of context-sensitive productivity/ plasticity. A key question here for future research is about what type of relation holds between divergent thinking and context-sensitive productivity/ plasticity. Is divergent thinking a domain-general cognitive skill that acts as a determinant of context-sensitive productivity/ plasticity, or is it like the pragmatic ability and the ability for *ad hoc* concept formation, where the property of context-sensitive productivity/ plasticity manifests itself? In the first case, the relation is a causal one, in the second it is not.

more inventive, non-trivial and genuinely creative single solutions to single problems. To the extent that a subject has simply reached solution Y, the subject can be claimed to have used the capacity for context-sensitive productivity/ plasticity. To the extent that that a subject has reached solution Y in a highly inventive and non-trivial way, the subject can said to have thought creatively. It follows that in investigating convergent thinking in the broader context of the study of human creativity, neuroscientists and psychologists need not simply look at whether the subject reached solution Y but crucially, at how solution Y was reached.

It is also important to consider that not all areas of human ideational performance involve definitive single solutions. Scientific theory formation, as a prime area where the human ability for creative and, more specifically, aspectual thinking –as I termed it in Chapter 3– is an excellent exemplar of this fact. Scientific theories and hypotheses are systematic bodies of non-demonstrative inferences or inferences to the best explanation that are not guaranteed, but only highly likely to be true in the light of the evidence available. Being non-demonstrative, these hypotheses correspond to a range of different possible single solutions Y, Y\*, Y\*\*, Y<sub>n</sub> to a single problem which can be seen as deriving from a tortuous process of, among other things, convergent thinking involving highly context-sensitive inferences to the best explanation. The scientist constantly resorts to their cognitive background to make use of relevant existing knowledge consisting of extremely complex sets of empirical and introspective evidence which are subject to constant re-assessment and re-interpretation and combined with empirical observation, intuitions about the efficiency or inefficiency of other competing solutions that have been proposed for the same problem etc in order to propose a highly likely yet not definitive single solution Y, Y\*, Y\*\*, Y<sub>n</sub> to this problem. It is clear, I think, from the case-study of scientific theory formation that convergent thinking is a highly context-sensitive skill and definitely one of the cognitive skills in which the property of context-sensitive productivity/ plasticity manifests itself.

Context-sensitive productivity/ plasticity is species-specific, in the sense that the cognitive abilities that manifest it (e.g. generic or species-specific productivity/ plasticity, pragmatic plasticity, ability for *ad hoc* concept formation and ability for divergent and convergent thinking) cut across the human species, but the fact that it is also context-dependent means that it relies heavily on the producer's cognitive environment or background. But people do not have identical cognitive environments or backgrounds. This simple fact suggests that this property cannot be thought of as exhibiting the level of equipotentiality of constraint-governed productivity/ plasticity: inter-individual differences in the individual's ability to access or construct a context will amount to differential

manifestations of such a context-sensitive property and at least some degree of person-dependent differential distribution across the human species. There is also evidence from recent empirical research on metaphor that the ability to produce metaphors –which clearly relates to how and when context-sensitive productivity/ plasticity manifests itself in the realm of pragmatic plasticity– is subject to maturation processes (Carriedo et al. 2016) thereby suggesting at least age-dependent differential distribution across the human population.

## **7.6 Full-blown creativity**

Some ideational stimuli and their outputs are mere products, and some ideational stimuli and their outputs are valuable products to a greater or lesser extent. When subjects are asked to find as many uses of a newspaper as possible, intuition might lead us to judge some uses as more non-trivial, valuable and hence creative than others. When a scientist finds an unexpected use of an enzyme to prevent Alzheimer’s disease, intuition suggests this is an output of outstanding non-trivialness, value and creativity. As I argued earlier, it is methodologically necessary to refer to this property of human cognition that makes certain ideational stimuli and their outputs valuable as ‘creativity’ or ‘creativity(ies)’ (used here in a full-blown and not loose sense), and propose that the cognitive ability in which creativity or creativity(ies) demonstrates itself is the human ability for generativity or ideation.

Here is how the rationale of this claim fits with my notion of aspectual creativity: certain outputs of human ideation and production have aspectual characteristics, and can therefore be thought of as outputs of an aspectual type of creative ideation (aspectual creativity). The outputs of the property of aspectual creativity are always valuable products – independently of the degree of their value– by virtue of their aspectual characteristics. The minimal degree of value is achieved simply by the outputs demonstrating creative potential of an aspectual kind.<sup>110</sup> It follows that in looking at aspectual creativity, we are essentially looking at a property of human ideation and generativity whose outputs cannot but represent products of value. Aspectual creativity can therefore be referred to as creativity not in a loose but a robust and full-blown sense.

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<sup>110</sup> If the ideational output did not demonstrate any value, even in the rudimentary sense of having creative potential of a certain kind (aspectual kind), we wouldn’t be able to identify in it evidence of aspectual creativity; and identifying evidence of aspectual creativity in an ideational output, even in the rudimentary sense of its having creative potential of a certain kind (aspectual kind), suggests that we identify in it early evidence of value of a certain kind (aspectual kind).

Intuition and empirical observation<sup>111</sup> indicate that there is huge person-dependent and context-dependent differentiation in the way the property of creativity manifests itself, suggesting that we are looking at a property with even greater differential distribution, and therefore lesser equipotentiality, across the human population, and also one that most probably has a whole range of different manifestations: CREATIVITY\*, CREATIVITY\*\*, CREATIVITY\*\*\*, etc. What factors may be taken to influence this differential distribution and manifestations that creativity can be assumed to take? To address these questions, I would like to frame the discussion within my model of artistic thought states/ processes and my notions of aspectual creativity and the artistic condition.

So far, I have introduced two fundamental human cognitive properties, (constraint-governed productivity/ plasticity and context-sensitive productivity/ plasticity. These properties represent two different versions of a unique aspect of the human cognitive capacity: its productivity and plasticity, unparalleled by any other non-human animal species. As I suggested, these two properties differ palpably in terms of potentiality: the former is equipotential, whereas the latter seems to exhibit at least some variation in potentiality on person- and ecology-dependent grounds. A first radical point of departure of my account from existing theoretical accounts of human creativity is that it distinguishes full-blown creativity from these two base-layer cognitive properties.

So far, neuroscientific and empirical research has explored three possibly distinct cognitive properties in an undifferentiated way, under the summary heading ‘creativity’.<sup>112</sup> This problem, shared by a number of experimental studies on creativity, emerges in a variety of ways. Take for instance studies like Takeuchi et al. (2010ab, 2015), which present themselves as studies on verbal creativity: brain correlates of performance are explored

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<sup>111</sup> Existing empirical research is useless at this point, precisely because it investigates the three cognitive properties I have been discussing in these later sections of this chapter in a completely undifferentiated way.

<sup>112</sup> Take, for instance, the considerable amount of empirical literature that takes itself to be investigating creativity because it studies divergent thinking, and even treats divergent thinking as synonymous with creativity (for pertinent discussion see Abraham 2018: 72-73) It might be that all this empirical body of research is investigating is a domain-general skill in which context-sensitive productivity/ plasticity and creativity manifest themselves. To the extent that these studies investigate differential potentiality in divergent thinking on the basis of person-dependent parameters, all they are investigating is differential potentiality across human individuals in terms of how context-sensitive productivity/ plasticity manifests itself in a given domain-general skill. For these studies to yield results about creativity, they must focus on the way in which, and the extent to which good divergent thinkers can be shown to consistently generate products of value. This is a methodological problem that cuts across existing creativity research and I must therefore clarify that in making references to empirical evidence from ‘creativity’ research, to some extent this evidence is contaminated by an unrefined outlook that investigates creativity in a full sense invariably from the two base-layer cognitive properties.

during verbal divergent thinking tasks of three different types: an alternate uses task (think of different uses for a newspaper), a desirable functions listing task (list all the features of a good TV), and a counterfactual imagination task (imagine a world without mice; what would that be like?). Responses are scored for originality and elaboration. To quote Abraham (2018: 275) the big and tricky question is ‘to consider (...) whether verbal divergent thinking tasks are capturing something that is specifically ‘verbal’ about creativity. An even bigger and trickier question is to consider whether verbal divergent thinking tasks of this type are capturing something about creativity at all’. Given the distinction introduced earlier, these and other similar studies seem actually to be investigating the domain-general cognitive skill of divergent thinking by means of verbal tasks. They are also clearly investigating the property of context-sensitive productivity plasticity as applied to divergent thinking and *ad hoc* concept formation. But they are not investigating either verbal creativity in particular (if there is such a thing at all) or creativity in general.

In neuroimaging studies like Bechtereva et al. (2004), participants are given lists of semantically related and unrelated words and asked to generate a story connecting them. The experimental setting *prima facie* assumes that the use of a list of semantically unrelated words (e.g. to throw, mushroom, silence, cow) as opposed to a list of semantically related words (e.g. lesson, school, teacher, to solve) makes the former story generation creative and indicative of verbal creativity, and the latter uncreative and non-indicative of verbal creativity. Just as in my example above, it is unclear what this study investigates. A similar story generation paradigm using three words was used in a neuroimaging study by Howard-Jones et al. (2005), where story generation for semantically unrelated words was again judged to be more creative than that of for semantically related ones. Although remote conceptual associations and implications are one of the characteristics of non-trivialness, and non-trivialness also often involves breaking the expected patterns of schemas, frames and scripts of how things are stereotypically done out there in the world, to assume *a priori* that the generation of a story with semantically unrelated concepts by definition involves creative ideation in the full sense of the term ‘creative’ is biased and simplistic. Both semantically related and unrelated story generation tasks are in reality investigating context-sensitive productivity plasticity as applied to verbal performance and mental imagining, and not verbal creativity or creativity as such. Highly creative literary works often involve only semantically related words, and often, outputs with lots of semantically unrelated words do not exhibit any literary merits. To treat any kind of story generation as an output of creativity in a strong sense of the term, the key criterion should be whether the story generated demonstrates strong

evidence of non-trivialness and aesthetic value. If it doesn't, it is a mere product that manifests the properties of context-sensitive productivity plasticity and constraint-governed productivity plasticity, but not that of creativity. Without a clear differentiation of creativity from the two base-layer cognitive properties, experimental studies on creativity will keep producing experimental results which are completely irrelevant to an understanding of creativity as such, and obscure rather than clarify the picture.

