Masters Theses 1911 - February 2014

2013

Towards a Neopragmatist Understanding of Translation: A Cross-Disciplinary and Cross-Medial Survey

Steffani Scheer
University of Massachusetts Amherst

TOWARDS A NEOPRAGMATIST UNDERSTANDING OF TRANSLATION:
A CROSS-DISCIPLINARY AND CROSS-MEDIAL SURVEY

A Thesis Presented

by

STEFFANI SCHEER

To be submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

MASTER OF ARTS

May 2013

Comparative Literature
Translation Studies

TOWARDS A NEOPRAGMATIST UNDERSTANDING OF TRANSLATION:
A CROSS-DISCIPLINARY AND CROSS-MEDIAL SURVEY

A Thesis Presented

by

STEFFANI SCHEER

Approved as to style and content by:

_____
Maria Tymoczko, Chair

_____
Nalini Bhushan, Member

_____
Jim Hicks, Member

_____
Moira Inghilleri, Member

                                        _____
                                        David Lenson, Program Director

                                        _____
                                        William Moebius, Department Head
                                        Department of Languages, Literatures, and Cultures

DEDICATION

For Mike

By your side I have learned to think, to love, and to live

Thank you

ABSTRACT

TOWARDS A NEOPRAGMATIST UNDERSTANDING OF TRANSLATION:
A CROSS-DISCIPLINARY AND CROSS-MEDIAL SURVEY

MAY 2013

STEFFANI SCHEER, B.A., MCGILL UNIVERSITY

M.A., UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Professor Maria Tymoczko

Maria Tymoczko (2005) highlights four research trajectories that are likely to be at the forefront of translation studies in coming decades: the attempt to define translation, the internationalization of translation, the impact of technology and globalization on translation theory, and the contextualization of translation studies relative to other areas of academic inquiry. The goal of this thesis is to contribute to the first research trajectory. I hope to enrich current developments in translation studies by offering a new way of conceptualizing translation based upon pragmatist philosophy and its particular approach to language and epistemology. Specifically I build upon certain passages from the works of the contemporary neopragmatist philosopher Richard Rorty (1979; 1989; 1998; 1999) in order to develop a neopragmatist understanding of translation.

I demonstrate the cross-disciplinary applicability of a neopragmatist understanding of translation, focusing in particular on visual art, popular science, and political history. I also demonstrate how the neopragmatist framework can be of use in constructing a theory of intersemiotic translation, by means of three case studies of translation between different media. The approach I develop offers a robust philosophical grounding for expanding our conceptualization of translation. Such an approach is motivated by recent research in translation studies highlighting the need for an expanded definition of translation in light of the following issues: traditional definitions of translation tend to be based upon Western views, thus neglecting the diverse international conceptions of translation and contributing to the cultural hegemony of

the West; the term "translation" is used in more contexts than traditional definitions would predict; translation is not simply an operation between texts, but can also occur across semiotic systems; translation is not a method of relaying messages across languages through the mediation of a neutral translator, but is instead a complex interface in which a network of cultural, political, socio-historical, communicative, creative, and interpretative factors are intertwined. A neopragmatist framework is useful for building an understanding of translation that responds to the above issues, helping scholars to refine an adequately descriptive and generalized theory of translation.

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

1.1 Historical Context

Translation has been a topic of discussion in Western cultures for at least two millennia, although the periodization of literature on translation is no easy task. George Steiner (1992), for example, proposed a four-tier periodization of translation literature that has been subject to critique (Tymoczko, 2007b; Bassnett, 2002; etc.). Maria Tymoczko (2007) argues that translation studies emerged as a contemporary discipline only in the twentieth century, especially after World War II. A significant factor in the formation of contemporary translation studies was the demise of positivism, a philosophy and world view according to which objective observation is the only privileged source of knowledge (*ibid*., p. 18; see chapter 4). In postpositivist translation theory, the focus is not on observing problems and developing solutions, but on problematizing the solutions and expanding the discipline to include a wider diversity of epistemic perspectives (*ibid*.). Contemporary theorists thus acknowledge that there may not be any single correct way of translating, or any single correct analysis of the nature and function of translation.

One way of expanding and diversifying the field of translation studies within a postpositivist paradigm is to enlarge the concept *translation*. Indeed a major trend among contemporary translation scholars has been to examine and critique the terms employed in the discipline (Tymoczko, 2005; Tymoczko, 2007b, p. 18). Tymoczko (2005) suggests that the attempt to define translation will be one of four central research trajectories in translation studies over the coming decades. Several strategies for such research are possible. Particular concepts may be challenged as being culturally exclusive, as exemplified in Martha Cheung's decision to replace of the Western term "theory" with the more inclusive "discourse" in the title of her translation anthology (Cheung, 2006b). Similarly Tymoczko (2007) notes that the very term *translation* etymologically derives from the Latin verb meaning "to carry across," but different

cultures associate different metaphors with translation. For example, in Tagalog the word for translation is "pagsasalin," which is related to terms meaning "to pour the contents of one container into another" and "to give birth" (*ibid.,* pp. 74-75). The examination of how cultures beyond the West conceive of translation is an important strategy for expanding the field in line with a postpositivist emphasis on the relativity of knowledge and the inevitability of situatedness, and has become increasingly popular amongst scholars (e.g. Cheung, 2006a; Tymoczko, 2007b).

