THE CONTINUITY BETWEEN ART AND EVERYDAY COMMUNICATION

Whereas various cognitive approaches to art have focused on the perceptual dimension of art experience (Cavanagh, 2005), I argue that the reception of artworks is better conceptualised as a particular form of communication. I show that the main mechanisms that frame our engagement with artworks are those involved in the understanding of acts of "weak communication," paradigmatically metaphors, as defined by the relevance theory of communication (Sperber & Wilson, 1995). However, in order to correctly account both for everyday weak communication and art reception, relevance theory has to be slightly modified. More precisely, it has to be "grounded": i.e., reanalyzed in light of the grounded cognition paradigm (Barsalou, 1999). I conclude that one of the main functions of art is to permit the exteriorization and reconstruction of "analog" mental states that are particularly remote from any possibility of explicit verbal formulation. Artistic means of expression enhance the power of everyday weak communication in allowing the exteriorization of mental states that could not have been exteriorized using more economical modes of expression.

1. Art and communication

From an evolutionary perspective, it is unlikely that a cognitive process has evolved specifically to underlie our ability to create and appreciate art (Pignocchi, 2009). Thus, the task for a cognitive approach to art is to explain how our artistic practices recruit psychological mechanisms that have not been selected for it. In order to do so, cognitive approaches have to describe how our artistic practices are in continuity with other everyday cognitive activities that rest on dedicated processes, while describing what is specific in our artistic practices as compared with those other cognitive activities.

The intuition that has motivated the work exposed in this paper is that, contra most existing studies in this domain (Cavanagh, 2005), the most relevant and fruitful analogies to understand art reception have not to be drawn with simple perceptual activities, but with communication. More precisely, I will argue that the mechanisms that frame our engagement with artworks are the same as those involved in the understanding of acts of communication that have a loose, fuzzy and hard-to-paraphrase kind of meaning, such as some acts of pointing and some metaphors.

Imagine that during an enjoyable walk with you, I ostensively point to a nice landscape with a smile, in order to exteriorize what I am feeling in this moment. Or, imagine that after the walk, I try to describe explicitly, with precise words, what I have felt when looking at the nice landscape and that, after failing to do so, I find a creative metaphor that seems to be more efficient. Neither with the pointing gesture nor with the metaphor do I expect you to reconstruct my impression with much precision. I only expect that you will be able to form a loose, but sufficient, approximation of it. The thesis that I will elaborate in this paper is that there is no clear cut-off point between the understanding of these simple forms of loose communication and the reception of artworks. The obvious and numerous differences between your understanding of my pointing gesture or of my metaphor and the reception of a great painting, movie or novel lie mainly in the degree of sophistication of the mental states involved, not in the nature of the underlying psychological processes.

Defending and operationalizing this claim require, firstly, a precise account of loose communication. I will build it, in the following sections, using *relevance theory* (Sperber & Wilson, 1995). In fact, as opposed to many others theories of communication that have focalised on verbal and straightforward communication, relevance theory has dedicated much energy in describing non-verbal and loose forms of communications.

2. Relevance Theory: first sketch of the *communication model* of art reception

According to relevance theory, communication is fundamentally a process of mind-reading, during which a communicator ostensively "provides evidence of her intention to convey a certain meaning, which is inferred by the audience on the basis of the evidence provided" (Wilson & Sperber, 2002, p. 607). This account is not limited to verbal communication, since there is an infinity of non-verbal ways to ostensively provide evidence of an intention to convey a certain meaning. And it is not restricted to straightforward forms of communication, since the evidence can be loose and allusive.

Our cognitive systems process their input following a principle of relevance, defined as a trade-off between cognitive benefit and processing effort. Perceptual systems, for instance, have been shaped by evolution and learning to pick out in the environment the input that might provide the greatest cognitive benefit while requiring the smallest processing effort. During communication, a communicator provides evidence (an utterance, for instance) that is expected to be processed by the receiver. So he tacitly assumes that his utterance is relevant enough to be worth processing, i.e. that it will provide to the receiver, in a given context, cognitive benefits that justify the cost of processing it. According to relevance theory, we are equipped with processes of mind-reading that have specifically evolved for communication and that exploit this principle of relevance (Sperber, 2000). When processing a communicative act, those mechanisms use as a heuristic the tacit assumption that the communicator implicitly believes that, in a given context, his communicative act can provide cognitive benefits that justify the effort invested in its processing. For instance, if I point something that is behind you, you will turn your head and expect to see something that I believe is relevant for you, i.e. that you will learn something that justify the effort of turning your head, visually processing the scene and inferring my intentions. If you cannot see what I

point by just turning your head but need to move a bit more, the effort being a bit greater you will implicitly expect to see something that will provide a bit greater cognitive benefit.

Relevance theory allows to quite easily draw an analogy between understanding a simple communicative act and receiving an artwork: during reception of an artwork, the spectator tacitly considers the artwork as a means that the artist uses to ostensively manifest a piece of information that he/she believes is relevant. The situation is comparable to the one where I direct your attention to a nice landscape by pointing, to make an impression manifest. In the case of art, the artist has him/herself conceived—sometimes over a long time and at the cost of much effort—the object that he/she metaphorically points out to an audience (except in the case of ready-mades). The situation is thus far more complex than the case of my simply pointing to a landscape. But the difference might well be only one of complexity.

The artist may have no one in particular in mind when conceiving a work (or have only him-/herself as the main addressee of the work), and the spectator may have no idea of who the artist is; but these and other differences that might be pointed out between art reception and standard communication do not challenge the general claim that an artwork is fundamentally received as a means used to ostensively manifest something that the artist believed to be relevant.

In order to clarify this claim—hereinafter the "communication model" of art—and to specify what is specific to art reception in relationship to the reception of simpler communicative acts, I look in the next section at what I take to be the two main objections that can be raised against this view.

3. Two objections to the communication model

Claiming that the reception of artworks is fundamentally comparable to that of standard communicative acts as conceptualized by relevance theory has some consequences. The main

one is that the reception of an artwork is fundamentally a process of attributing mental states to the artist. In the same way that we cannot pay attention to a sentence without guessing (often unconsciously) what its producer has in mind—i.e., what the speaker wants to make overtly manifest—we cannot pay attention to an artwork without (often unconsciously) attributing mental states to the artist. This view subordinates other aspects of our relation to artworks—such as the perceptual effects studied in many cognitive approaches—to the process of attributing mental states to the artist. According to this view, those perceptual effects have the same status as the one that relevance theory assigns to the vocabulary and syntax of natural language: they are tools, shared by a producer and a receiver, which the former uses to overtly manifest the content of some mental states and the latter uses to guess what that content might be.