It should be noted here that to distinguish full-blown creativity from the previous two base-layer cognitive properties does not mean that I am necessarily proposing at this stage that full-blown creativity is a palpably distinct cognitive property: as I will suggest later in this discussion, there is genuine question about whether creativity is a separate property or an ability to exploit more inventively the resources of context-sensitive productivity/ plasticity, or perhaps even an incidental state of mind resulting from incidental and contingent factors such as increased concentration, attention and flow. These are genuine questions that psychology and neuroscience are already to some extent contemplating, and I should stress that aim of this book is not to spell out a comprehensive theory of creativity, but to make a first step towards a decisive adjustment of the current theoretical picture on the matter, not only in order to fulfil the two-way interdisciplinary commitments of this book, but also to open the way for a taxonomic clarity that is necessary for a future experimental investigation of the very cognitive model developed in this analysis. At this early and speculative stage, what matters is to sketch a descriptive framework that will help refine existing empirical research to the extent of creating more efficient experimental settings and clarifying the picture a bit in terms of what it is we are investigating in each such setting. It is also important to lend descriptive frameworks for creative ideation an element of psychological plausibility, and ensure that they are compatible with significant insights the study of human natural language and human linguistic communication have yielded into the human cognitive capacity and the workings of the mind.

To return to my cognitive model as introduced in Chapter 3, my notion of aspectual creativity can be significantly refined in the light of the descriptive framework I have started developing here, as one among the various possible forms the property of creativity might take, most probably assisted by a range of particularised cognitive, perceptual and affective sub-abilities. It might not necessarily be that the particularisation is down to these sub-abilities being dedicated to each specialised type of creativity, but that each specialised type of creativity is composed of unique combinations of sub-abilities, in the same way that unique combinations of genes and genetic polymorphisms make up unique genotypes.

The provisional list of sub-abilities I introduced in Chapter 3 which make aspectual creativity possible could therefore be seen as its unique ‘genotype’. Recent empirical enquiry in experimental psychology and neuroscience allows us to provisionally start establishing an empirically attested basis between aspectual creativity and some of the sub-abilities I chose for its ‘genotype’.

Experimental findings on *unique perception* in individuals with a talent for the visual arts (Asari et al. 2008) provide initial evidence that corroborate one possible instantiation of my intuitive suggestion that aspectual creativity involves distinct ways of *seeing*. Although the experiment provides a much narrower and more literal construal of unique perception than the one I propose when metaphorically talking about aspectual creativity and ways of *seeing*, the findings can nonetheless be loosened and generalised: maybe aspectual creativity binds with unique perceptual or conceptual or affective or other cognitive mechanisms enabling ways of *seeing* with unique outputs across areas of performance.

Evidence about a positive correlation between creativity and the ability for sudden and unexpected *perspective shift* or *insight* (i.e. a non-incremental process leading to an unexpected alternate perspective, a sudden restructuring of a given context and the subsequent discovery of new conceptual relations embedded within it) (e.g. Gilhooly et al. 2015; Kounios and Beeman 2014), as well as the ability to overcome *functional fixedness* (i.e. the propensity to view an object in terms of its most salient, stereotypical and common properties, which constrain our ability to consider non trivial, inventive and unconventional perspectives) also make a preliminary case in support of a certain instantiation of my intuitive view about distinct ways of *seeing* as being integral to aspectual thinking (Abraham 2018: 101-102; Duncker 1945). In relation to the sub-ability to be in fine-grained informational states of a perceptual sort, recent neuroscientific research by Jola et al. (2011) on how local sensory signals integrate to form a single experience of the body as a whole compared the contribution of proprioceptive<sup>113</sup> and visual information in both expert dancers and non-dancer controls, and found that dancers show better integration of local proprioceptive signals

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<sup>113</sup> *Proprioception, exteroception* and *kinaesthesia* concern the sense of internal and external awareness of body posture, position in space and movement. According to Abraham (2018: 319) kinaesthesia ‘refers to the integration of information from the vestibular system (the sensory experience of balance and spatial orientation) and the proprioceptive system (the sensory experience from forces within the body –muscles, tendons, joints). Some accounts of kinesthesia include not only proprioception but also exteroception (the sensory experience –visual, auditory, tactile– of stimuli outside the body), making kinesthesia integral to multisensory and active perception’.

than non-dancers.<sup>114</sup> Creativity in artistic and scientific areas of human performance has also been found to be positively connected with wider associative abilities and looser association making, perhaps as a result of an optimal use of analogical reasoning and thinking: the ability to fluently retrieve and combine remote, and hence less accessible, conceptual associations is seen as facilitating creative ideation in science and the arts (e.g. Abraham 2018; Boden 2004; Blanchette and Dunbar 2002; Dunbar 1997; Vendetti et al. 2014).

The empirical observation that not all human individuals are capable of aspectual creativity, although they might demonstrate different types of creative potential, leads me to the assumption that there must exist specialised types of creative ideation, and that each type applies to certain domains of performance, and demonstrates much greater differentiation in terms of potentiality and a significantly narrower distribution within the human population: so while we might all possess one type of creativity or another, none of us possesses all possible types of creativity. What types might these be? This is actually yet another radical point of departure for my notion of aspectual creativity from existing creativity models. My notion of aspectual creativity crosses domains of performance, in the sense that, as I already claimed in Chapter 3, there is strong intuitive evidence that aspectual creativity is shared equally by the artistic/ literary mind and the scientific and philosophical one, at least as far as theoretical science is concerned.

This assumption runs against the currently dominant, *domain-specific approach to creativity*, as I would call it, which tends to distribute human ideational performance into prototypically determined domains (e.g. the prototypically determined domain of literature, or of music, or of kinaesthetic performance or of science etc). The domain-specific approach assumes that each prototypically determined domain corresponds one-to-one to a pertinent type of creativity: for instance, ‘literary creativity’, ‘musical creativity’, ‘kinaesthetic creativity’, ‘artistic creativity’, ‘scientific creativity’, ‘technological creativity’ etc. My empirical observation that artistic, theoretical-scientific and philosophical ideational outputs seem to involve aspectual creativity implies that the dominant, domain-specific taxonomic approach to creativity must be theoretically inadequate.

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<sup>114</sup> A question for further research is whether or not these sub-abilities (perspective shifts, non-functional fixedness, fine-grained perception, unique perception) occur in a domain-specific way, with the notion of domain here being prototypically determined. My intuition is that they are domain-specific, and that there will be intra-personal variation of performance in these sub-abilities across domains, owing to what later in the chapter I will describe as *initial states*.

This latter assumption is in my view confirmed by a whole host of recent experimental findings, which I will briefly analyse below, and which not only undermine the prototype-based taxonomies that I challenged earlier in this book from a very different standpoint –in my discussion of prototype-driven theories and canons of art– but also suggests that psychologically and neurologically realistic descriptive frameworks for investigating creativity might in fact run against prototype-based ones. So, let me linger for a moment on the taxonomic implications of my account of literature and art as a cognitive object and my notions of artistic thought states/ processes and aspectual creativity for existing taxonomic approaches to creativity.

In line with my internalist and mentalistic model of literature and art as a distinct human action standing in a causal relation to art-specific thought states and processes, literature and art, in all its possible past, present and future forms and manifestations, is a unified domain. In all its existing and possible forms, literature and art is a cognitive object in a robust sense of the term, causally connected with one and the same kind of distinct and art-specific action-process, involving one and the same kind of distinct and art-specific minimal thought states and processes. As I suggested in an earlier chapter, the unification of literature and art as an action with shared minimal cognitive history across the outputs of all existing and possible artforms runs against traditional literary and art-theoretical divisions, not only by defying the standard prototype-based dichotomy between literature, on the one hand, and all the remaining artforms on the other, but also and primarily by opening the way to replacing prototype-driven canons of art with causal, cognitive and psychologically realistic taxonomies. In these new taxonomies, many more objects than those we traditionally categorise as artworks might find their way into the taxonomic category ARTWORK (BLIB), and many objects that we have categorised as ARTWORKS on prototype-driven grounds, might start being thought of as NON-ARTWORKS (BLOBS). From the point of view of its minimal cognitive engineering, literature and art is a unified domain, a unique human action-process distinct from all other action-processes.

As I proposed in Chapter 3, the distinct and art-specific thought states and processes (artistic thought states/ processes) that unify all past, present and possible artforms, including literary ones, in a single domain from a causal point of view, are compound states/ processes. One of the components of a minimal artistic thought state/ process is an ability for a specialised type of creative ideation (aspectual creativity), equally shared with non-artistic types of human ideational performance such as theoretical science and philosophy. So, while the overall thought state/ process is art-specific and occurs only in the kind of action that

literature and art is, the aspectual creativity constituent of this thought state is shared between the kind of action that literature and art is and other types of human action (e.g. theoretical science and philosophy). The backward interdisciplinary implications of these assumptions for existing descriptive and explanatory accounts in the psychology, neuroscience and philosophy of creativity are massive. The first and foremost implication is the very introduction onto the theoretical table of the notion of an art-specific thought state/ process in the first place, which radically alters current assumptions about the relation between creative ideation and production procedures. Let me elaborate on this for a moment.