Another strategy for definitional research in translation studies is to problematize how seemingly straightforward terms relate to the act of translation, or to problematize binary categories in translation terminology. For example, research into pseudotranslations has problematized the notion of a "source text" and its opposition to the target text (Toury, 1995). André Lefevere (1982) similarly challenges a radical distinction between literary and non-literary translation, and Maria Tymoczko (2007, pp. 54-57) notes that even such seemingly basic terms as "language" and "text" are ambiguous. Furthermore, the development and application of technical terms has been a common research strategy for elucidating the nature and practice of translation. Lawrence Venuti (1995) describes the practice of the translator in terms of visibility and invisibility; Eugene Nida (1964) contrasts formal and functional equivalence in translation; Itamar Even-Zohar (1978) analyzes translation via systems theory; André Lefevere (1982; 1985) builds an analogy between translating and rewriting or refraction; Theo Hermans (1985) highlights the role of manipulation in translation (cf. Sengupta, 1995) and has developed a technical theory of norms in relation to translation practices (1996; 1998).

The internationalization, innovation, and problematization of terms related to the practice of translation constitute branches in the larger strategy of expanding the field of translation studies by inquiring into the nature of translation itself. Roman Jakobson's essay "On Linguistic Aspects of Translation" influenced the rise of postpositivist translation studies by expanding translation to include intersemiotic and intralingual activities (1959/1978). Moreover theoretical approaches in the last fifty years have stressed different aspects of translation as being of central

concern (Tymoczko, 2007b). Philosophers and linguists such as Jakobson, W. V. O. Quine, and J. C. Catford have emphasized the asymmetries between languages and the resulting indeterminacy of translation. I elaborate upon Quine's (1960) influential theory of the indeterminacy of translation in chapter 2.

The functionalists, such as Nida, Hans Vermeer, and Christine Nord, have emphasized how translation can be used to affect individuals and cultures. The descriptivists, such as Hermans and James Holmes, have stressed the importance of analyzing translations as cultural artifacts formed in particular contexts. Scholars within the "cultural turn," such as Susan Bassnett, Lefevere, Gentzler, and Venuti, have focused on the relationship between translation and ideology. The deconstructionists and poststructuralists, such as Gayatri Spivak, have focused on undermining prescriptivism and stressing the openness of translation. Such movements sought to deepen our understanding of translation by emphasizing different aspects of the practice, which "illuminates the dialogic nature of the development of the discipline and its discursive field" (Tymoczko, 2007b, p. 53).

The aim of this thesis is to contribute to the definitional trend in translation studies by offering a new conceptual framework for understanding the nature of translation. I propose that a contemporary version of the philosophical tradition of pragmatism can provide a fruitful foundation for studying translation in its various forms, and for expanding translation studies in the West to include a greater variety of perspectives. For example, as noted above, Roman Jakobson (1959/1978) suggested that intersemiotic translation is a fundamental category of translation. Recently, scholars have begun to explore the various forms that intersemiotic translation can take. Yet intersemiotic studies have had little significant influence upon contemporary translation theory. Neopragmatism supplies a framework for analyzing the relationship between intersemiotic and interlingual translation, because a neopragmatist approach to translation admits a greater variety of forms of source texts, as I explain in chapter 2. Moreover neopragmatism supplies a framework for analyzing the relationship between translations within

different disciplines. Contemporary scholars have discussed, for instance, the similarities and discrepancies between literary and commercial translation (e.g. Lefevere, 1999, p. 74; Venuti, 1995.2008, p. 6, p. 34). A neopragmatist approach enables a generalized understanding of translation across disciplines, creating a theory of translation with wide applicability.

I rely upon key passages from the works of Richard Rorty (1979; 1989; 1998; 1999) to argue that translation is not an act of imitation or transference, but a tool for conceptualizing experience in order to achieve goals particular to the translator, as well as to achieve goals particular to the sociocultural, ideological, textual and historical context of the translation. I address translation in a manner that reflects its position within the broader context of language and communication, which is one of the more valuable approaches to studying translation in the postpositivist tradition (Tymoczko, 2007b, p. 31-32).

1.2 Outline of the Thesis

In chapter 2 I describe the theoretical framework that I employ to develop an understanding of translation. My approach will make use of contemporary versions of the pragmatist tradition of philosophy, often called "neopragmatism" or "linguistic pragmatism." Classical pragmatism emerged at the turn of the twentieth century with the works of Charles Sanders Pierce, William James, and John Dewey (Hookway, 2010). Contemporary pragmatists include Richard Rorty, Hilary Putnam, Donald Davidson, and Robert Brandom (McDermid, 2006). I adopt as a research framework select extracts from Rortyan neopragmatism, including antirepresentationalist views of language, antifoundationalist views of knowledge, and antiessentialism. I argue that translation, like language in general, is a tool for constructing meaning in an indeterminate environment of objects by establishing relationships between experiences, concepts, and objects, with the aim of fulfilling particular ends.

In chapters 3 to 5 I apply the neopragmatist framework to cases of artistic, scientific, and political translation respectively. I focus on cases of intersemiotic translation in particular, to

show that neopragmatism enriches the concept of translation not only across various disciplines but also across various media and linguistic contexts, in accordance with Jakobson's tripartite classification of translation. In chapter 3 I address the translation of visual art into language, which has traditionally been studied in literary spheres as ekphrasis (Lessing, 1853; Mitchell, 1995; Shapiro, 2007). I argue that the neopragmatist framework enables ekphrasis to be understood as a type of translation (cf. Venuti, 2010). The case study I use is a recent project by the Polish-Canadian artist Ewa Scheer, who creates abstract paintings by applying pigments to naturally occurring ice and photographs the paintings before they melt.[1] Her translator, Arek Drozd, then composes poems in Polish based on the photographs, which he subsequently translates into English with Scheer's collaboration. Scheer's work demonstrates that translation selects features from visual experience and endows them with new and deeper meaning, exemplifying the Rortyan doctrine that language is a tool that shapes and integrates human experiences. The case of ekphrasis shows that art is semiotically open-ended, and that language can be used to resolve such open-endedness by linking visual objects and features such as color to human experiences such as emotion. The way in which language imparts meaning to artwork depends upon the goals of the ekphrastic translator, which may range from emotional expression to securing patronage.