Thus, the communication model is related to classical intentionalist theories of art, according to which artworks have a meaning (Danto, 1981) which is related in some way to the actual intentions of the artist (Carroll, 2000; Levinson, 2010; Stecker, 2006). This acquaintance is only partial, however. Firstly, the communication model is concerned with the attribution of mental states in general, and not only with intentions—at least if intentions are conceived as conscious and verbalizable mental states (Pignocchi, 2010, 2012; 2014b). As shown by relevance theory, we communicate emotions, impressions, bodily sensations, and many other kinds of mental states that are difficult or impossible to verbalize. Secondly, unlike many existing accounts in the philosophy of art, the view defended here is descriptive and psychological, and not normative or metaphysical (Pignocchi, 2014a).

Nevertheless, this affinity with classical intentionalism may seem to open up the communication model to the kind of objections that are traditionally raised against intentionalism. Adapted to the present—psychological, descriptive—debate, the two main objections are as follows:

(1) Plurality of interpretations. A given artwork (at least a successful one) seems to give rise to a plurality of (sometimes incompatible) interpretations (Gadamer, 1975; Ricoeur, 1976). This would not necessarily be a problem for the view defended here if those various interpretations always emanated from different interpreters, since a communicative act can give rise to contrasting interpretations depending on who interprets it. But a given artwork can generate multiple interpretations even in a single interpreter. Moreover, a single interpreter can interpret and reinterpret a given artwork indefinitely. This seems to stand in clear contrast to standard communicative acts. At first sight, it seems that a sentence, in an everyday conversation, even when imbued with particularly rich implicit meaning, can be paraphrased in a way that is quite precise, unique and definitive.

(2) Verbal explanation by the artist. Artists' public explanations of an artwork often have only a marginal impact on our engagement with it (Beardsley, 1958) or, at least, they almost never assume more importance than the work itself (Wollheim, 1987). For instance, Levinson (1996) notes that "When a poet vouchsafes us, in plain language, what some enigmatic poem of his might mean, we don't react by then discarding the poem in favor of the offered precis" (p.177). This trivial observation seems incompatible with the communication model, since when the author of a standard communicative act explains what he wanted to say, his explanations are generally decisive (Levinson, 1999).

These two objections share a common principle: artworks seem to display a peculiar resistance to paraphrase. When a given person tries to put words to the meaning that she has attributed to an artwork—or to what the artwork did to her, on what it expresses, etc.—the task seems potentially endless. Moreover, attempts to translate the reception of an artwork into words seem themselves to enrich this reception, which may motivate continued striving to put words to it, etc. This observation seems to reveal a difference in nature between artworks and standard communicative acts. It is as if we spontaneously approached artworks

as objects that have no definite meaning, in opposition to standard communicative acts. Thus, it seems unlikely that a common framework—relevance theory or any other—could ground the empirical investigation of both art and standard communication.

To answer this objection, it first has to be noticed that many standard communicative acts also resist paraphrase and are interpretable and reinterpretable, even if it is to a lesser extent than great artworks.

4. Weak and strong communication

Relevance theory distinguishes between weak and strong communication. An act of communication is *strong* when its relevance comes from one, or few, strongly implicated implications. An act of communication is *weak* when it evokes a loose array of weakly implied implications. In an act of weak communication, each implication alone would be insufficient to satisfy the receiver's expectation of relevance, but collectively they do end up satisfying it. If, during a diner, I point to the salt cellar because I want it, my communicative act is strong, since its meaning, even if implicit, can be easily paraphrased by explicating the main and strongly implicated implication: "please could you give me the salt cellar". If instead, during a walk, I point with a smile to a nice landscape, my communicative act is weak since it evokes an array of implications, such as "this landscape is nice," "the light is very pleasing," "I'm happy to be here with you," "I would like to continue the walk," etc. In this case your expectation of relevance is satisfied by an accumulation of this kind of weak implications, which are linked to my mood, the landscape itself, our common plan, etc. An act of strong communication gives the impression of being clear and precise, because the receiver's expectation of relevance is satisfied by one or few implications. An act of weak communication, in contrast, appears looser and its meaning is fuzzier, given the plurality of implications that it conveys.

According to relevance theory, the meaning of an act of strong communication is generally quite easy to paraphrase explicitly. The meaning of an act of weak communication in contrast, is generally much harder, and sometimes even impossible, to paraphrase. Commenting on an example in which Mary appreciatively and ostensively breathes the fresh air of the seaside where she has just arrived with Peter, in order "to share an impression with [him]" (p.58), Sperber and Wilson (1995) claim that Mary could not have communicated the same impression with words. Relevance theorists are particularly explicit on the impossibility of exhaustively paraphrasing an act of weak communication when they analyze the case of metaphor, which they take to be paradigmatic of weak communication. Wilson (2009) writes for instance that a metaphor "cannot be paraphrased in literal terms without a loss of meaning" (p. 41). This claim echoes various authors who have insisted on the impossibility of exhaustively verbalizing the meaning of a metaphor. For instance, Davidson (1978) notes that the task of paraphrasing a metaphor seems endless, and that this is why "most attempts at paraphrase end with 'and so on'" (p.46).

If standard communicative acts can display the same resistance to paraphrase as artworks, then the idea of a continuity between art and communication can be maintained. The claim is simply a bit further specified: art reception is in continuity with the understanding of standard acts of weak communication. Now, to reinforce this view and to carefully answer the two objections discussed in the preceding section, the task is to explain where the resistance to explicit paraphrase comes from. Given the claim that art is in continuation with everyday weak communication, it may suffice to adapt the explanation provided by relevance theorists to the more sophisticated case of art reception. The problem is that in its present state, as we shall see now, relevance theory is unable to explain why the content of an act of weak communication is hard or impossible to verbalize explicitly.