Since the early 70's, the standard approach in the study of creativity is to use MacKinnon's (1970) notion of the 'creative process', although MacKinnon himself when introducing it described it as a mere convenient summary label for what in reality must be a complex set of processes. In the four decades that have followed, the term 'creative process' has been standardised in the empirical literature and studied in terms of its alleged stages, drawing from as far back as Wallas' (1927) 4-stage model of the creative process –which in my view is only pertinent to scientific theory formation– through to Lubart's (2001) re-assessment of Wallas' model, and to Finke, Ward and Smith's (1997) Geneplore model, which assumes the existence of pre-inventive structures followed by an explorative phase involving idea evaluation. The alleged components (e.g. divergent thinking) of the 'creative process' have also been studied. No-one has thus far questioned or disputed the very notion of the 'creative process' itself. I will happily undertake the task.

My first objection concerns whether such a thing as the 'creative process' exists at all. In fact, it doesn't. In the light of the descriptive analysis I have tried to develop from the beginning of this chapter, what theorists actually have in mind when using the term 'creative process' is the mere creation of a product of any sort. It follows that what they actually refer to by use of the term 'creative process' is CREATION PROCESS, which, as I suggested earlier, may be either creative or uncreative depending on whether the ideational output is a mere product or a product of value. Now, even if somebody claimed that 'creative process' is simply used in a narrowed sense to pick out solely the process of creating products of value, the term 'creative process' is still theoretically inadequate: CREATIVE PROCESS and CREATION PROCESS are not synonymous. My construct of a minimal artistic thought state/ process allows us to comprehend why, by visualising the precise locus of creative ideation in the overall action-process of creating an artwork: the ability for creative ideation (and in particular, aspectual ideation) is merely one among other components of the minimal cognitive compound that enables this action-process to take place. Metarepresentation and idea

evaluation, even in the weak sense of intuitive awareness of the non-trivialness of the agent's creative representation, is another. Spontaneous aesthetic response to the agent's intuitive awareness of the non-trivialness of her own creative representations is yet another. Why, then, use the name of just one component of a compound process as a cover term for the entire process? Why call it the 'creative process' and not, say, the 'metarepresentational process' or the 'aesthetic process'? For that matter, any of these options would be equally forced overgeneralisations.

Also, on the speculative assumption that there might exist other domain-specific and dedicated types of thought states as well (e.g. scientific thought states?) in which the ability for creative ideation of a certain kind –in this case, aspectual creativity– may perhaps possess a similar locus in the overall compound thought state, calling the overall action-process the 'creative process' is again a forced and theoretically inadequate overgeneralisation: using the term 'creative process' to refer in an undifferentiated way to, say, the action-process that art is and the action-process that theoretical science is, and for that matter any kind of human action-process is, predicts that art creation and science creation, and for that matter any kind of creation, correspond to one and the same type of action-process. While a certain type of creativity (e.g. aspectual creativity) might be shared among a range of areas of human creation (e.g. art, theoretical science, philosophy), each of these areas of creation involve different action-processes. My notion of artistic thought states/ processes and my extensive arguments for why these thought states/ processes are specific to art and art only, suggests that the undifferentiated labelling of palpably different types of action action-process, possibly corresponding to different sets of genetic predisposition and hard-wiring, as the 'creative process' is grossly incorrect. In this light, the undifferentiated notion of a 'creative process' emerges as a theoretically redundant construct, while new alternative approaches open the way to studying creative ideation within the broader framework of human practical reasoning processes and tracking its contribution to what might in fact be a whole host of distinct action-processes.

The only possibly legitimate use we could make of the term the 'creative process' in the framework I'm trying to sketch here is to pick out the specific constituent of the overall compound of an artistic thought state/ process, the constituent where our agent comes up with and holds onto an aspectual representation: i.e. the aspectual ideation component of an artistic thought state/ process. But I still think that other possible descriptive terms, such as 'stage of creative ideation' or 'stage of aspectual ideation', might be more adequate to pin down that particular bit. Finally, as far as the so-called 'stages' of the so called 'creative process' are

concerned in the existing psychological and neuroscientific literature, I will try below to make a number of alternative suggestions.

Instead of talking about the ‘stages’ of the so called ‘creative process’ (Finke et al 1997; Lubart 2001; Wallas 1927) it would perhaps be more adequate to talk about the stages of the *creation* process rather than the stages of the *creative* process, since these ‘stages’ may well occur in processes of mere production/ creation which do not generate products of value and do not merit the characterisation ‘creative’.<sup>115</sup> It would therefore be crucial to focus on the determinants that sometimes make the outputs of these ‘stages’ creative and sometimes uncreative. It would also be crucial to refine any discussion of what these ‘stages’ are, and how and when they occur in the macroscopic creative creation process, by introducing into the picture the theoretically necessary and psychologically realistic microscopic mechanism of spontaneous action-specific thought states/ processes. As I tried to underline in the previous chapter, such spontaneous thought states/ processes (e.g. artistic thought states/ processes) are not equivalent to working methods, and should by no means be thought of as such. They are automatic and potentially hard-wired mental operations that form the minimal cognitive infrastructure of causally distinct human actions such as the kind of action that literature and art is. The so called ‘stages’ of the ‘creative process’, on the other hand, seem to investigate macroscopic patterns of working methods involved in the procedure of creation in various contexts;<sup>116</sup> from a cognitive point of view, this is clearly a very different level of investigation. However, if my account is right and the automatic and potentially hard-wired spontaneous mental operations I have termed artistic thought states/ processes do exist, then, in the context of artistic creation at least, the study of macroscopic patterns of working methods involved in the procedure of creating an artwork is descriptively and explanatorily incomplete unless it takes into account how the microscopic and minimal mental operations involved in artistic thought states/ processes interact with the macroscopic operations of

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<sup>115</sup> More refined descriptive analyses are required in the future to pin down the contexts in which these ‘stages’ are relevant or not relevant, or even devise further ‘stage’-models for areas of human performance that are not perhaps accounted for by the existing ones: as I suggested earlier, Wallas’ (1927) 4-stage model of the creative process, for instance, seems to be relevant only to scientific theory formation. Finke, Ward and Smith’s (1997) Geneplore model, on the other hand, seems to have more general applicability across a range of different performance contexts.

<sup>116</sup> It should be noted here that the procedure of creative creation need not always have a macroscopic dimension, or in other words, it doesn’t necessarily have to expand significantly over time: instantaneous creative creation by insight –most probably owing to prior sub-attentive thought processes– is an empirically attested phenomenon across areas of human performance. Nikos Gatsos wrote the entire poetic work *Amorgos* in just one night; On a single March day in 1914, Fernando Pessoa composed his entire epiphanic collection *The Keeper of Sheep*, one of this great poet’s pivotal works.

broader artistic creation methods and procedures. By introducing these mental operations into the theoretical picture, my approach contributes to the current study of ‘creativity’ –in the context of literature and art at least– by putting on the table a psychologically real entity that ‘creativity’ research needs to take into consideration. In this light, and as I explained in Chapter 3, to explore the ‘stages’ of the macroscopic procedures of creative creation in the context of literature and art is to explore the extremely intricate feedback relationship and variation caused by the constant interaction between the various stages of the macroscopic methods and procedures of artwork creation, all the way from initial conception to mind-internal or mind-external (physical) instantiation, on the one hand, and the spontaneous potentially hard-wired microscopic engineering of artistic thought states/ processes, on the other. To look at the macroscopic creation procedures without taking into account the microscopic mental operations that form their cognitive infrastructure is to miss a critical component of the complex psychological reality of what it means to create an artwork.

One other radical theoretical implication of the notion of an artistic thought state/ process for the current study of ‘creativity’ arises from my suggestion that both artistic and (theoretical) scientific creation involve one and the same type of creative ideation ability, i.e. aspectual creativity. This is indeed a point where my account decisively departs from existing theoretical models of creativity, for two main reasons. Let me start with the least important one. ‘Scientific creativity’, to use the term standardly employed in the pertinent literature, is an understudied and relatively ignored domain of enquiry compared to the study of creativity in the arts. The general consensus in psychology and neuroscience is to treat ‘scientific creativity’ as distinct from creativity in art, and this tendency is terminologically reflected in the use of two distinct theoretical terms, ‘scientific creativity’ and ‘artistic creativity’, which capture the allegedly distinct types of creativity that occur in the domains of science and art. This is clearly what I described earlier as a domain-specific model of creativity, as it assumes that there are distinct types of creativity which correspond one-to-one to prototypically determined domains of human ideational performance –e.g. the prototypically determined domains of human ideational performance ‘art’ and ‘science’ are seen in this model as presupposing corresponding varieties of domain-specific ‘artistic’ and ‘scientific’ types of creativity, with further particularisation and sub-categorisation of each alleged creativity domain into sub-domains such as ‘musical creativity’, ‘literary creativity’, ‘kinaesthetic creativity’ etc. Almost all empirical and theoretical research in the psychology and neuroscience of creativity in the present day implicitly or explicitly adopts the domain-specific model. Research findings about different predictive personality traits in

‘scientifically’ and ‘artistically’ creative individuals have been taken as further evidence that, at least as far as art and science are concerned, we are clearly looking at different domains of creative ideation ability (Kaufman et al. 2017). But the inference here is quite forced: even if it is the case that ‘scientifically’ and ‘artistically’ creative individuals have different predictive personality traits, it is by no means necessary that the distinct personality traits are due to possessing distinct creative ideation abilities; they might, for instance, be ecology-dependent, as western societies and the directions children get from family and nurture affect the personality profile of people who will opt for an artistic or scientific ‘career’. At the same time, a number of psychologists and neuroscientists are reluctant to treat science as a domain that provides evidence of creativity at all, on the assumption that science creation relies heavily on logical reasoning. Abraham (2018: 348) insightfully criticizes this view, suggesting that ‘the notion that logical reasoning is antithetical to creative ideation is a grave misconception, as different forms of logical reasoning –deductive, inductive, abductive, and analogical– are utilized in service of creative ideation (Morris: 1992)’; Abraham (2018: 23-24) also maintains some reluctance to adopt the view that ‘artistic’ and ‘scientific’ creation involve correspondingly distinct types of creativity by resorting to an argument from hybrid domains (see also Gardner 2011): hybrid domains of human performance like ARCHITECTURE or INDUSTRIAL DESIGN seem to involve a crossing of the two alleged types of creativity, perhaps indicating that the creative ideation abilities involved in ‘artistic’ and ‘scientific’ creation are not after all distinct.<sup>117</sup>