In chapter 4 I turn to the case of scientific translations. The subjectivity and creativity of the translator have been integrated into literary theories of translation, yet scientific translations have retained high standards of objectivity and accuracy (Olohan, 2007). In this chapter I show that the aim of scientific translations, like artistic ones, is not to represent reality accurately, but to relate scientific research to human experience in order to fulfill particular goals (cf. Montgomery, 2000). I suggest that the neopragmatist framework enables scientific popularizations to be understood as translations, as suggested by the use of the term *translation* by popularization

---

[1] I have had extensive personal communication with Scheer about her work, because of my family connection to her.

theorists (Myers, 1990; Fahnestock, 1998). I show that popularizations exemplify how science, like art and language, is an activity for achieving social goals rather than representing facts; popularizations also demonstrate that knowledge does not have a single privileged foundation, as the positivists thought, but is instead context-dependent and situated (cf. Tymoczko, 2007b, p. 25). I use as a case study a BBC television popularization of cell biology entitled *Secret Universe: The Hidden Life of the Cell*. I argue that the show translates textual academic research into an audiovisual popular narrative to give viewers a sense of personal implication in scientific research, with the aim of attaining commercial success and garnering public support for science (cf. Hilgartner, 1990; Mellor, 2003).

In chapter 5 I discuss the case of intersemiotic translation in politics. Translation theorists have begun to note the importance of considering the ethical and ideological implications of translation (Pym, 2001; Inghilleri, 2012; Baker and Maier, 2011; etc.). For instance, a growing body of research indicates that translations can be used as tools for political resistance or subversion (e.g. Fenton and Moon, 2002; Brisset, 2000/2012). This chapter demonstrates that a neopragmatist framework can elucidate the role of ideological and political factors in translation and can also contribute to the growing discourse problematizing assumptions about the neutrality of the translator (Tymoczko, 2003; Tymoczko, 2007a). In chapter 5 I argue that the publication of photographs of historical events is a type of translation. I use as a case study photographs of the mushroom clouds resulting from the bombings of Hiroshima and Nagasaki in 1945. Translations of the photographs into magazine articles, military documentations, science magazines, fiction books, and newspapers endow the images with various meanings. The translations use the photographs to show the triumph of American technology (Kirsch, 1997; Zeman, 2008), to depict the bomb as a natural wonder (Hales, 1991; Zeman, 2008), to build an emancipatory narrative for nuclear science (Zeman, 2008), to domesticate a traumatic event (O'Brian and Borson, 2011), to instill fear (Heller, 2004), to condense a collective memory into a summary symbol (Brennen and Hardt, 1999; Saito, 2006), and to escape political blame through censorship (Edwards, 2006). I

argue that each publication, by way of particular translation choices, takes a position on the

political and ethical interpretations of the bombings, demonstrating that the translator, whether

intentionally or unconsciously, is not a neutral messenger but an active player in the shaping of

the public understanding of historical events.

CHAPTER 2

A NEOPRAGMATIST FRAMEWORK

2.1 Classical Pragmatism

Classical pragmatism emerged at the turn of the twentieth century with the writings of

Charles Sanders Peirce, William James, and John Dewey (Hookway, 2010). Although not all

philosophers who have been classified as pragmatists agree with the label, and although there is

considerable disagreement amongst pragmatists about particular issues, classical pragmatists

share a number of doctrines in common. Most fundamentally, pragmatists believe that concepts

and hypotheses ought to be evaluated according to their practical consequences. Peirce's central

maxim in his 1878 essay "How to Make our Ideas Clear" was taken up by William James twenty

years later and became the foundation of the pragmatist tradition (Pierce, 1878/1955; James,

1898; Hookway, 2010). Pierce's maxim is the following: "Consider what effects, which might

conceivably have practical bearings, we conceive the object of our conception to have. Then, our

conception of those effects is the whole of our conception of the object" (Peirce, 1878/1955, p.

31; Burch, 2010). The maxim states the meaning of a conception, such as a concept, thought, or

belief, consists in the totality of the practical effects of the conception. The maxim was

considered by some to summarize an entire methodology of inquiry and by others to constitute a

theory of meaning or truth (Hookway, 2010). Although pragmatists have had different opinions

regarding the scope of the maxim, they generally agree upon the strategy of solving problems,

evaluating theories, and clarifying concepts based upon their practical consequences.

The notion of "practical consequences" did not have a consistent interpretation by

pragmatists (Hookway, 2010). As a scientist himself, Peirce stressed the import of the maxim in

scientific inquiry. He believed that two theories or concepts are equivalent if they produce the

same empirically observable outcomes, and that the observation of effects is the sole criterion by

which theories should be assessed: "The pragmatist clarification revealed all the information we

would need for testing hypotheses and theories empirically" (Hookway, 2010). John Dewey, another prominent pragmatist philosopher, applied the maxim to logic, demonstrating that even statements of logical identity could be useful in problem-solving (Dewey, 1938/2008; Field, 2005). Dewey generally emphasized the utility of propositions over their intrinsic characteristics in constituting knowledge. Thus the status of a belief as knowledge is "contingent upon its adequacy in providing a coherent understanding of the world as the basis for human action" (Field, 2005). William James focused on the wider implications of "practical consequences" in pragmatist theories of meaning, in such fields as psychology and even religion (Pfeiffer, 2003). For example, James writes that, "on pragmatistic principles, if the hypothesis of God works satisfactorily in the widest sense of the word, it is true" (James, 1907/1991, p. 131).