5. Weak communication and explicit verbalization: why don't we speak more clearly?

According to relevance theory, the reason why an act of weak communication gives an impression of looseness and fuzziness is because it conveys many implications. The plurality of implications also explains why an act of weak communication is hard, and sometimes impossible, to paraphrase explicitly. As we have seen, an act of weak communication can for instance communicate what Sperber and Wilson call an "impression." In their view, an "impression" is "a noticeable change in one's own cognitive environment, a change resulting from relatively small alterations in the manifestness of many assumptions." Those assumptions can potentially be verbalized, so that the "very vagueness of an impression can be precisely described" (Sperber & Wilson, 1995, p. 59).

This account of weak communication, however, does not explain why the meaning of an act of weak communication is hard to paraphrase. In fact, if the various intended implications can all be verbalized, it should be possible to verbalize them all, even if there are many of them. A somewhat deeper concern targets the very relevance of weak communication: if the various implications of an act of weak communication can be verbalized, why exteriorize them through an act of weak communication instead of formulating them more explicitly? Arguably, an explicit formulation of the same implications would provide the same cognitive benefits while requiring less processing effort than an act of communication that requires the receiver to infer them all. In other words, explicit formulation should be more relevant than loose evocation. As speakers, in order to be relevant, we should always prefer to explicitly verbalize the various implications that might be conveyed by an act of weak communication, instead of evoking them loosely. I should have said "This landscape is nice," "I would like to continue the walk," etc. instead of pointing to the landscape with a smile and thus leaving you with the burden of making the efforts required to reconstruct the various implications of my communicative act.

Sperber and Wilson (1995) claim that in order to represent a set of implications we do not need to represent them all individually, and that a representation of the set may suffice. But how is it possible to represent a set of implications without representing each of them? And, if it is possible, the set of implications of an act of weak communication should constitute its meaning. Thus, the problem is the same: it should be easy to paraphrase the content of an act of weak communication by simply verbalizing the set of its implications. Similarly, in order to be relevant, we may verbalize the representation of the set of implications of an act of weak communication instead of evoking them loosely.

6. The case of metaphor

The problem raised by the account based on relevance theory's notion of weak communication is particularly clear in the case of metaphor. Wilson and Carston (2006) and Sperber and Wilson (2008) analyse the following examples:

Caroline is a princess

Robert is a bulldozer

My surgeon is a butcher

Sally is a block of ice

Relevance theorists argue that the hearer draws relevance-guided inferences leading her to spontaneously understand that the speaker means that Caroline is spoiled, pampered, etc., that Robert is forceful, stubborn, persistent, etc., that my surgeon is incompetent, dangerous, etc., and that Sally is reserved, impassive, unemotional, etc. (the "etc." in these examples plays the same role as the "and so on" noted by Davidson, 1978). But again: if all the implications of a metaphor were verbalizable, it should be possible to actually verbalize them all. Moreover,

why say that Caroline is a princess instead of saying that she is spoiled, pampered, etc.? Why is a metaphor more relevant than an enumeration of its implications?

To answer these questions, the only solution for relevance theory is to claim that at least part of the implications of an act of weak communication are incompatible with explicit verbalization. Otherwise it would always be more relevant to express those implications verbally and explicitly instead of evoking them loosely. The most straightforward solution to the problem of explaining why an implication can be incompatible with verbalization is to exit the language of thought paradigm, which thus far has been endorsed by relevance theory, adopting instead at least some of the assumptions of the grounded cognition paradigm.

7. Language-like vs. analog mental states

Explicitly in their core book *Relevance* (Sperber & Wilson, 1995) and more implicitly in later writings, relevance theorists endorse the paradigm of the "language of thought," which has long been the dominant paradigm in cognitive science. According to this paradigm, human thinking is "language-like," i.e., it is underlain by a set of atomistic, discrete and amodal representations that are combined in accordance with a set of syntactic rules (Fodor, 1975; Jacob, 1997; Pylyshyn, 1973). On this account, the representational format used by the mind is compatible with verbal language. Thus, there is no a priori reason why the implications of an act of weak communication should resist direct verbalization. Those implications might be hard to verbalize explicitly in practice but, theoretically, nothing would prevent the production of a straightforward verbal formulation of their content. To remain in this paradigm, relevance theory would have to produce an *ad hoc* argument explaining why the implications of an act of weak communication resist verbalization despite compatibility of format.

In the last few decades, however, a number of different voices have challenged the main claim of the language of thought, viz. that our mental representations are language-like (Lakoff & Johnson, 1980; Barsalou, 1999; Prinz, 2004). According to the theories of "embodied" or "grounded" cognition, the majority of our mental representations are not encoded in a format that is comparable to language. Instead they are encoded in an analog, modal, and continuous format, which is more akin to perception, sensation, emotions, or images than to words and sentences. Analog representations can be implemented, for instance, by simulations: i.e., by reactivations of pieces of past experiences in modal areas of the brain. The concept of a chair, for instance, is not a fixed and discrete symbol, but a fuzzy and ever-changing set of simulations that, according to the task that the concept is recruited for at a given time, combine visual simulations of different aspects of chairs in different contexts, simulations of the sensation of sitting in a chair, and so on. Crucially, advocates of the theory of grounded cognition argue that analog mental states can be propositional and combinable. Furthermore, analog mental states can enter into complex inferential chains and represent the most abstract and complex concepts (Barsalou, 1999; Prinz, 2004). There is no reason, in their view, to believe that these fundamental cognitive abilities require digitalization.

According to the theory of grounded cognition, the combination of analog representations rests not on the application of syntactic rules, but on the construction of new simulations that combine elements extracted from different experiences. It is possible, for instance, to combine a visual simulation of the shape of a chair with the color and texture of another chair, or with colors and textures that have never been combined in the experience of an actual chair. More creatively, it is also possible to combine the visual appearance of a chair with that of an animal running, to obtain a visual simulation—and an *ad hoc* concept—of a running chair (Barsalou, 1999).

A growing body of evidence supports the claim that many, if not all, mental operations—including the manipulation of abstract concepts—relies on analog mental states (see Barsalou, 2008, for a review). In the domain of social cognition, conceptual and empirical arguments suggest that our ability to read the minds of others is based in some measure on our own ability to act, feel, perceive, imagine, etc.—i.e., to form what seem to be paradigmatic analog mental states (Goldman, 2006). Some experiments even suggest that very peripheral sensations play a crucial functional role in the attribution of mental states to others (Ackerman et al., 2010; Bosbach et al., 2005; Niedenthal et al., 2001; Oberman et al., 2007).