My putting the terms ‘scientific creativity’ and ‘artistic creativity’ in inverted commas is simply to indicate that they are echoic: I do not endorse either the terms ‘scientific creativity’ and ‘artistic creativity’ *per se* or the domain-specific model of creativity they arise from. In Chapter 3, I suggested that science creation, as much as art creation, crucially involves, among other things, some ability for creative ideation, and further claimed that introspective and empirical observation suggests that theoretical science and philosophy, in particular, seem to involve the exact same variety of creative ideation ability and defamiliarization processes as are involved in art. I referred to this variety of creative ideation as aspectual creativity and later claimed that aspectual creativity generates products with

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<sup>117</sup> Similar claims have been made for hybrid domains like that ARTISTIC GYMNASTICS, which cross the (prototypically determined) domains of ART and SPORT. Although, I am an advocate of the view that ‘artistic’ and ‘scientific’ creation do not involve distinct types of creative ideation ability but rather a single type (aspectual creativity), I don’t see the argument from hybrid domains as weighing strongly in this direction: one could claim, for instance, that the individuals who happen to be adept at such hybrid areas of human performance simply happen to be simultaneously endowed with both types of creativity, ‘artistic’ and ‘scientific’.

aspectual value. So, while literature and art (in all its existing and possible manifestations, and in the cognitive perspective I have tried to introduce in my account) is a unified and distinct domain in terms of the action-process it causally results from (artistic thought states/processes), when it comes to the component of the type of creative ideation it presupposes (i.e. aspectual creativity), literature and art seems to share this component with other prototypically determined domains of human ideational performance such as theoretical science and philosophy at the least. This is a critical cut off point between the account I am developing here and existing accounts of human creativity, not just because I clearly advocate the view that scientific thinking involves creative ideation, but also and primarily because my account challenges head on the domain-specific view of creativity, and proposes instead a search for alternative models where varieties of creative ideation need to be reconsidered from scratch on an entirely new basis. The various types of creative ideation might not after all correspond one-to-one with prototypically-determined domains of human ideational performance, but instead cut across such domains. My proposal invites a radical reconsideration and re-specification of possible varieties of human creative ideation disentangled from corresponding directly with certain prototypically-determined domains of performance. In fact, I will now try and attack head-on the current taxonomic distribution of types of creativity in relation to prototypically determined domains of performance (e.g. 'artistic creativity', 'scientific creativity', 'musical creativity', 'literary creativity', 'kinaesthetic creativity' etc), showing how this domain-specific approach is undermined by compelling empirical evidence of how human creative ideation actually manifests itself in these alleged 'domains'.

The conventional categorisation of the genres poetry, prose and drama, for instance, as belonging to the conventional and prototypically determined domain LITERATURE, on the basis of prototypical family resemblances such as use of a linguistic medium, non-utilitarian use of language, emphasis on form, joint treatment under the summary label 'literature' by existing critical canons etc, as well as the further assumption that the prototypically determined domain LITERATURE is presumably enabled by a domain-specific ability for 'literary creativity', completely collapse under the weight of simple empirical observations. For starters, the conventional prototype-driven categorisation seems to assume that all members of the prototypically-determined domain LITERATURE (e.g. poetry, novel, short-story, drama etc) are outputs of a single and unitary 'creative process' enabled by the same domain-specific type of 'creativity', that is 'literary creativity'.

But this model makes a historically and empirically counterintuitive, and therefore misconceived, prediction: that if an agent possesses the ability for ‘literary creativity’, then this agent should be able to set out on a single and unitary domain-specific ‘literary creative process’ that can equally, and in an undifferentiated way, produce any of the characteristic outputs associated with the given ‘domain’ on the basis of prototypical resemblances, i.e. poems, as much as novels, as much as works of drama etc.<sup>118</sup> The history of literature offers the most compelling piece of empirical evidence against this assumption. It is extraordinarily rare that outstanding poets are equally outstanding novelists, or that outstanding novelists are equally outstanding poets, or that outstanding novelists are equally outstanding theatrical writers, and so on. If the prediction cutting through the linear and domain-specific model of creativity were correct, we would in fact be witnessing the exact opposite: those possessing the unitary and domain-specific ability for ‘literary creativity’ would set out in a linear way on a unitary ‘literary creative process’ and at one moment write brilliant poetry, at another brilliant prose and at another fashion brilliant theatrical plays. If creativity were domain-specific and in this sense unitary, and if ‘creative processes’ were equally domain-specific and unitary, enabling in an equal and undifferentiated manner the outputs of a given domain (e.g. the domain LITERATURE), and if all that was required for the ‘creative process’ of producing LITERATURE was just a decent amount of ‘literary creativity’, then authors should be able to create equally decent LITERATURE independently of genre, and write decent prose with the same fluency they write decent poetry. But this is neither introspectively nor empirically and historically what happens.

To explain the possible genetic, cognitive, perceptual and neurological underpinnings of this fact, I will momentarily take a step away towards another relatively recent area of empirical research, that of talent.

A crucial point of divergence in my account which might inform and help revise existing ‘creativity’ research is the assumption that the ability to hold aspectual representations, as well as the ability to hold artistic thought states/ processes, is differentially distributed: not all humans are endowed with these aptitudes. This can be further interpreted as an indirect argument for introducing into the theoretical picture some notion of genetically

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<sup>118</sup> One might claim that a somewhat similar prediction follows from my suggestion that aspectual creativity crosses domains, and more specifically, the (prototypically determined) domains of art, theoretical science and philosophy at the least. Later in my discussion, I will explain why the proposed approach to human creative ideation that arises from my notions of artistic thought states/ processes and aspectual creativity does not actually make this prediction at all.

predisposed differential initial states involving *aptitudes*, *gifts* and *talents*.<sup>119</sup> Let me linger on this crucial point a bit and track the backward effects it has for existing discussions on ‘creativity’ at both a descriptive and an explanatory level.

In looking at current research on the psychology and neuroscience of ‘creativity’ I was puzzled by the fact that the theoretical models used and the experimental settings designed to pin down ‘creativity’ do not seem to accommodate anywhere any systematic notion of differential initial states in humans with respect to the aptitudes, gifts and talents they possess. At the same time, I was puzzled by the fact that the theoretical models used to pin down talents and gifts do not seem to accommodate anywhere any systematic exploration of how differential initial states in humans with respect to the types of creative ideation abilities they possess might interact with differential initial states with respect to aptitudes, gifts and talents. My theoretical notions of artistic thought states and processes and aspectual creativity have bi-directional interdisciplinary effects for both these conundrums. So let me try and connect them.

A widely evidenced fact in everyday experience that wouldn’t escape the attention even of a lay mind is that humans do not perform with the same ease and aptitude, and do not develop with the same pace, across performance contexts. I consider myself a rather multiskilled person. I am a scientist-philosopher and a poet and performance artist. I am a rather good cook, I am good at designing and constructing things, I am good with plants and agriculture, I pick up sports quite easily, but do not forget how energy-consuming and slow paced compared to my learning peers my attempt to play the piano was as a child, how inept I was and how impossible it was to convince my poor mother of it. And if you want to get a hands-on idea of what ‘completely inept’ means, wait till you see me try to learn traditional Greek dances. We are not all gifted in the same direction and to the same degree, with the differentiation being both inter-individual and intra-individual (similar views are expressed from a multiple intelligences standpoint by Gardner (1983, 1993/ 2007)): there are substantial differences in inter-individual initial states in a given context of performance, and in inter-individual pace of development and responsiveness to formal training in this context, as well as substantial differences in intra-individual initial states, with the same person being anything from completely inept in certain areas, to possessing some aptitude in others, to

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<sup>119</sup> By ‘initial state’ here I refer to the state of individual human performance in a given context prior to formal training. By ‘aptitudes’ I refer to abilities of an individual in an initial state which are high enough for this individual to be well above average in relation to age peers. As far as ‘gifts’ and ‘talents’ are concerned, next in my discussion I will adopt the definitions of Gagné (2013).

being gifted in others, to maybe even being exceptionally gifted and highly talented in others. We can also infer, based on mere empirical observation, that it is rare for a non-cognitively impaired individual to be inept in all possible areas of human performance, but at the same time it is not rare for individuals to possess aptitudes without necessarily demonstrating a potential for giftedness, or to possess gifts without necessarily demonstrating a potential for exceptionalism in any of them, independently of the ecology of the developmental environment. In the mid 1980's Francois Gagné (1985) tried to systematise these lay observations in an empirically testable *differentiating model of giftedness and talent* which was later reviewed in Gagné (2009) and further updated and revised in Gagné (2013).