The concept of truth was a common theme amongst classical pragmatists. James, in some sense, saw pragmatism itself as a theory of truth (Hookway, 2010): "*ideas . . . become true just in so far as they help us to get into satisfactory relations with other parts of our experience*" (James, 1907/1991, p. 28, original emphasis). The pragmatists accordingly rejected foundationalist views of knowledge, which "attempt to ground inquiry and communication in something more firm and stable than mere belief or unexamined practice" (Fish, 1989, p. 342). Individuals can begin an inquiry from any starting point; what matters in the evaluation of a belief or hypothesis is not the grounds upon which it is founded or the degree to which it reflects reality but upon its utility and consequences. As such the classical pragmatists were fallibilists: they believed that any theory or methodology of inquiry could turn out to be flawed or to be replaceable with a more fruitful alternative (Burch, 2010; Hookway, 2010).

A final element of classical pragmatism worth noting is its treatment of human experience. The classical pragmatists rejected any rigid distinction between sensory perception and experience and denied that representationality is an intrinsic feature of thoughts or beliefs (Field, 2005; McDermid, 2006; Hookway, 2010). They emphasized that observation, one of the

fundamental procedures for resolving puzzles or determining meaning, is an active interaction with reality rather than a passive reception of facts:

> According to James and Dewey, for instance, to observe is to select—to be on the lookout for something, be it for a needle in a haystack or a friendly face in a crowd. Hence our perceptions and observations do not reflect Nature with passive impartiality; first, because observers are bound to discriminate, guided by interest, expectation, and theory; second, because we cannot observe unless we act. (McDermid, 2006)

Dewey (1934/1958) expanded his theory of experience to aesthetics, arguing that works of art are not passively received as such but are constituted by the experience and agency of the observer (Field, 2005; Leddy, 2012). Aesthetic experience arises through an interaction with one's environment rather than through a transcendence of or surrender to one's environment. Like other animals, humans encounter obstacles in their environment that they must overcome in order to survive. An integral experience, according to Dewey (1934/1958), occurs when an animal resolves a conflict or tension by interacting with objects in his or her environment. Humans have aesthetic experiences when their environmental interactions are conscious, goal-driven, and guided by a progression of emotions. Aesthetic experiences require a balance of attentive perception and intentional production or intervention with objects in one's physical or mental environment in order to resolve the tension at hand. In short Dewey viewed experience, including aesthetic modes of experience and their underlying emotions, as fundamentally interactive states, rather than as passive states in which one simply undergoes changes in one's environment.

Underlying the pragmatist take on the nature of experience is an anti-Cartesian or anti-skepticist epistemology. René Descartes' 1641 treatise *Meditations on First Philosophy* was one of the foundational texts of modern epistemology, in which Descartes addressed the possibility of knowledge in light of the apparent gap between reality and our mental experience of reality (Descartes, 1641/1996; Smith, 2010). Peirce (1868), James (1896), and Dewey (1929/1960) critiqued Cartesian skepticism on various grounds, including its inconsistency with everyday practices, its flawed conception of reasoning, and its overestimation of certainty in human

10

activities (McDermid, 2006; Hookway, 2010). In brief, although the classical pragmatists emphasized different epistemological, metaphysical, and methodological aspects in their philosophy, they shared fundamental views about the nature of truth, belief, and inquiry as being defined in terms of utility (Boersema, 2002).

2.2 Contemporary Pragmatism

In 1979 Richard Rorty published *Philosophy and the Mirror of Nature*, which expanded upon the pragmatist rejection of Cartesian skepticism and repudiation of thoughts or beliefs as being intrinsically representative of reality. Over the following decades Rorty developed a contemporary version of pragmatism, which he dubbed "neopragmatism" or "linguistic pragmatism" (1999, p. 24). While Rorty has labeled other philosophers as neopragmatists, such as Hilary Putnam and Donald Davidson, they do not all see themselves as participating in a common tradition (*ibid.*; see, for example, Putnam, 1994, pp. 295-312). I will therefore focus on select passages from the work of Rorty as the philosophical framework for my arguments, rather than drawing from and mixing perspectives from several philosophers.

2.2.1 Antiessentialism

Rorty describes many of his claims as being "antimetaphysical" (1999, p. 48), as he argues at length against inquiry into the intrinsic nature of reality. Specifically Rorty writes that the assumption that reality is antecedent to our perceptions of it is untenable (1979, p. 357; 1989, p. xvi; 1999, p. 48). Rorty writes: "Pragmatists – both classical and 'neo' – do not believe that there is a way things really are" (1999, p. 27). Rorty's antiessentialism breaks down any distinction between "intrinsic" and "extrinsic" properties of objects and, accordingly, between reality and appearance (*ibid.*; cf. p. 50). By contrast metaphysics and Cartesian skepticism both have as their central project the transcendence of the "veil of appearances produced by the interaction between subject and object" in order to access the intrinsic nature of reality (*ibid.*, p.

49). Because such projects rest on the false assumption of essentialism, Rorty rejects skepticism and metaphysics as disciplines.

Rorty's theory of metaphysics is not merely negative. He offers an alternative, positive conception of reality, which Ulf Schulenberg (2003, p. 585) calls "panrelationalism": objects are defined not by intrinsic characteristics, but by their relations to other objects and to human experiences as established by language (cf. Rorty, 1999, p. 50). That is, there is nothing more to reality than relationships between objects, and such relationships are brought about through language: "there is nothing to be known about an object except what sentences are true of it" (Rorty, 1999, p. 55). Rorty's antiessentialism is closely intertwined with his views about language and knowledge, as I discuss respectively in sections 2.2.2 and 2.2.3 below.