Endorsing the claim that analog mental states underlie a significant part of our mental activity makes it possible to explain why some implications of an act of communication can resist verbalization. It is that, because of format incompatibility, the content of an analog mental state cannot be exhaustively translated into words and sentences. Trying to verbalize the content of an analog mental state raises the same problem as trying to verbalize the content of a picture: any description, even thousands of pages long, necessarily fails to convey an important part of the information contained in the picture.

8. Grounding relevance theory

"Grounding" relevance theory—i.e., claiming that at least part of the implications of a communicative act can be encoded in an analog format—makes it possible to solve the problems faced by its account of weak communication. The meaning of an act of weak communication is hard to paraphrase because of an incompatibility of format between the mental states that it exteriorizes and verbal language. Any paraphrase, however sophisticated, fails to capture some meaning, for the same reason that the verbal description of a picture can never be exhaustive: because of an incompatibility of format. In the same way, an act of weak communication is more relevant than an attempt to express its implications verbally, because

those implications are at least in part analog, and thus cannot be transmitted efficiently using a more explicit form of expression. Contrary to the standard account of acts of weak communication, they do not convey a set of language-like implications that could have been formulated explicitly. Instead, an act of weak communication conveys implications that could not have been expressed otherwise, because of their analog format.

If this view is correct, at least a portion of the various language-like implications that relevance theorists postulate when analyzing acts of weak communication are not conveyed by the act of communication itself. Instead they are byproducts of linguistic analysis—i.e., of the theorist's translation into words of a meaning that is not language-like but analog. And, at least in some cases, the impression of looseness and fuzziness is a byproduct too: in the example of the nice landscape that I point out to you with a smile, you may have the impression of perfectly understanding the state of mind that motivated my communicative act. The meaning of my communicative act appeared quite clear during your first, spontaneous, interpretation of it. Only if you try to put it into words for one reason or another do you discover that its meaning is hard to verbalize. Then, and only then, you may be moved to enumerate a set of sentences that may seem to systematically fail to convey part of the meaning of my communicative act.

On this alternative account, the impression of looseness and fuzziness often appears only with the discovery that what seemed quite clear is hard to verbalize. During your spontaneous interpretation of my pointing gesture, you simulate a sensation, an impression, maybe the visualization of our program, and attribute the general state of mind resulting from the combination of these simulations to me—i.e., you interpret my communicative act by attributing to me analog representations that you reconstruct in the same analog mode. It is only in a second, non-mandatory, phase of interpretation—i.e., a phase where you try to put

words to the meaning of my communicative act—that you translate these analog representations into a loose array of linguistic implications as best you can.

The fact that at least a portion of the implications of an act of weak communication are analog is clearer in the case of metaphor. The standard account of metaphor cannot explain why the meaning of the examples quoted above (Caroline is a princess; Robert is a bulldozer; my surgeon is a butcher; Sally is a block of ice) is hard to paraphrase, and why those metaphors are more relevant than an explicit formulation of their implications. According to the view defended here, those implications are at least in part analog: to some extent, we *see* Caroline with a crown behaving like a princess, we *see* a kind of hybrid between Robert and a bulldozer demolishing a construction, we *see* my surgeon with a butcher knife in his hand and blood splashed on his apron, and we *feel* that if we touched Sally her skin would be cold and unyielding (Ritchie, 2009). This is all the more clear if we put these metaphors in context, as relevance theorists do in describing the process of understanding. “Caroline is a princess” can for instance be an answer to the question “Will Caroline help us clean up the flood damage?” To understand that the intended answer is “probably not,” we do not need to activate a set of language-like representations of the kind “Caroline is a spoiled and pampered girl.” We just see her dressed and behaving like a princess, and directly realize that this vision does not fit with the scenario of clearing up flood damage.

It might be objected that we do not need conscious visualization to understand the above metaphors. It might even be claimed that visualization, at least for some people, only happens as a consequence of a particular effort of attention and imagination. However, analog representations can be unconscious (Barsalou, 1999). Thus, the above argument is that when we consciously visualize the content of a metaphor, we bring to the surface of consciousness a representation that would otherwise remain unconscious—maybe in a simpler form, but it

nonetheless underlies the process of understanding. The claim here is not about phenomenal experience, but about the format of the underlying representation, at a functional level.

The view defended here does not imply that a metaphor or any other act of weak communication communicates only one analog mental state: an act of communication can exteriorize an array of quite distinct mental states. Moreover, analog and language-like mental states can cohabit within this array. In other words, I do not want to say that an act of weak communication cannot have language-like implications at all. In order to explain why an act of weak communication is relevant and why its content is hard to paraphrase, it is sufficient to claim that *some* of its main implications are analog. Those analog implications can interact with language-like implications. During the process of interpretation—especially when a particular effort is made, for instance because the metaphor is encountered while reading a poem—analog representations may interact with linguistically encoded ideas, and both kinds of representations may enrich one another. Consider the two first lines of Sandburg's poem "Fog," which was discussed by Sperber and Wilson (2008):

> The fog comes
> on little cat feet. It sits looking
> over harbor and city
> on silent haunches
> and then moves on

Sperber and Wilson note that "'on little cat feet' evokes an array of implications having to do with silence, smoothness, stealth. Taken together with the following four lines, the phrase evokes a movement which appears both arbitrary and yet composed, so that it is tempting to see it not as random but rather as guided by mysterious dispositions" (p.102). It is tempting to see a mixture of analog and language-like representations behind this evocation. An image of

a giant and shadowy cat made of fog, a set of bodily sensations linked to what it could feel like to walk with cat feet made of fog, could for instance be activated jointly with the contradictory and linguistically encoded idea that fog is not an intentional creature, which could further activate the idea that it is tempting to think that we just don't understand its dispositions. This linguistically encoded idea can activate other images and sensations, which can evoke other linguistically encoded ideas, etc.