Gagné's (2013) differentiating model treats talent development as the transformation of outstanding untrained natural gifts into outstanding fully realised talents. Beginning from the quite uncontroversial assumption that the notion of giftedness corresponds to two distinct states, which could be pinned down by terminological pairs like potential-realisation, aptitude-achievement, and promise-fulfilment, Gagné (2013: 5) formulates the distinction between giftedness and talent: i.e. between early untrained and spontaneously expressed outstanding natural abilities, or high aptitudes with strong biological roots (called gifts) in at least one ability domain to a degree that places an individual at least among the top 10 percent of age peers, and outstanding mastery of systematically and fully developed competencies that have been realised and fulfilled as full-blown adult forms of talent in at least one field of human activity to a degree that places an individual at least among the top 10 percent of those who have accumulated a similar amount of learning time. Gagné (2013: 8-10) acknowledges the biological underpinnings of the causal components of talent development and integrates them into his model in the form of 'basements' that exert their influence upwards, moderating the development of natural abilities. He also mentions (Gagné 2013: 11-12) two types of catalysts, intrapersonal catalysts (physical and personality traits such as conscientiousness, resilience, motivation, volition etc) and environmental catalysts (parents, teachers, coaches, place of birth of the talentee, provisions etc) which actively participate in the realisation of gifts into talents.

I don't necessarily agree with all the details of Gagné's model; for instance, Gagné designates a range of (prototypically determined) domains of human aptitudes that suffer from the same taxonomic problems as all other prototypically determined descriptive approaches that I have tried to demonstrate here. Then there is considerable room for debate over the specific aptitudes that could be listed under each prototypically determined domain: memory, for instance, is categorised as an intellectual aptitude, but it is no less a kinaesthetic

one (my poor kinaesthetic memory is perhaps a prime reason behind my difficulty in picking up traditional Greek dances),<sup>120</sup> and this is not simply a taxonomic issue: empirical observation suggests that we draw on different types of memory for different purposes, and neuropsychological evidence suggests (for pertinent overview see Gardner 1993/ 2007) that memory for one type of content (e.g. language) can be separated from memory for other types of content (shapes, bodily movement, melodies etc), with further particularisation in sub-types of content (e.g. abstract arbitrary movement in contemporary dance vs structured causal movement in sport). There are inter-individual differences in memory performance in each domain, and empirical observation again suggests that high aptitude in task-specific types of long-term and online memory might be one of the key determinants of giftedness and talent in a given context. There is also no need to refer to talents as specifically ‘adult forms’ of competencies, since it is historically evidenced that fully developed talents may also occur prior to adulthood as, say, in the case of child prodigies or stellar creators like Rimbaud, whose talent emerged at a very young age. However, overall, Gagné’s model provides the most sophisticated discussion available at the moment of the differentiating causation and development of human aptitudes, gifts and talents, optimally integrating pertinent developmental, psychological and genetic findings from the broader field of talent research. Let me briefly outline some of these key findings.

Over the last century, the notions of giftedness and talent have been embedded within the broader nature vs. nurture debate, and investigated mainly in the context of music and sport. With the competition for medals at the Olympics and World Championships being unprecedented, in the last few decades there has been markedly increased investment in an evidence-based understanding of the identification and development of sporting talent through sport Talent Identification Systems (e.g. see Baker et al. 2012; Morley et al. 2015;

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<sup>120</sup> I observe, for instance, that my long-term and online memory abilities in areas where I happen to be gifted are pretty outstanding –for years I could recall quite effortlessly the exact text in which I had encountered a certain word for the first time, while I also notice that all my poet and writer friends have outstanding online semantic memory, being able to recall with ease and precision isolated phrases or entire lines during the one-off acoustic processing of even very long text–, while in areas of performance where I seem inept, my long-term and online memory abilities are extremely poor: I can be shown a simple traditional Greek dance step sequence repeatedly, but it is incredibly hard for me to retain what I see, so that I end up ‘forgetting’ it the next moment. In scientific terms we would say that my kinaesthetic memory is relatively poor, and definitely much weaker than my semantic one. I would therefore suggest that giftedness and talent in a certain area of performance must be somehow positively associated with optimal memory function in this area of performance, which systematic training may then further optimise or enhance.

Rees et al. 2017).<sup>121</sup> Talent Identification Systems draw on existing empirical findings from talent research to devise test batteries that pin down giftedness and exceptionality in sport so as to identify the exceptionally talented athletes of the future and optimise their developmental potential. Although for almost the entire 20<sup>th</sup> century the very existence of natural gifts and talents was fundamentally questioned and treated as an elusive quality from a strict environmentalist viewpoint<sup>122</sup> –the model that predominated during this period advocated the ‘pro nurture’ view that humans are born as ‘blank slates’, which Tooby and Cosmides (1992) have referred to as the Standard Social Science Model<sup>123</sup>—and although empirical research on talent is still in its infancy, meaning that we still have limited understanding of the particular determinants (physical, motor, anthropometric, perceptual, cognitive, personality-dependent etc) that distinguish athletes in specific sport contexts, the admirable strides in genetics and the systematic study of talent in sport science in the last couple of decades have led to three established assumptions that now underpin talent research. First, talent is identifiable, and therefore measurable. Second, future performance is relatively safely assessed through talent identification systems as well as ‘potential’ identification in childhood. And finally, personality-related behavioural, perceptual and cognitive skills, along with chance-dependent ecological factors, are equally key determinants that delineate talent realisation and exceptionality in sport performance at a future time as much as inbuilt task-specific performance qualities (e.g. see Baker et al. 2012; Baker and Horton 2004; Bourgois et al. 2000, 2001; Côté 1999; Gabbett et al. 2007; Gagné 2013; Ingham et al. 2002; Meir et al. 2001; Mohamed et al. 2009; Sykes et al. 2009; Vaeyens et al. 2008).

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<sup>121</sup> There are many recent international case studies of talent identification batteries. In the last decade, for instance, the Rugby Football League – the governing body of Rugby League football in the UK – piloted a talent development scheme named Embed the Pathway (EtP) for the Under 14 age category whose purpose was to assess player fitness and sport-specific movement abilities within a talent development framework used by the National Governing Body (see Morley et al. 2015). The Talent Opportunity Program (TOPs) for Women's Artistic Gymnastics in the United States in the 90's, one of the premier national gymnastics programs in the world, is another prominent talent identification system developed in order to assess both performance variables that were under considerable genetic control and variables that were potentially modifiable by training, so as to assist coaches in early identification of exceptionally talented athletes (Baker et al. 2012).

<sup>122</sup> For a strict environmentalist thesis against the natural origins of talent, see Ericsson et al. (2007), Howe et al. (1998), Sloboda et al. (1991) and Sloboda et al. (1994). However, Gagné's (1999) knock down review of Sloboda et al.'s (1991) strict environmentalist interpretation of their study of talent development in music is an extremely insightful and comprehensive rebuttal of the environmentalist thesis on talent.

<sup>123</sup> Pinker (2002), in one of his bestsellers, *The Blank Slate*, launched a comprehensive attack on the main arguments of the Standard Social Science Model.

After three decades of ground-breaking findings in sport science on the genetic underpinnings of elite performance, there is also no longer room for debate about whether there is a genetic component to giftedness and exceptionalism in sport (see e.g. Baker et al. 2012; Baker et al. 2018; Rees et al. 2017): early genetic studies in the '90s (e.g. Bouchard et al. 1998; Maes et al. 1997; Thomis et al. 1998) already showed that inter-individual differentiation in variants such as 'explosive strength, speed of limb movement, running speed, reaction time, flexibility, balance, bone mineral density, lean muscle mass, eccentric arm flexor strength, concentric arm flexor strength, arm cross-sectional area, change in maximum voluntary force, isometric strength and VO<sub>2</sub>max (the maximum rate of oxygen consumption during exercise of maximum intensity)' (Rees et al. 2017: 1044) is up to 80 percent accounted for by genetic factors. The protein Collagen, Type V, Alpha 1 that in humans is encoded by the *COL5A1* gene has been shown to relate to flexibility of ligaments and tendons, and determines an individual's predisposition to anterior cruciate ligament ruptures and Achilles' tendon injury, affecting the amount and intensity of training this individual can sustain during elite sports development (Mokone et al. 2007; Posthumus et al. 2009). Genetic research has also been trying to identify genetic profiles that may serve as early indications of future athlete potential: particular attention has been paid to the ACE gene and the alpha-actinin-3 (ACTN3) gene R577X polymorphism in elite sprinters and endurance sports. The ACTN3 gene has been positively associated with endurance performance and fatigue resistance, and has been consistently identified in elite Australian, Caucasian and Finnish endurance athletes (e.g. Ahmetov et al. 2015; Niemi and Majamaa 2005; Papadimitriou et al. 2017; Yang et al. 2003). Interestingly, the ACTN3 gene was found to be almost absent in sprinters from Nigeria, Jamaica and the US, as well as East African endurance runners; East African endurance running triumphs cannot be attributed to this gene (Scott et al. 2005, 2010; Yang et al. 2007).<sup>124</sup> Does this contradictory finding turn genetic research on the biological basis of giftedness on its head as the standard social science model would hope?

Well, three decades of refinement of our understanding both of the workings of genetic biology itself and of the complex interaction between biology and the external world

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<sup>124</sup> Along these lines, Williams and Folland (2008) looked at twenty-three different genetic variants that have been identified in existing research as relating to elite performance in endurance sports, and calculated that the probability of an individual having all twenty-three genetic variants is approximately one in twenty million. In fact, a recent study involving forty-six world-class endurance athletes and looking into just seven of these twenty-three genetic polymorphisms found that none of them had all seven polymorphisms (Ruiz et al. 2009).

have allowed us to comprehend more accurately the complexities of genetic predisposition, as well as the intricacies of gene-environment interaction. We have come to understand, for instance, that human traits are not the result of single gene polymorphisms but combinations of advantageous genotypes. In other words, research has decisively moved from the early search for a magical single gene that would explain elite performance to trying to grasp more complex interactions of genetic raw material that could reflect the complex genetic influences on exceptional outcomes. And the question is no longer whether there is a genetic profile that makes a contribution to exceptionalism in given contexts, but which genetic profiles make the greatest contribution. Note also here that genetic predisposition does not mean genetic pre-ordainment: research in genetics has moved away from the early rigid view that human traits are genetically pre-ordained, i.e. environment-independent and bound to occur solely on the basis of genetic causation, to the more environment-sensitive notion of stronger or weaker genetic predisposition in a context of gene-environment interaction. The cognitive science community has in the last two decades left behind the nature vs. nurture debate on human achievement in favour of integrated models of gene-environment interaction. Indeed, ample evidence from the study of musical and sport talent suggests that the nature-nurture dualism is no longer relevant (see e.g. Davids and Baker 2007; Gagné 1999) and that environment and genetics interact in promoting or limiting exceptionalism through a dynamic interplay of genetic raw material, ecological factors and chance occurrence.