2.2.2 Antirepresentational View of Language

One implication of antiessentialism is that concepts such as *objectivity* and *certainty* do not pertain to how well a statement corresponds to the essence of the world. Instead such concepts are defined by their use in social interactions: the term "objective" is defined by antiessentialists not "in terms of a relation to intrinsic features of objects but rather by reference to relative ease of attaining consensus among inquirers" (Rorty, 1999, p. 50-51; cf. 1979, p. 157). Rorty's philosophy of language follows the Wittgensteinian tradition of rejecting "correspondence" theories of meaning, according to which words acquire meaning by entering into representative relationships with reality, in favor of "use" theories of meaning, according to which words acquire meaning by their contextual and social usage (Wittgenstein, 1953; Rorty, 1999, pp. xxii-xxiii; Lycan, 2008).

Rorty describes his view of language as Darwinian (1999, p. xxiii; p. 65).[2] He sees language as an evolutionary tool for coping with reality, not as a medium of representation (*ibid.*).

_____

[2] Rorty elsewhere aligns the entire pragmatist tradition with Darwinian biologism, although he is careful to note that he sees "natural science in general, and Darwin in particular, as

It follows from this antirepresentationalist perspective that language does not create "a barrier to human knowledge of how things are in themselves," a view that Rorty attributes to philosophers of the past two hundred years (1999, p. 64). Language does not stand between humans and an "intrinsic" reality the knowledge of which must be the goal of philosophy. Instead, knowledge of language constitutes knowledge of reality, because language is the fundamental means by which humans interact with reality and manage their lives (Rorty, 1999, p. 64). It is through language that human beings construct their views about reality in the first place. This understanding of language has important epistemological consequences regarding the nature of knowledge and of inquiry[3]

2.2.3 Epistemological Antifoundationalism

Given Rorty's rejection of representationalist views of language and of the distinction between reality and appearance, it follows that the truth of a statement cannot consist in how accurately the statement reflects reality. For Rorty, correspondence theories of truth are incompatible with neopragmatism altogether (1998, p. 3). He undermines the value of "truth" as a foundationalist ideal by denying that it should be the goal of philosophical inquiry (Rorty, 1998; 1999, p. 32-33). Instead, he suggests, the goal of inquiry must be directed toward the collective

---

simply one more image of the world to be placed alongside others, rather than as offering the *one* image that corresponds to reality" (1998, p. 294).

    [3] A paradox is worth noting at this point. Rorty rejects representational theories of language in favor of a use-based theory of language. However, the term "representational" has often been used to describe language. For example symbolic theories of language, which can be traced as far back as Augustine, assume that words stand in for or symbolize various concepts and objects in reality. Therefore, a Rortyan philosopher would have to conclude that language is antirepresentational because meaning is determined through usage, but also that language is representational because people use the very term to describe language as such. I believe a solution may be found in a revision of how we might understand the term "representation." Bas Van Fraassen (2008), for instance, offers a theory of representation that is relational and usage-based, similar to the way in which Rorty envisions language. Van Fraassen's focus is on visual representation, but his theory might be fruitfully applied to language as well. Thus a reanalysis of the term "representational" could allow Rortyans to accept a representational theory of language, absolving them from the paradox of usage.

achievement of particular human ends, which will vary from one situation to the next (1999, p. 38). For Rorty, justification is an especially important step in such inquiry, an action that consists of securing the agreement of one's peers, of reaching some form of consensus (Rorty, 1999, p. 82). One consequence of Rorty's emphasis on justification is the breakdown of the dichotomy between fact and value in epistemology: according to Rorty, statements that correspondence theorists would label as "true" are simply those that are deemed most conducive to fulfilling particular ends (Rorty, 1979, p. 363-4; Boersema, 2002; cf. Dewey, 1938/2008, p. 17).

Rorty rejects the traditional foundationalist idea that certain beliefs are infallible and thus should form the basis of all knowledge and inquiry. From an antifoundationalist point of view, there is no privileged method of inquiry, no belief immune to doubt, and no absolute means of justifying a belief (Fish, 1989, p. 322). Antifoundationalism stresses that knowledge is situated rather than absolute:

> [Anti-foundationalism] is an argument for the situated subject, for the individual who is always constrained by the local or community standards and criteria of which his judgment is an extension. Thus the lesson of anti-foundationalism is not only that external and independent guides will never be found but that it is unnecessary to seek them, because you will always be guided by the rules or rules of thumb that are the content of any settled practice, by the assumed definitions, distinctions, criteria of evidence, measure of adequacy, and such, which not only define the practice but structure the understanding of the agent who thinks of himself as a "competent member." (Fish, 1989, p. 323)[4]

Rorty's philosophy reflects this anti-foundationalist argument. He writes that there is no privileged norm or goal of scientific inquiry, such as truth (1998, p. 40). Thus a rigid distinction between science and other disciplines, such as religion, politics, or even carpentry, becomes indefensible, because all human activity is a matter of achieving local goals (*ibid.*; p. xxii; p. 72). Rorty also rejects relativist arguments because they presuppose some of the very assumptions that pragmatists deny. Pragmatists do not wish to argue that reality is "subjective" rather than

---

[4] Maria Tymoczko (2007, pp. 16, 19, 25) similarly stresses the local nature of knowledge and the plurality of theoretical perspectives, arguing that such a postpositivist conception of knowledge has rightly become a cornerstone in contemporary translation theory.