The importance of analog mental states in the interpretation of metaphor may be made clearer by considering cases where the metaphor itself is presented in an analog format, such as in the case of metaphors in movies. The clearest metaphors in movies exploit the resources of editing, as when Fritz Lang, in *Fury*, uses a splice to associate a group of women talking together and a group of hens, or when Chaplin, in *Modern Times*, compares a group of workers going to the factory with a group of sheep. A somewhat more subtle metaphor, at the beginning of Kubrick's *2001 Space Odyssey*, shows us a furious ape throwing a bone into the air, and then, as the camera follows the bone, a cut establishes a link with a space ship. Movies can also establish metaphorical links inside a single shot: for instance, between a character's personality and his house (as in Hitchcock's *Psycho* or *Rebecca*) or between the action and the scenery within which it takes place. For instance, the properties of different kinds of love stories can entertain metaphorical links with the properties of the scenery where they take place (a teenage love story with a wild river, an adult love story with an artificial and highly structured swimming place, as in Mia Hansen-Love's *Un amour de jeunesse*). To produce an effect on the audience, these metaphors need not be explicitly identified as metaphors, nor, probably, need they activate any kind of language-like representations (Pignocchi, 2015).

9. Analog mental states and the function of art

As argued by relevance theorists, strong and weak communications are not categories with clear cut-off boundaries: the strength of communication is a matter of degree. Relevance theorists claim that what determines the position of a given communicative act along this continuum is the number of its language-like implications. According to the view defended here, the dimension that determines the position of a given act of communication along the continuum between weak and strong communication is not the number of its implications, but the remoteness of its implications from the possibility of straightforward verbalization.

If I say “this lemon is very sour,” or “this pan burned my hand,” or “I am happy,” “sad” or “melancholic,” the mental states that motivate my communicative acts are arguably analog (they are akin to sensations and emotions). However, these communicative acts can be quite strong, if I do not need you to precisely reconstruct these mental states. If, for instance, I say that this lemon is sour because I want sugar, or that this pan burned my hand because I want you to bring me ointment, it would be irrelevant for you to reconstruct the precise intensity and the nuances of my sensation, the precise part of the hand that was burned, etc. Instead, if I say the same thing but in a context where my aim is for you to understand with some precision what I feel, my communicative act is weaker, since what it conveys is harder to paraphrase. If for one reason or another I want to be more specific, I may enrich my sentence with a particular tone of voice or a facial expression. In this case, my weak communicative act becomes richer, since you will be able to imagine a bit more precisely what I feel. If I want to be even more specific—i.e., if I want you to be able to reconstruct what I feel with greater precision—I may describe the context of my situation, clarify its causes and consequences, or use a metaphor or any other kind of more evocative communicative act.

As suggested by Hoefstatder and Sander (2013), analog mental states can be very complex. As the mental states that I want to manifest become more remote from any possibility of direct verbalization, my communicative act becomes weaker. In other words, the

sparser lexical entries in the area of a given person's conceptual space where the analog mental state that he/she wants to exteriorize happens to be, the more he/she will have to use a form of weak and indirect evocation to make this mental state manifest. At some point of complexity, the tools of everyday weak communication may become insufficient. This is where artistic means of expression may become essential.

Thus, if one end of the continuum is occupied by strong communication, the other end is the realm not of everyday weak communication, but of artistic expression. Artistic modes of expression are tools that allow people to enhance the power of everyday communication and exteriorize analog mental states that could not have been exteriorized using other more economical and straightforward forms of expression, or at least not without a major loss of content.

In everyday conversation, when an act of communication is implicit and allusive whereas we have the impression that its message could have been expressed more explicitly without any significant loss of meaning, we judge it as lacking relevance, since we have the impression that we could have obtained the same cognitive benefit at a lesser cognitive cost. For the same reason, a communicative act that uses an artistic mode of expression is judged to lack relevance if we have the impression that its content could have been expressed, without significant loss of meaning, using ordinary verbal language or any form of expression that would have required less processing effort. At a larger scale, this principle might have been and might still be a driving force behind the appearance, evolution, and stabilization of artistic means of expression: artistic means of expression have developed to enhance our capacity to exteriorize analog mental states that could not be exteriorized using a more explicit and straightforward form of expression, or at least not without significant loss of meaning. Progressively, this use of artworks may have been culturally internalized as a core function of art, so that an artwork that seems to exteriorize only mental states that could have been

exteriorized using a more explicit and economical form of expression is not only seen as irrelevant but also as running against one of its *raisons d'être* qua art (Pignocchi, 2012c).

Notice that the precise relation between a set of mental states and the means of expression that could permit their exteriorization depends on each person's vocabulary and knowledge. Thus, the evaluation of the relevance of a given artwork also depends on these parameters. Knowledge of other artworks, in particular, is determinant, since it can provide linguistic shortcuts to approximately designate complex mental states that would otherwise escape words. The expression "la madeleine de Proust," for instance, makes it possible to approximately evoke a feeling of reminiscence activated by a perceptual stimulus that establishes a memorial connection with a remote and long-dormant memory. As illustrated by this attempt at verbal description, this feeling would be hard to exteriorize (and even to notice) for someone who has not read *In Search of Lost Time*.

The idea that art allows artists to express something that could not have been expressed otherwise, and particularly not with words, is not new. This "something" has been related to intuitions (Croce, 1903), expressed emotions (Collingwood, 1938), deep feelings (Tolstoy, 1898), and deep self (Proust, 1954). In addition to a cognitive description of this "something," the originality of the view defended here is that it translates a metaphysical claim into a descriptive theory of engagement with art: we necessarily receive artworks as means that the artist uses to express something that could not have been expressed using more explicit forms of expression. The remoteness of the mental states that we attribute to the artist from any possibility of verbal and more direct characterization is a crucial dimension of our positive appreciation of the work.

This view does not deny that some of the motivations behind an artwork can be language-like and, thus, easily verbalizable. Language-like and analog mental states interact and complement one another in the mind. What the view sketched here predicts is that

someone who recovers *only* language-like motivations behind an artwork, and who thus has the tacit impression that the artist could have expressed the same thing while requiring less processing effort, will judge the artwork as lacking relevance.