East African success in endurance running is one of the archetypal case studies currently being investigated in an attempt to grasp in more refined terms the interplay between genetic material and chance environmental influence in elite sport performance: Baker et al. (2012: 170) summarises the findings of two demographic studies of Ethiopian and Kenyan distance runners (Onywera et al. 2007; Scott et al. 2003), showing that 38 percent of elite Ethiopian distance athletes originated from the Arsi region which accounts for less than 5 percent of the Ethiopian population, while 81 percent of elite Kenyan distance athletes came from the Rift-Valley area, which accounts for less than 25 percent of the Kenyan population. The obvious geographical disparity suggests some underlying genetic causation (Manners 1997; example found in Baker et al. 2012: 170), while at the same time similar ecological parameters between the two regions indicate environment-induced performance enhancing factors. Both these regions are high altitude, and it is widely known in the sports community that athletes have long used altitude training to enhance endurance performance. In both these regions, children start running very long distances barefoot from a very young age to get to school. Research has shown (Lieberman et al. 2010; example found

in Baker et al. 2012: 170) that habitually barefoot runners land with a forefoot or midfoot strike, avoiding the large impact transients that occur when landing with a heel strike, and thus reducing the risk of injury; barefoot running, therefore, may allow Ethiopian and Kenyan athletes to train intensely and for many hours with reduced risk of injury compared to non-barefoot athletes. Although these hypotheses are still under scrutiny, it is rather uncontroversial nowadays to say that the study of human performance across contexts is the study of the inter-relationship between complex causal genetic factors and the ecology of the developmental environment (e.g. see Davids and Baker 2007; De Moor et al. 2009; Eynon et al. 2011; Gagné 1999, 2004, 2013; Gayagay et al. 1998; Maes et al. 1997; Posthumus et al. 2009; Ruiz et al. 2009; Thomis et al. 1998; Williams and Folland 2008; Williams and Wackerhage 2009; Woods, D. 2009).

I would now like to put back on the table the intuitions about giftedness and talent with which I started this analysis, but this time backed by a decent level of empirical evidence: humans are endowed with a range of aptitudes whose causation is at least partly genetic; not all humans possess the same combination of aptitudes, or a given aptitude to the same degree; there is therefore substantial inter-individual variation in initial states of performance across and within areas of performance; as a result of such variation, certain individuals may possess (at least) one aptitude in a way and to a degree that demonstrates giftedness, or in a way and to a degree that demonstrates exceptionality/ talent subject to a complex gene-environment interaction.

There are various reasons why we need these assumptions on the table, even though in a quite uncontroversial way. One reason concerns the theoretical importance of the inter-relationship between ‘creativity’ on the one hand and aptitudes, gifts and talents on the other. Another reason concerns the theoretical importance of the inter-relationship between artistic thought states/ processes and aptitudes, gifts and talents. A final reason concerns how evidence from the study of talent can be used to undermine the domain-specific taxonomic distribution of areas of human performance. Let me delve into these issues one by one.

In his list of possible human aptitudes and (prototypically determined) domains of giftedness, Gagné (1985, 2008, 2013: 7-7) designates an area of ‘creative giftedness’ and within it lists a range of ‘creative aptitudes’ such as inventiveness, problem solving, imagination, originality, retrieval fluency etc. So, is the human ability for creative ideation a domain of giftedness comparable to, and of the same order as, other domains of giftedness listed by Gagné, such as sensorimotor giftedness, socio-affective giftedness, intellectual giftedness etc? Notice here too the interesting methodological conundrum that the currently

dominant domain-specific approach to ‘creativity’ I briefly discussed earlier actually treats pretty much the same domains listed by Gagné as ‘creativity domains’, i.e. sensorimotor creativity, socio-affective creativity, intellectual creativity etc., hardly ever referring to aptitudes, gifts or talents possessed by the ‘creative’ agent other than the aptitude, gift or talent of creativity itself. At the same time, discussing sports talent in the *Neuroscience of Creativity*, Abraham (2018: 338) lists creativity not as an ‘aptitude’ but as a ‘personality trait’ which, along with other traits such as perseverance and intrinsic motivation, are among the determinants of exceptionalism in sport. What is going on? Well it seems to me that methodological over-specialisation and lack of the appropriate interdisciplinary interaction between the study of giftedness and talent, on the one hand, and the study of creativity, on the other, have in the main kept apart two research questions that might in fact be inseparable. We clearly need new interdisciplinary descriptive and explanatory models that will integrate research findings and hypotheses from both ends of the spectrum, leading to a systematic exploration of the interplay between differential initial states in humans based on the types of creative ideation abilities they possess, and differential initial states based on aptitudes, gifts and talents.

At a preliminary and speculative level, let me suggest that the human ability for creative ideation –independently of whether we are talking about aspectual or other types of creativity– cannot be a domain of giftedness of the same order as the other giftedness domains listed by Gagné (1985, 2008, 2013: 7-7): the property of creativity manifests itself in one form or the other across prototypically determined domains of performance from poetry and mathematics through to economics, sport, engineering, cookery, gardening, flower arrangement, hunting, social functioning and social thinking, interpersonal functioning etc, indicating that we are probably looking at a cognitive property that somehow attaches itself to any of the possible aptitudes/ gifts/ talents found in the entire range of areas of human performance, rather than an aptitude/ gift or talent as such. Another clue pointing in the same direction concerns the empirical observation that most if not all human aptitudes seem to occur in both a creative and a non-creative mode in a given context: not all people who play the piano decently are creative musicians and not all people who can write a story are creative authors. For writing to qualify as art, and as a creative ideational output in any robust sense of the term, it is not enough just to qualify as decent writing (BLOB); it should demonstrate evidence of inventiveness, non-trivialness and value (BLIB). Someone might have an aptitude for tennis and be a very decent tennis player, but not necessarily a creative or inventive one. I recall my PhD supervisor Professor Deirdre Wilson, a Federer fan, describing with

fascination how mind-blowingly creative Federer's game is, from *ex impromptu* inventing new previously unthought of strokes to finding breath-takingly unexpected solutions at critical game-decisive moments.

Still, our understanding of how and why human aptitudes occur in both a creative and a non-creative mode is extremely limited, with empirical and neuroscientific research in this domain remaining in its infancy. In his paper *Is sport the brain's biggest challenge?* Walsh (2014), for instance, outlines the limitations of current neuroscientific techniques in empirically assessing 'creativity' in the context of exceptionality in sport, because of the extreme demands elite sports performance imposes on the human brain. As a result, there are currently no neuroscientific studies that have specifically explored how and why 'creativity' manifests itself in sport, and our hypotheses can only rely on empirical observation and intuition which cannot as yet be empirically established.<sup>125</sup>

This is a persistent methodological and epistemic limitation with the types of questions investigated in this book and particularly in this chapter: despite their admirable advances, both the empirical study of human creative ideation abilities and the study of human aptitudes/ gifts and talents are still embryonic fields of rather recent scientific enquiry, with extremely limited understanding not only of the phenomena and theoretical notions under investigation, but also of how we might put such phenomena under empirical scrutiny. The methodological discrepancy arising from this fact is that at times our hypotheses rely on compelling experimental evidence, while at others we cannot help but rely on mere empirical observation or intuition which has not been subjected to experimental test.

Since we cannot yet draw on solid experimental evidence about whether human aptitudes indeed occur, as intuition suggests, in both a creative and a non-creative mode, I will need to resort here solely to intuition: so, if this intuition is indeed correct, then the various types of human creative ideation (e.g. aspectual creativity) correspond to a cognitive property that is differentially distributed based on genetic predisposition, characterising the ideation abilities of certain individuals only<sup>126</sup>, and potentially interacting with (at least one of) the aptitudes/ gifts and talents that this individual also possesses, generating outputs of value in areas of human performance that relate to these aptitudes/ gifts and talents. The predisposition to entertain artistic thought states/ processes is also differentially distributed,

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<sup>125</sup> At the moment there is only a small number of behavioural studies in 'sport creativity' focusing mainly on case studies of athletes intuitively assessed as highly creative, e.g. the case study by Martin and Cox (2017) about the basketball player Steve Nash.

<sup>126</sup> They might be capable of creative ideation of a different sort, but not necessarily aspectual creative ideation.

and this, combined with the fact that they occur spontaneously, indicates an element of hard-wiring and genetic predisposition here too: not all people are genetically endowed to entertain artistic thought states/ processes.<sup>127</sup>

These two assumptions allow us to sketch an alternative descriptive and explanatory approach to a range of relevant questions: why is it that in some people aspectual creativity generates artistic outputs, whereas in others it generates scientific and philosophical ones? And why does this distribution occur in such a way that we rarely encounter great artists who are equally great scientists, or conversely? Why is the distribution of the two mentalities, so to speak, more often than not separated and distinct from one another? And why do we observe staggering variability across individuals in terms of the area of artistic performance their outputs belong to? Why does my mind spontaneously generate artistic thought states/ processes that yield as output poetry and performance works, and not dance works or musical pieces? And why, as I suggested earlier, is it not actually possible for an agent to deliberately, unrestrictedly and equipotentially flow from one artform to another, from music to photography to poetry to sculpture, not even from one genre of a prototypically determined artform to another –from poetry to drama to novel? The notions of genetic endowment, initial states and aptitudes/gifts and talents are crucial in attempting to answer these and other similar questions.