"objective," nor that truths are "invented" rather than "discovered." Their aim is to dismantle such binary oppositions and replace them with a Darwinian take on inquiry (1999, p. xix). Rorty sees scientific progress "not as the gradual attenuation of a veil of appearance which hides the intrinsic nature of reality from us, but as the increasing ability to respond to the concerns of ever larger groups of people," similar to morality (1999, p. 81). While justification is an important aim in scientific inquiry, it is always relative to different audiences and contexts, and is simply a matter of dealing "with doubts about what we are saying, either by shoring up what we have previously said or by deciding to say something different" (1999, p. 82).[5] There is no absolute method for settling such doubts and no absolute goal that transcends mutual agreement. Rorty's antifoundationalism is reflected in his support for fallibilism, the view that no belief is immune to doubt (1998, p. 2).

2.3 A Neopragmatist Framework for Understanding Translation

Using extracts from Rorty's writing on antirepresentationalism, antiessentialism, and antifoundationalism, a number of implications arise for the study of translation. As a consequence of antiessentialism, translations should not be understood as representations of "intrinsic" characteristics of source texts, because for pragmatists "the notion that there is something a given text is *really* about, something which rigorous application of a method will reveal, is as bad as the Aristotelian idea that there is something which a substance really, intrinsically, *is* as opposed to what it only apparently or accidentally or relationally is" (Rorty, 1999, p. 142). It follows then that antiessentialism entails that there is nothing a translation is "really" about, either; there is no intrinsic meaning it can "discover" in the source text. Every translation offers a unique interpretation of the source text, but no translation can have the final say in defining its meaning.

---

[5] Thomas Kuhn (1962), Bruno Latour and Steve Woolgar (1979/1986), and Greg Myers (1990) share similar views regarding the nature of science as an evolutionary social activity, rather than a telic process of discovery. Latour and Woolgar in particular view science as culturally situated.

W. V. O. Quine's (1960) thesis on the indeterminacy of translation is useful for explaining how meaning is constructed through translation. Quine argued that there is no way of verifying with certainty that one's translation of a foreign word accurately reflects the meaning of the foreign word. Quine illustrates his argument through the example of a field linguist among an indigenous people whose language he does not understand. One of the natives points to a rabbit and utters, "Gavagai." The linguist, however, has no way of ascertaining whether the term "gavagai" refers to rabbits or to "mere stages, or brief temporal segments, of rabbits . . . .Or perhaps the objects to which 'gavagai' applies are all and sundry undetached parts of rabbits" (Quine, 1960, pp. 51-52). Similarly, within a neopragmatist approach to translation, meaning is indeterminate. The source text as a whole, and the words and sentences that comprise it, have a potentially infinite number of possible meanings. Translators, in the process of their work, select a meaning out of the range of possibilities and translate the text according to their interpretation. Therefore translators confront the indeterminacy of their source texts and make choices that align their translation with a limited set of meanings relative to the source text. Translators' selection of certain meanings over others is determined by several factors, including their conscious goals, the unconscious influence of their culture or ideology, the restrictions imposed upon them by their patrons, their audience expectations, or the norms of their literary and socio-political culture.

An antirepresentational view of language leads to similar implications for translation. Since language is not a representational medium, translations cannot be viewed as approximations or reproductions of their sources. Instead translations should be understood in light of the view of language as a tool for "hooking objects up to one another" and for resolving particular tensions in one's literary, intellectual, social, or cultural environment (Rorty, 1999, p. 55). Translation is a particular case of language as a relational tool. The local function of a translation is to bring selected elements from a source text into another conceptual framework where they are related to other phenomena of experience, in an attempt to resolve conflicts such as the indeterminate meaning of the source text or the ignorance of the translator's audience

regarding a particular subject matter. In addition, a translation might take a source text as a whole into a new conceptual framework, which is indeed the inevitable outcome of translating between cultures.

The conceptual and relational processes that occur in the translation of a text are not context-neutral. As noted above, a variety of factors affect the manner in which a translation re-conceptualizes its source. One factor might be the conscious intentions of the translator. For example, Eugene Nida (1964, p. 158) suggests a translation of "white as snow" into Sudanic languages as "white as egret feathers," bringing the term "white" into a new network of conceptual connections in order to cater to the geographic knowledge of the Sudanese. Another influence might be the unconscious biases or pre-existing conceptual frameworks of the translator. The sociocultural, historical, and political context of a translation has been shown to play a major role in the choices of translators. For example, Maria Tymoczko (1999, p. 103) suggests that certain translations of the Old Irish epic *Táin Bó Cúailnge* assimilated the narrative to the anticipated literary norms of the target cultures, demonstrating that translators "hook up" their source texts into socio-historically determined conceptual frameworks.

Examples of the relational nature of translation extend beyond literature. Scott Montgomery (2000), for example, illustrates how scientific translations are not passive reproductions of theory and terminology from different languages. Instead translations actively restructure scientific knowledge by reframing theories and terminology to suit the norms and goals of the target culture. He writes that the Romans, for instance, translated Greek astronomical texts using strategies that linked celestial phenomena to political and religious metaphors, whereas the Greeks' terminology derived from mathematical concepts. Montgomery writes that Greek astronomy, "particularly in Cicero's hands, [was] the very embodiment of Stoic theology projected onto the skies, a theology of eternal divine order and the need for human beings to gaze upon, comprehend, and submit to such order" (2000, p. 43).

In brief the context and goals of a translation will resolve the indeterminacy of the source texts and its elements by relating them to select phenomena and concepts. In addition, the construction of meaning is not ideologically neutral. Because translators have the potential to highlight and enrich any element of their source text, including the text itself, translators must be seen as agents of cultural perception and as agents of knowledge in general. For example, Janko Trupej (2012) shows that Slovenian translations of *Adventures of Huckleberry Finn* before 1948 translate racist slurs with such variability as to suggest the hypocrisy of American culture and to enable readers to additionally perceive economic injustices in the American South. Even the choice to omit a term from a translation may have ethical implications by suggesting that the source text term is not worth highlighting or by shifting the reader's attention to other cultural elements in the translation. Translators should be aware of their own ideological positions and their potential to act as agents of knowledge, and readers should be aware of their own complicity in the reception and analysis of a text.