This idea can be tested experimentally. It predicts that one key factor in the positive appreciation of an artwork should be that it induces the attribution of mental states whose content is particularly hard to paraphrase. More precisely, the prediction is that to be appreciated by a given receiver, an artwork (1) has to activate a rich attribution of mental states (Jucker & Barrett, 2011; Jucker et al., 2014), and (2) the content of these mental states must be hard to paraphrase, otherwise the artwork will be judged poor, weak, uninteresting, etc. This prediction might be tested by adapting the paradigm used by Jucker and colleagues (2014) which measures the impact of different titles on the appreciation of a given work. The prediction is that a title will enhance the appreciation of a work if its relationship to the work seems both comprehensible and hard to explain: i.e., if it stimulates the attribution of mental states that resist verbalization to the artist.

Although this hypothesis has not been directly tested, note that it explains why various studies have found an unexpected negative impact of some kind of contextual information on art appreciation (Belke et al. 2006; Bordens, 2010; Cupchik et al. 1994; Leder et al. 2006; Temme, 1992). In fact, according to the hypothesis defended here, some kinds of contextual information can inhibit the attribution of analog mental states (for instance by activating the attribution of language-like mental states instead) and/or digitalize the mental states that the subject has or would have spontaneously attributed to the artist. As a consequence, the work is judged less relevant and the subject likes the work less.

In the absence of more direct empirical verification, the main conceptual argument that can be given for the version of the communication model defended here is that adopting it makes overcoming the two objections raised in section 3 a straightforward task.

10. Plurality of interpretations and artist's explanations

According to the communication model developed in this paper, the main mechanisms that frame our reception of artworks are the same ones that are involved in our understanding of everyday weak communication. In other words, an artwork is spontaneously received as a means that the artist has used to ostensively manifest a set of mental states that could not have been exteriorized using more economical means of expression. The concept of analog mental state was introduced to explain the origin of the resistance to more economical modes of expression, and in particular direct verbalization.

This analysis makes it possible to answer the two objections raised in section 3. Consider the first: a given artwork can generate multiple interpretations even for a single interpreter. In this objection, the term 'interpretation' refers to the verbal translation of the meaning that a given interpreter attributes to an artwork. According to the communication model, a crucial component of the positive appreciation of an artwork is the attribution to the artist of mental states that could not have been expressed more economically, in particular not by means of direct verbal designation. This resistance to direct verbalization comes from the fact that the expressed mental states are sophisticated analog mental states for which language does not provide even coarse approximations. Trying to verbally describe an intentional process involving mental states of this kind is tantamount to trying to describe a movie—each frame, each camera movement, each sound, etc. Any verbal description, even if it is thousands of pages long, would leave room for thousands of other equally long accurate descriptions. This account not only explains why an artwork can generate multiple interpretations and why the task of interpreting it can give the impression that we are facing a Danaides' barrel into which words be poured forever, but also why this situation is generally considered as a symptom of success.

It may still be objected that a successful artwork can stimulate completely distinct interpretations, even for a single interpreter, and not only various approximations of the same array of analog mental states. However, as seen in the analysis of Sandburg's poem, an act of weak communication can exteriorize a complex array of quite distinct mental states. In everyday communication, when acts of weak communication involving multiple analog mental states are produced in the flow of conversation, those states generally have some close coherence. In an artwork, which can be worked and reworked sometimes for years, it is much more common for quite distinct clusters of mental states to be expressed. A given interpreter can alternatively explore each of these clusters using words, thus generating quite contrasted pieces of verbal interpretation.

Consider the second objection: artists' public explanations of an artwork often have only a marginal impact on our engagement with it. Again, the core of the answer is provided by the idea that an artwork expresses what could not have been expressed using more economical communication tools: the artist, like anyone else, is unable to translate the complex analog mental states that he/she managed to exteriorize through the work into words. This is why the artwork itself remains essential even when an artist makes special and sincere efforts to verbally explain the intentions behind the artwork.

However, it may still be objected that this view wrongly predicts that the artist's verbal explanation should nonetheless always have a deep impact on our engagement with an artwork, because they should always enrich the analog mental states that we are able to attribute to the artist. First, this objection must not be pushed too far. The impact of artists' verbal explanations on personal engagement with the artworks they produce is an empirical question that has begun to be explored, and it seems that at least sometimes the impact is a major one (Specht, 2010). Danto (1981) even described a thought experiment wherein two

identical artworks are appreciated in a somewhat opposed manner given the different explanations provided by their creators.

Second, it may be remarked that the incompatibility of format between analog mental states and verbalization is not the only barrier separating the artist's verbal explanation from the mental states that actually played a role in the production of the work. Cognitive science has shown how remote the verbal explanations that individuals give of the reasons for their behavior can be from its actual causes. This is true even if the person is perfectly sincere: in many situations, the verbal explanations we give of our own behavior are unconsciously motivated by the public image that we want to display and, in particular, by a search for apparent coherence, rather than by an introspective search for the actual causes of our behavior (Von Hippel, & Trivers, 2011; Kurzban & Aktipis, 2007). This phenomenon of self-deception might be particularly deep in an artistic context, since many artists, as any other public people, are particularly concerned with their public image. Most of us might not be aware of this phenomenon of self-deception, and might not be able to explicitly reason about it. We nevertheless spontaneously behave in accordance with it, by not taking people's verbal reports about the causes of their behavior as definitive proofs. An example helps to clarify the application of this idea to art reception.

At a conference, a movie critic offered an interpretation of Hollywood Westerns, and in particular of the tumbleweeds that in many Westerns regularly cross the screen, pushed and rolled by the wind. The critic argued that in many such films, in particular those of John Ford, the tumbleweeds symbolize the first covered wagons of settlers exploring the Wild West, which, like tumbleweeds, followed an uncertain path, and finally stopped to put down roots when they had found a watering place. The critic claimed that one argument in favor of this symbolic interpretation comes from a film of Ford's in which John Wayne plays the role of a pioneer who has grown old and who has difficulties finding his own place in the newly

industrialized west. In one of the movie's crucial scenes, a tumbleweed is artificially stuck just in front of John Wayne, symbolizing him settled somewhere at the cost of his liberty, and, perhaps, against his true nature.

If we watch a John Ford Western with this theory in mind, our experience of each of these tumbleweeds might now be quite enriched. In particular, if we see the scene with the tumbleweed stuck at the feet of John Wayne, our interpretation of it will spontaneously be enriched by a symbolic component that it probably would not have had if we had not heard the critic's suggestion.