It is possible that what we are looking at is a case of multiple components of a genetic predisposition (always perceived in the informed sense of a gene-ecology interaction) woven into different combinations that generate varied ideational and productive results: 1. A genetically pre-determined differential predisposition across agents to spontaneously entertain action-specific types of thought state/ process that will accordingly generate artistic or scientific or philosophical outputs etc. 2. A genetically pre-determined differential predisposition for aspectual creativity, which automatically embeds its ideational outputs in the type of thought states/ processes the given agent is pre-disposed to hold. 3. A genetically pre-determined range of task-specific aptitudes/ gifts and talents (including task-specific memory aptitudes) that the particular agent happens to possess and that aspectual creativity draws on, generating the staggering differences in the type of ideational and publicly available outputs that have eventually brought to being all past, present and future artforms and artworks, and scientific and philosophical fields, theories and ideas. 4. An indefinite range of voluntary macroscopic work methods and patterns of creation procedures which

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<sup>127</sup> As the notion of an artistic thought state is a newly-coined construct, there cannot be experimental evidence for this claim; at this stage one can only rely on empirical observation.

differ palpably across individual agents, as well as across the course of the lifetime and maturation path of each given agent, and in which the microscopic operations of action-specific thought states/ processes embed themselves as their minimal and enabling cognitive components. The history of art and science is full of reports about how individual authors, artists and scientists work, providing introspective data about the intricate feedback between the recurrence of the minimal action-specific thought states/ processes and the progressive development of the broader creative creation procedure all the way from initial conception to final instantiation (be it publicly available or mind-internal).

To focus my suggestions on literature and art, in those agents who are born with the pre-disposition to become artists, aspectual creativity automatically embeds itself in spontaneously occurring artistic thought states/ processes, drawing on the particular range of aptitudes/ gifts and talents that the particular agent happens to possess, thereby explaining both inter-individually and intra-individually why artistic thought states/ processes generate the particular set of outputs they generate from an otherwise very wide and diverse range of possible genres and artwork types: sculpture, poetry, photography, drama, film, novel, installation, dance performance, bonsai story etc. The particular aptitudes/gifts/ talents that the particular agent happens to possess –and the cognitive, perceptual, affective and neural engineering that underpins them– should be thought of as both an enabling and a limiting factor. They are enabling factors in the sense that an agent is capable of producing these, rather than those, types of outputs of an artistic thought state/ process, precisely because she happens to possess these, rather than those, types of aptitudes/ gifts and talents. My ability to create poetry, short stories and performance works is enabled by the specific aptitudes/gifts and talents I possess and that my aspectual creativity interacts with and draws on. They are limiting factors in the sense that an agent is capable of producing ONLY these, and not other types of characteristic output, because she specifically possesses these, rather than some other set of aptitudes/gifts and talents: both my sister and I are artists; but while I produce poems and performances, my sister produces photography and video art. I am not a particularly good photographer and never will. My sister writes decently but will never produce exceptionally good poems. We are both in the artistic condition, we both spontaneously entertain artistic thought states/ processes, we are both capable of aspectual creativity, but our aspectual creativity and the spontaneous artistic thought states/ processes in which it embeds itself deliver palpably distinct characteristic creative outputs, precisely because we are endowed with very different sets of aptitudes/gifts and talents. And we can only produce outputs of

value that fall within the scope of the specific sets of aptitudes/gifts and talents we are endowed with.

If so, then this is yet another reason why the creative creation process is neither a linear nor a domain-specific process, as the currently dominant domain-specific model of 'creativity' suggests. Creative creation is not a linear process of domain-specific 'creativity' X ('literary creativity') triggering a type of domain-specific creation process Y ('literary creation process') leading to a domain-specific and undifferentiated set of outputs Z ('literary outputs'), but a far more complex and non-linear process in which human creative ideation abilities automatically embed themselves in action-specific thought states/ processes and automatically interact with an indefinite range of human aptitudes, gifts and talents as well as task-specific memory aptitudes, thereby eliciting a diverse range of outputs (e.g. poetry, photography, drama, film, dance performance etc) and a diverse range of individual styles that form a creator's milieu within each type of output: from intensely imagistic poetry through to psychologistic writing to raw realistic styles to writing styles that foreground character development or attention to telling detail or dystopia development or social critique or existential contemplation or kinaesthetic imagism, all the way to writing that makes appeal to sarcasm or humour and so on and so forth. Ovid's poetry, Carson's poetry, Pessoa's poetry, Archilohus' poetry, Whitman's poetry, Celan's poetry, Kristensen's poetry are all outputs enabled by the distinct action-process that literature and art is, but at the same time, they are unique and highly individualised as outputs because in each 'poetry' the creative ideation abilities of each poet dynamically interacts with unique constellations of highly particularised underlying aptitudes, gifts and talents.

The approach I am sketching here has greater predictive and explanatory value than the linear domain-specific model of creativity for a number of reasons. Despite my claim, for instance, that aspectual creativity crosses at least the prototypically determined domains of art, theoretical science and philosophy, my approach does not make the false prediction that artists, theoretical scientists and philosophers should be able to flow freely and produce creative ideation products across all three domains, because the relation I establish between aspectual creativity and the final product of the creative creation procedure is not direct and linear, as in the domain-specific model, but indirect and mediated by certain types of genetically predetermined action-specific thought states/ processes and constellations of underlying aptitudes, gifts and talents which are unique to each agent. This explains how artists, theoretical scientists and philosophers may be potentially endowed with the same type of creativity (aspectual creativity) and yet unable to cross freely the prototypically-

determined domains of art, theoretical science and philosophy: their aspectual creativity automatically embeds itself in distinct action-specific thought state/ processes and draws on distinct talents that mediate the relation between the agent's creative abilities and the characteristic outputs of the overall creative creation procedure.

My non-linear approach also offers a more adequate explanation for the historically attested fact that artists cannot often flow freely and with the same aptitude even across the various genres of the same prototypically determined artistic domain, e.g. LITERATURE. Human creative ideation abilities can be assumed to automatically interact with the specific range of aptitudes, gifts and talents of the particular creative agent, thereby eliciting a diverse range of outputs which in reality call for radically different sets of cognitive, perceptual, affective and neural aptitudes if they are to be brought to light. As I will try and show below, even outputs that traditionally belong to the same genre and superficially share prototypical family resemblances, as a matter of psychological reality are probably highly differentiated outputs in terms of the aptitudes they draw on.

In Chapter 2, I discussed how the prototypically-driven categorisations of the various artforms in the existing history and philosophy of art, as well as the very prototype-based category ART, determined conventionally through prototype-driven canons, is based on appearances rather than reality. The domain-specific view of creativity, just like many theoretical accounts and tendencies in epistemological history, is also based on appearances rather than reality. We look at the characteristic outputs of what we treat as a given domain of performance using prototype-driven considerations, and assume that these characteristic outputs are the result of some dedicated type of creativity directly corresponding to this domain of performance. I have already challenged the idea of such a direct correspondence: despite appearances, there is no such thing as a single and unitary 'literary creative process' which can lead in an equipotential and undifferentiated way to the creation of any of the characteristic outputs that we traditionally classify as literary genres. I would now like to challenge in the first place the validity and theoretical adequacy of trying to specify domains of performance and their subdomains or genres solely on a prototype-driven basis, and show in experimentally attested terms why there is no such thing as a single and unitary ability for 'literary creativity' either.

So, do conventional categorisations of human ideational performance in domains and genres based on prototypical resemblances among various types of characteristic output of these domains have any psychological reality at all?

Evidence recent neuroscientific research in what has so far been thought of as the unitary abilities for ‘visual creativity’ and ‘musical creativity’, as well as from the empirical study of the ‘general motor ability’ in sport-talent research, can be used to challenge the theoretical adequacy of a unitary and prototype-driven specification of domains of human performance. Boccia et al. (2015), for instance, present functional magnetic resonance imaging (fMRI) evidence that the supposed ability for visual mental imaging is anything but unitary, demonstrating functional neural segregation for different contents of mental images and suggesting that visuospatial information is coded by different patterns of activity in brain areas involved in visual mental imagery. These findings can be interpreted as evidence that there is no such thing as a unitary domain of visual performance in the first place, the domain where ‘visual creativity’ allegedly operates. If so, then it can be argued that ‘visual creativity’ does not exist as a unitary domain, but corresponds to a diverse range of aptitudes for visual processing and mental imaging, which are linked to the fashioning of different types of outputs. Evidence in the same direction also emerges from the study of musical performance, with findings suggesting that there is musical genre-based selectivity in perceptual sensitivity: gleaned from the brain activity of classical, rock and jazz musicians, as well as non-musicians, in terms of the accuracy of neural encoding in relation to deviations in tuning, rhythm, timbre, melody transpositions and contour, the evidence suggested that only classical musicians were selectively attuned to tuning variables, and only jazz musicians showed the same selective sensitivity for transposition. Jazz and rock musicians exhibited equally heightened sensitivity for melody contour, while classical and jazz musicians exhibited selectivity for timing (Tervaniemi 2001, 2009; Tervaniemi et al. 2015). The evidence suggests that different musical genres correspond to distinct sets of neural and perceptual mechanisms and skills, explaining the simple empirical observation that classical music performers are rarely equally adept in jazz, or jazz performers in folk kinds of music and so on and so forth. This finding can be further generalised to all hypothetical domains of human performance, illuminating from an experimental point of view my earlier introspective and empirical observation that literary individuals cannot flow across literary genres in an equipotential way. That is simply because there is probably no such thing as a unitary domain of human ‘literary performance’, and in fact, we may be looking at tangibly different sets of neural, perceptual, affective, cognitive and other skills involved in performance across each prototypically-determined ‘literary genre’, if not an even greater degree of particularisation of the neural, perceptual, affective, and cognitive apparatus required by specialised, task-specific types of performance occurring within each prototypically-determined ‘genre’:

writing poetry in metre and rhyme requires aptitudes that are not involved in writing poetry in free verse, writing psychological poetry requires aptitudes that are not involved in non-anthropocentric poetry, imagism-driven poetry requires aptitudes that are irrelevant for a poetry that does not delve into inner perception, and so on.