One advantage of the neopragmatist approach is that it provides a philosophical underpinning to theories of intersemiotic translation. It follows from a neopragmatist approach that any object in one's environment, whether it be linguistic, audiovisual, or not, can be translated for two reasons. First, the neopragmatist definition of language as an adaptive tool for interacting with one's environment and constructing meaning is broad enough to include other media such as art, film, and photography. Thus the target "texts" and the "languages" of translation can take various forms and belong to various media. Likewise source texts can take on various forms, although further reasons for expanding the possible forms of source texts are given below. In the following chapters, I offer examples of translation into various forms of target texts including poetry, documentary film, and publications.

Second, within a neopragmatist approach, the possible range of source "texts" is expanded to include more than just linguistic texts as understood traditionally, such as books or articles. Here it is helpful to recall Dewey's (1934/1958) theory of experience. To reiterate,

humans, like all animals, routinely encounter breaks in their adaptive harmony with their environment. Humans must interact with objects in their environment in order to overcome such conflicts. The objects might be material, as in a paintbrush that an artist is manipulating or a cell that a biologist is examining, or intellectual, as in an idea that a scholar is considering (Dewey, 1934/1958, p. 44). Integral experiences occur when a human successfully resolves a conflict by intentionally interacting with his or her environment in certain ways. Requisite interactions involve a balance between "undergoing," or the perception of environmental features and changes, and "doing," or the active intervention and manipulation of one's environment. For Dewey, meaning arises when the processes of undergoing and doing are merged in the experience of an individual, resulting in conflict resolution as well as a sense of harmony and adaptation.

The focus of this thesis is on enriching translation theory by examining the scope of the term "translation" through various case studies, rather than by examining the psychological or procedural mechanisms of the translation process. Nonetheless I offer a brief sketch of what a pragmatist approach to the translation process might look like. Translations can be thought of as experiences in Dewey's sense. Translators build meaning in their products by intentionally bringing about an integrated resolution of an environmental challenge, namely, the translation of a source "text" whose meaning is indeterminate. Through their translation strategies, translators resolve the indeterminacy of their source texts by establishing a harmony of meanings or ideas. The translation strategies include components of "doing," such as textual production, and "undergoing," such as reading the source text and considering possible translation choices. The translator works towards a resolution by interacting with certain objects in his or her environment. The objects, or source texts, that the translator interacts with can be material, such as a book or a film, or intellectual, such as an idea or an ideology. A similar process of resolving indeterminacy might occur again on the part of a reader of the translation. No single translation or reading resolves the indeterminacy of the source text once and for all: the formulation of meaning is iterative for each experience of a text. In the following chapters, I offer examples of the

translation of various forms of source texts including fine art, scientific literature, and documentary photography.

One might object that the neopragmatist understanding offered here results in an exponential growth in the scope of the term "translation." For example, a teacher's description of a historical event might be considered a translation based upon the approach I offer: the teacher aims to resolve a conflict, namely a discrepancy between students' knowledge and that of the teacher or that of standardized test producers, by using language to bring about a meaningful understanding of the historical event while remaining attentive to the students' responsiveness to the teacher's descriptive strategies. In other words, expanding the concept of "translation" to include any goal-driven use of language that relates objects or experiences to one another, and expanding the concepts of "text" and "language" accordingly, would seem to imply little difference between translation and communication in general. Accordingly theories of translation becomes generalized to the point of uselessness or even meaninglessness (cf. Wakabayashi, 2000, p. 267). Alternatively, the scope of translation studies as a discipline expands to the point of undermining its legitimacy as an independent field of study.

Several responses to the above objections may be made. First, recent research in translation studies has begun to expand the definition of translation but has not settled on an accepted scope. If the neopragmatist approach developed in this thesis is contested for expanding the scope too far, then an important finding will have been made. Translation theory involves defining translation as much as defining what it is not. Second, colloquial usage of the term "translation" is more flexible than current translation theory admits, and theorists have not sufficiently taken into account the diverse uses of the term. Rorty, after all, aligns himself with Wittgensteinian "use" theories of language according to which the meaning of words stems from their usage rather than their references (Rorty, 1999, p. xxvii). I make an effort to restrict my expansion of the definition of "translation" to case studies to which the term has actually been applied. Finally, translation studies is a young discipline that might in the future choose to narrow

its scope to a more limited set of translation types than are outlined here. However scholars must have a sense of the scope of translational activity in order to make a well-informed decision about how to focus their research.

In brief, certain passages from pragmatist literature offer useful frameworks for understanding translations as tools for bringing indeterminate objects into specific networks of conceptual relations. The precise network into which an object is brought depends upon the context, influences, and goals of the translation. I show that the neopragmatist understanding of translation applies across disciplines, in particular to the translation of artistic, scientific, and political objects. A neopragmatist approach corroborates and substantiates postpositivist developments in translation studies that aim to expand our understanding of translation.