Now, imagine that John Ford himself is in the conference room, that he raises his hand to protest, sincerely, that he never had any such complex symbolic intention. The tumbleweeds in his movies, he says, have no other function than to give an impression of a remote, wild, and hostile West. This public statement, however, would not invalidate a symbolic interpretation of the tumbleweeds in John Ford's Westerns. If we have the critic's theory in mind when we see a tumbleweed crossing the screen, or when we see the tumbleweed stuck at Wayne's feet, we will spontaneously attribute metaphorical content to it despite Ford's denial of symbolic intent. It is tempting to conclude from this kind of observation that the mental states that we attribute to the artist do not constrain our spontaneous interpretation of the artwork.

The explanation favored here is that, in this case, we spontaneously consider that Ford's verbal declarations are not reliable cues to access his mental states, at least not those that actually played a role in the creation of the movie. There are two complementary reasons for this: first, the mental states responsible for the presence of the tumbleweeds includes sophisticated analog mental states that established, in Ford's mind, metaphorical connections between filming tumbleweeds in the way that he did and other motivations that were at play in the creation of his movie. Those relations are non-verbal in nature, and they can play a

causal role in the creation of the movie without the artist himself being aware of them. Secondly, we spontaneously consider that Ford's protest against the symbolic reading of the stuck tumbleweed was motivated, without Ford himself noticing it, by the public image that he wants to present—i.e., that of a forthright director who does not imbue his movies with esoteric meanings—rather than by introspective access to the mental states that actually played a role in the creation of the movie.

In further support of this interpretation, imagine that another person raises her arm in the conference room and explains that she was the sound person on the movie with the stuck tumbleweed, and that she stuck it there herself simply in order to hide a microphone. In this case, it would become quite hard to maintain the symbolic reading of that tumbleweed. When we watch this Western again, we will spontaneously see that tumbleweed as a device to hide a microphone rather than a symbol of the situation of John Wayne's character. Of course, it could still be claimed that Ford chose this scene instead of another without the stuck tumbleweed for relevant reasons, and that we can implicitly see his choice as unconsciously driven by the symbolic virtue of the tumbleweed, but the symbolic interpretation has been significantly weakened. If the anecdote continued in a way that does even more to undermine the view that the artist's mind, even in its most unconscious recesses causally intervened by virtue of such metaphorical content, the symbolic interpretation would be further weakened as a consequence.

This view explains why, as noticed for instance by Collingwood (1938), artists themselves may consider their work as more reliable cues to their own mental states than what they think their mental states are. In fact, artworks can help artists to clarify mental states of their own that they could not verbalize. In the same way as writing a philosophical dissertation helps its author organize and enrich his/her language-like mental states, the

creation of an artwork could work as a thinking tool to clarify the artist's own analog mental states (Pignocchi, 2015).

11. Conclusion

This paper has tried to clarify the link between art reception and everyday communication. I have argued that, from a psychological point of view, the reception of an artwork is closely related to the understanding of everyday acts of weak communication, such as metaphors. The difference, I contend, is mainly a matter of sophistication, but the psychological processes are the same: in both cases, mind-reading processes drawing on the communicative principle of relevance infer the mental states that an agent wants to ostensively manifest.

If this view is correct, then the study of art could directly benefit from progress made in theories of human communication, as it has benefited from progress achieved in theories of perception (Cavanagh, 2005; Livingstone, 2002) and emotions (Robinson, 2005). And, conversely, the study of art could inspire progress in the understanding of human communication, as it has inspired progress in the domain of perception—e.g., in the domain of shadow perception (Casati, 2004).

This paper is a first illustration of this kind of exchange. On the one hand, I used relevance theory to discuss classical topics in the philosophy of art: namely, the plurality of interpretations of artworks and the role of artist's verbal explanation. On the other hand, focusing on art revealed a weakness of relevance theory, and the need to accept that the implications of an act of weak communication can be encoded in an analog format. In other words, it showed relevance theory's need for some degree hybridization with grounded cognition paradigm. Since this kind of connection generally benefits both sides, grounded cognition might benefit from the establishment of this connection. In particular, thanks to the communication model, the reception of artworks may provide grounded cognition with useful

case studies to explore one of its more controversial and essential claims: namely, that analog mental states can produce inferences.

References

Ackerman, J. M., Nocera, C. C., & Bargh, J. A. (2010). Incidental haptic sensations influence social judgments and decisions. *Science, 328*(5986), 1712-1715.

Barsalou, L. W. (2008). Grounded cognition. *Annual Review of Psychology, 59*, 617-645.

Barsalou, L. W. (1999). Perceptual symbol systems. *Behavioral and brain sciences*, *22*(04), 577-660.

Beardsley, M. C. (1958). *Aesthetics: Problems in the Philosophy of Criticism*. New York: Harcourt Brace & World.

Belke, B., Leder, H., & Augustin, D. (2006). Mastering style. Effects of explicit style-related information, art knowledge and affective state on appreciation of abstract paintings. *Psychology Science*, *48*(2), 115.

Bordens, K. S. (2010). Contextual information, artistic style and the perception of art. *Empirical Studies of the Arts, 28*(1), 111-130.

Bullot, N., & Reber, R. (2013). The artful mind meets art history: Toward a psycho-historical framework for the science of art appreciation. *Behavioral and Brain Sciences*, *36*(02), 123-137.

Carroll, N. (2000). Interpretation and intention: The debate between hypothetical and actual intentionalism. *Metaphilosophy, 31*(1 - 2), 75-95.

Casati, R. (2004). Methodological issues in the study of the depiction of cast shadows: A case study in the relationships between art and cognition. *The Journal of aesthetics and art criticism*, *62*(2), 163-174.

Cavanagh, P. (2005). The artist as neuroscientist. *Nature*, *434*(7031), 301-307.

Collingwood R. G., 1938, *The principles of art*. Oxford, Clarendon Press.

Croce B., 1903, *Breviario di estetica: quattro lezioni*, Bari, Laterza & figli.

Cupchik, G. C., Shereck, L., & Spiegel, S. (1994). The effects of textual information on artistic communication. *Visual Arts Research*, 62-78.

Danto, A. C. (1981). *The transfiguration of the commonplace: a philosophy of art*. Cambridge, Mass: Harvard University Press.

Davidson, D. (1978). What metaphors mean. *Critical inquiry*, *5*(1), 31-47.