Indirect evidence for the argument I'm trying to sketch here also comes from recent experimental studies of sport talent. Until 40 years ago, researchers investigating exceptionalism in sport performance assumed the existence of a general motor ability (e.g. McCloy and Young 1954). Although intuitively appealing, there is in fact little empirical support for this position, while on the contrary there is considerable emerging evidence (see e.g. Baker et al. 2012: 24, 75; Helsen and Starkes 1999, Helsen et al. 2000; Morley et al. 2015; Starkes and Deakin 1984) that aptitudes/ giftedness and talent in sport are not only sport-specific but highly task-specific, with little association between the aptitudes required even for superficially similar tasks: task-specific aptitudes and sport-specific information-processing abilities have been found to explain more of the variance between gifted/ talented and less gifted/ talented athletes than generalised measures of physiometry, anthropometry and general motor performance. When it comes to motor performance in particular, gifted/ talented athletes have been found to differ from less gifted/ talented ones in their level of physical literacy and competency in a range of movements and specialised skills appropriate to the specific sport.<sup>128</sup> Task-specific aptitudes and information-processing abilities seem to be partly genetically determined and partly amenable to environmental influence through training and practice in a gene-environment interaction context.

What to the naked eye appears like a unitary domain of performance, in psychological and neurological reality seems to be an extremely diverse and compartmentalised constellation of much more specialised and dissimilar areas of performance, which relate to one another via theoretically irrelevant family resemblances, while in fact drawing on palpably distinct and highly task-specific cognitive, perceptual, affective and neurological

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<sup>128</sup> The Embed the Pathway (EtP) talent development scheme of the Rugby Football League in the UK, for instance, explored the relationship between general fitness assessment and sport-specific Qualitative Movement Assessment in specialised motor skills typically found in the game of rugby league that involve the combination of three categories of movement (locomotor, manipulative and stability) of Under 14 junior Rugby League players in a context of a talent development intervention. The Qualitative Movement Assessment test battery assessed seven specialised movements that relate to those performed within rugby league, and are task-specific in that they involve fundamental and refined movement patterns that form sport-specific skills. All seven movements were identified and further split up into five components by a technical group of experts from the Rugby Football League also taking into consideration previous empirical studies that had identified specific movement requirements of players in rugby league (see Morley et al. 2015).

aptitudes. The classification of domains of human performance on the basis of prototypical features seems psychologically and neurologically unrealistic by comparison to how our perceptual, affective, cognitive and neurological system actually works. Despite their apparent prototypical family resemblances, the alleged domains are anything but unitary. And if a domain is not unitary, there is a question about whether it can be thought of as a domain at all, at least in any theoretically significant and psychologically realistic sense of the term.

The evidence from visual and musical performance, as well as performance in sport, suggests that we should start devising new descriptive and taxonomic models of human ideational performance, taking into account the staggering specialisation, compartmentalisation and task-specificity of individual aptitudes. Combined with my earlier suggestion that there is no direct and linear correspondence between alleged domains of creativity (e.g. 'literary creativity') and alleged unitary domains of creative process and performance (e.g. 'literary creative process' and 'literary performance'), this latter empirical fact undermines the linear model of creativity in yet another fundamental way: not only are types of creativity (e.g. aspectual creativity) more likely to cross prototypically determined domains of human performance rather than corresponding directly one-to-one to such domains, but also the domains of human performance themselves might not exist at all in their current taxonomic distribution and content, at least in a psychologically or neurologically relevant sense.

A final explanatory advantage of the more complex and non-linear process I have tried to sketch in a preliminary way in this analysis, where the various types of human creative ideation abilities seem to automatically embed themselves in action-specific thought state/ processes and automatically interact with an indefinite range of highly specialized, compartmentalized and task-specific human aptitudes, gifts and talents, is that it accounts for the failure to experimentally confirm the notions of *little-c* and *Big-C* creativity (Beghetto and Kaufman 2007; see also Kaufman and Beghetto's (2009) more recent *Four C Model* of creativity): *little-c* creativity is seen as a case of normative or everyday creativity that amounts to average creative performance. *Big-C* creativity is seen as a case of creative performance that exhibits elements of exceptionality, ingenuity and pre-eminence. Are the constructs of *little-c* and *Big-C* creativity psychologically real? I take this question to generalise to Kaufman and Beghetto's (2009) entire *Four C Model* of creativity. While exceptionality, ingenuity and pre-eminence are observationally attested across areas of human performance, the distinction to which it is often attributed, i.e. differentiation between *little-c* and *Big-C* creativity, fails to achieve experimental validation (e.g. see Merrotsy 2013).

The *Big-C Project* of the University of California, for instance, recently attempted to identify distinct neural characteristics that might distinguish Big-C from little-c creativity (Japardi et al. 2018) The project examined brain responses during divergent and convergent thinking tasks in thirty-five Big-C visual artists, forty-one Big-C Scientists and thirty-one individuals in a control group that matched the Big-C groups in terms of general IQ. The functional MRI (fMRI) scans used involved two types of activation widely used in creativity research, the Alternate Uses Task and the Remote Associates Task to assess brain activity during divergent and convergent thinking. Task performance did not differ significantly between the two groups.

Based on the approach I am sketching in this chapter, the outcome of this project can be interpreted in a number of informed ways. For one thing, the finding that brain responses during divergent and convergent thinking tasks did not differ significantly between the two groups which were assumed to represent Big-C and little-c creativity, might indicate that Big-C and little-c creativity are not after all neutrally correlated. For another, notice that the experimental setting is designed to investigate Big-C vs little-c creativity by focusing on two domain-general cognitive skills which in my earlier discussion I suggested might be more relevant to the study of the cognitive property of context-sensitive productivity/ plasticity than full-blown creativity as such. If so, we have no reason to assume that ingenious artists or ingenious scientists differ significantly in the level or way they possess this cognitive property as compared with a general population that has not shown signs of ingenuity in a specialised area of performance but still matches them in terms of general IQ. The findings of the *Big-C Project* are more compatible with my suggestion that domain-general cognitive skills such as divergent and convergent thinking might perhaps be domains of application of this more generic cognitive property that exhibits lower degrees of interindividual differentiation across the human population than creativity *per se*. Finally, it is clear from the alternative approach I have sketched, that a flawed assumption underlying the constructs of Big-C and little-c creativity and the *Big-C Project* is that exceptionality, ingenuity and pre-eminence are directly and solely attributed to a higher than average degree of creativity: implicitly following the linear domain-specific model of creativity, the construct of Big-C and little-c creativity and the *Big-C Project* that investigates them assume that the relation between creative ideation abilities and final outputs of creative creation procedures is direct, and therefore, what makes an artist or scientist an ingenious one can only be an exceptional level of creativity. But from the more complex and non-linear perspective I have tried to sketch in this chapter, what makes an artist or scientist an ingenious one is not an exceptional

level of creative ideation abilities; it is an exceptional level of highly specialized, compartmentalized and task-specific aptitudes, gifts and talents that this artist happens to possess (and ecological factors have allowed her to accomplish and flesh out their potential) and that her abilities for creative ideation decisively draw on, while automatically embedded within action-specific thought states and processes.

The kind of action that literature and art is is a property of certain types of minds only. It is a property that results from differential genetic endowment in terms of the types of thought-states/ processes and the type of creative ideation an individual is prone to entertain, as well as in terms of highly compartmentalized and task-specific sets of aptitudes, gifts and talents, whose fulfilment and accomplishment is subject to complex gene-environment mutual feedback interaction. Not everyone is 'creative' in these specialised ways. Even though not all the minds that have the propensity for art go on to pursue literary and artistic careers, –millions of children in the developing world that work in mines and landfills might have the genetic pre-dispositions that under different ecological conditions would have distinguished them as outstandingly gifted writers and artists– and even though not everyone in literary and art history who has pursued such a career necessarily had a real propensity for art –it is no secret that there is an abundance of pretend-to-be artists around and interestingly, artworld-related practices have credited some of them an unfair share of institutional recognition and disproportionate fame–, the fact remains that the ability for art is not equipotential for all human minds. Granting literature and art a certain causal distinctness suggests among other things that humans can be categorised as genetically endowed or not endowed for art (or in more simplistic and common-sense terms, as 'talented' or 'not talented') and this may be hard to digest. Needless to say that this theoretical implication lends my cognitive model of literature and art as an action and my non-linear approach to creativity and creative creation procedures a rather significant commercial disadvantage. The aim of scientific theory is neither to relieve nor to flatter, but to seek and spell out what empirical observation, close theoretical argument and experimental attestation suggest is most likely to be the truth; and often, the truth is anything but flattering or relieving. It may be that all human minds possess one specialised type of creativity or other, or one set of task-specific aptitudes, gifts and talents, but not all human minds possess each specialised type of creativity or each specialised set of task-specific of aptitudes, gifts and talents. Anyone can be trained to create a 'poem', or more accurately, a convincing simulacrum of a poem. Anyone can be trained to create an object that prototypically resembles a poem, but not everyone should be regarded as inherently capable of producing an actual POEM. In a strict

interpretation of his famous comment, Picasso was wrong: not every child is born a painter and then grows out of it.

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