Fodor, J. A. (1975). *The language of thought*. Harvard University Press.

Gadamer, H., G. (1975). *Truth and Method*. (translation ed. Garrett Barden and John Cumming. New York).

Gelman, S. A., Meyer, M. A., & Noles, N. S. (2013). History and essence in human cognition. *Behavioral and Brain Sciences*, *36*(02), 142-143.

Goldman, A. (2006). *Simulating Minds: The Philosophy, Psychology, and Neuroscience of Mindreading*. Oxford: Oxford Univ. Press

Hofstadter, D., & Sander, E. (2013). *Surfaces and Essences: Analogy as the fuel and fire of thinking*. Basic Books.

Jacob, P. (1997). *What minds can do: Intentionality in a non-intentional world*. Cambridge University Press.

Jucker, J. L., Barrett, J. L., & Wlodarski, R. (2014). "I Just Don'T Get it": Perceived Artists' Intentions Affect Art Evaluations. *Empirical Studies of the Arts*, *32*(2), 149-182.

Jucker, J. L., & Barrett, J. L. (2011). Cognitive Constraints on the Visual Arts: An Empirical Study of the Role of Perceived Intentions in Appreciation Judgements. *Journal of Cognition and Culture*, *11*(1-2), 1-2.

Kovács, Á. M., Téglás, E., & Endress, A. D. (2010). The social sense: Susceptibility to others' beliefs in human infants and adults. *Science*, *330*(6012), 1830-1834.

Kurzban, R., & Aktipis, C. A. (2007). Modularity and the Social Mind Are Psychologists Too Self-ish?. *Personality and Social Psychology Review*, *11*(2), 131-149.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.

Leder, H., Carbon, C. C., & Ripsas, A. L. (2006). Entitling art: Influence of title information on understanding and appreciation of paintings. *Acta psychologica*,*121*(2), 176-198.

Levinson, J. (1996). Intention and interpretation in literature. *The pleasures of aesthetics: Philosophical essays*, 175-213.

Levinson, J. (1999). Two notions of interpretation. *Interpretation and its Boundaries, ed. Arto Haapala and Ossi Naukkarinen. Helsinki: Helsinki University Press*, 2-21.

Levinson, J. (2010). Defending Hypothetical Intentionalism. *The British Journal of Aesthetics*, *50*(2), 139-150.

Niedenthal, P. M., Brauer, M., Halberstadt, J. B., & Innes-Ker, Å. H. (2001). When did her smile drop? Facial mimicry and the influences of emotional state on the detection of change in emotional expression. *Cognition & Emotion*, *15*(6), 853-864.

Oberman, L. M., Winkielman, P., & Ramachandran, V. S. (2007). Face to face: Blocking facial mimicry can selectively impair recognition of emotional expressions. *Social Neuroscience*, *2*(3-4), 167-178.

Pignocchi, A. (2015). *Pourquoi aime-t-on un film ? Quand les sciences cognitives discutent des goûts et des couleurs.* Paris: Odile Jacob.

Pignocchi, A. (2012). *L'œuvre d'art et ses intentions*. Paris: Odile Jacob.

Pignocchi, A. (2014a). The intuitive concept of art. *Philosophical Psychology*,*27*(3), 425-444.

Pignocchi, A. (2014b). History and Intentions in the Experience of Artworks.*Topoi*, *33*(2), 477-486.

Pignocchi, A. (2010). How the intentions of the draftsman shape perception of a drawing. *Consciousness and cognition*, *19*(4), 887-898.

Pignocchi, A. (2009). What Is Art? A methodological framework. *Cognitive semiotics, 5,* 122-135.

Prinz, J. J. (2004). *Furnishing the mind: Concepts and their perceptual basis*. The MIT Press.

Proust, M., (1954). *Contre Sainte-Beuve,* Paris, Gallimard.

Pylyshyn, Z. W. (1973) What the mind's eye tells the mind's brain: A critique of mental imagery. *Psychological Bulletin, 80,* 1–24.

Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing fluency and aesthetic pleasure: is beauty in the perceiver's processing experience?. *Personality and social psychology review*, *8*(4), 364-382.

Ricoeur, P. (1976). *Interpretation Theory: Discourse and the Surplus of Meaning*. Fort Worth, Texas.

Ritchie, L. D. (2009). Relevance and simulation in metaphor. *Metaphor and Symbol*, *24*(4), 249-262.

Robinson, J. (2005). Deeper than reason: Emotion and its role in literature, music, and art. Oxford: Calderon Press.

Specht, S. M. (2010). Artists' Statements Can Influence Perceptions of Artwork. *Empirical Studies of the Arts*, *28*(2), 193-206.

Sperber, D. (2000). Metarepresentations in an evolutionary perspective. In *Metarepresentations*, ed. D Sperber, pp. 117–38. Oxford, UK: Oxford Univ. Press

Sperber, D., & Wilson, D. (2008). A deflationary account of metaphors. *The Cambridge handbook of metaphor and thought*, 84-105.

Sperber, D. & Wilson, D. (1995). *Relevance: Communication and Cognition* (2nd ed.) Oxford: Blackwell.

Stecker, R. (2006). Moderate actual intentionalism defended. *The Journal of aesthetics and art criticism*, *64*(4), 429-438.

Temme, J. E. V. (1992). Amount and kind of information in museums: Its effects on visitors satisfaction and appreciation of art. *Visual Arts Research*, 28-36.

Tolstoï, L. N. (1898). *Qu'est-ce que l'art?* Ollendorf.

Von Hippel, W., & Trivers, R. (2011). Reflections on self-deception. *Behavioral and Brain Sciences, 34*(01), 41-56.

Wilson, D. (2009). Parallels and differences in the treatment of metaphor in relevance theory and cognitive linguistics. *Studies in Pragmatics, 11*, 42-60.

Wilson, D., & Carston, R. (2006). Metaphor, relevance and the 'emergent property'issue. *Mind & Language, 21*(3), 404-433.

Wilson, D., & Sperber, D. (2002). Relevance theory. *Handbook of pragmatics*.

Wimsatt, W. K., & Beardsley, M. (1954). The Intentional Fallacy. In *The Verbal Icon*. Lexington, University of Kentucky Press. 3-18.

Wollheim, R. (1987). *Painting as an Art*. London: Thames and Hudson.