CHAPTER 3

THE TRANSLATION OF ART

3.1 A Brief History of Ekphrasis

The term "ekphrasis" dates back to ancient Greece, when it referred to the rhetorical

practice of describing visual objects or scenes using language.[6] While the exact definition of

ekphrasis has shifted over the years and has been subject to debate, James Heffernan offers a

general definition that I adopt for the present purposes: ekphrasis is "*the verbal representation of*

a visual representation" (Heffernan, 1998, p. 191; cf. Mitchell, 1995, p. 152; Heffernan, 1991; for

a concise history of the term "ekphrasis" see Webb, 2009). The first attested example of an

ekphrastic text is found in Book XVIII of Homer's *Iliad* (Nagy, 1995, p. ix). In the excerpt the

poet describes the shield that Hephaestus is building for Achilles, the central character of the

Iliad. Horace's *Ars Poetica* offered one of the earliest commentaries on the relationship between

art and poetry, summed up in his famous quote, "ut pictura poesis" ("as is painting so is poetry")

(Lee, 1940, p. 196). Horace developed an argument similar to that in Aristotle's *Poetics* that art

and poetry share similar goals and strategies and could be evaluated according to similar criteria

(Lee, 1940, p. 199).

In general, the Greeks thought of ekphrasis as having two goals. First, ekphrastic texts

seek to "make language a window, through which the audience is to view the described

phenomena" (Becker, 1995, p. 25). In other words the first goal of ekphrasis is to create an

illusion that gives readers access to the realm of the visual through linguistic media. Second,

ekphrastic authors use language to offer their own interpretations and judgments about visual

phenomena. Thus ekphrasis "should encourage us to remain aware of our relationship to the

---

[6] In this chapter I use the term "language" in the traditional sense, despite my
speculations upon an expansion of the term in chapter 2, simply for the sake of clarity in
distinguishing visual productions from written ones.

describer and the language of the description" and should highlight that the illusions created by language are the products of a biased mediator (Becker, 1995, p. 29).

One of the most important modern treatises on ekphrasis is Gotthold Ephraim Lessing's *Laookon oder Über die Grenzen der Malerei und Poesie* written in 1766, in which Lessing repudiates the analogy between art and language. Lessing writes that painting represents objects that coexist in space, whereas language represents objects that are consecutive over time (Lessing, 1766/1853, p. 101). The consequence of the contrast between the representational form of the two media is that "bodies, with their visible properties, are the peculiar objects of painting . . . [while] actions are the peculiar subject of poetry" (*ibid.*). Consequently, a work of art and a poem cannot represent or replicate one another; at best, they can be suggestive or imitative of one another (Becker, 1995, p. 14). Lessing wrote that the ideal way for a poem to imitate a work of art is to describe the implications or effects of the image: "Let the poet paint us the delight, the affection, love, and rapture, which beauty produces, and he has painted beauty itself" (Lessing, 1766/1853, p. 149).

The Irish statesman and philosopher Edmund Burke published a treatise on aesthetics around the same time as Lessing, in which he likewise emphasized the disparity between art and poetry and the resulting importance of emphasizing the effects of the artwork when writing an ekphrastic text (Burke, 1757/2012, Part 5 §VII; p. Becker, 1995, p. 12). Burke additionally believed in the superiority of the written word over the visual image, because the latter can at most represent beauty whereas the former can "elicit the sublime . . . because it represents thoughts, emotions, and reactions to beauty" (Becker, 1995, p. 12). Burke and Lessing both contributed to an influential view of ekphrasis according to which art and language are fundamentally incommensurable media. They also helped to establish a norm of ekphrasis according to which the focus should be on rendering into language the effects produced by works of art.

The influence of eighteenth-century discourse on ekphrasis was formidable, although not all scholars have agreed with Lessing and Burke. Andrew Sprague Becker (1995, p. 9-10) notes Paul Friedländer (1912) as an example, who argued that an ekphrastic text should strive to represent the visible and physical features of a work of art rather than the emotional responses elicited. Regardless of specific theoretical disputes, a common trend up until the mid- to late-twentieth century was to treat ekphrasis essentially as a poetic genre rather than a rhetorical or dialectical practice and to stress the role of language over that of the image (Webb, 2009, p. 33).

By the end of the twentieth century, the human sciences had undergone what the influential media theorist W. J. T. Mitchell has called a "pictorial turn" (1995, p. 11).[7] Mitchell describes the trend as a ""postlinguistic, postsemiotic rediscovery of the picture as a complex interplay between visuality, apparatus, institutions, discourse, bodies, and figurality" (*ibid.*, p. 16). In other words, contemporary theorists have broken from the legacy of Lessing and Burke by problematizing the dichotomy between word and image and by shifting the focus away from language towards an examination of the theoretical, ideological, and cultural significance of images. Mitchell suggests that contemporary scholars embrace the dialectical nature of ekphrasis. Mitchell himself views ekphrasis as a confrontation with an alien "otherness," which can take on as many forms as there are works of art (1995, p. 181). For example Mitchell suggests that ekphrasis can reveal "the historical distance between archaic and modern" or "the alienation between the human and its own commodities" (*ibid.*). For Mitchell, ekphrasis is an activity in which two concepts or phenomena, one of which is more familiar than the other, are placed in opposition to one another, with the goal of highlighting the dialectic relationship between them.[8]

---

[7] Mitchell suggests that the pictorial turn might even have begun with pragmatist writings on aesthetics at the end of the nineteenth century, but that the general academic focus has remained centered around language until recent decades (1995, p. 11-12).

[8] I adopt the definition "dialectic" that is given on the University of Chicago's website "The Keywords of Media Theory," because it is based on Mitchell's own teachings: dialectic is "a mode of thought, or a philosophic medium, through which contradiction becomes a starting point (rather than a dead end) for contemplation" (O'Connor, 2003).

Mitchell (1995) outlines three phases or historical approaches to ekphrasis, which together illustrate the dialectic between word and image that characterizes the practice (cf. Welsh, 2007). The first is "ekphrastic indifference," which is the pessimistic view that ekphrasis is impossible because a "verbal representation cannot represent – that is, make present – its object in the same way as a visual representation can" (Mitchell, 1995, p. 152). The second is "ekphrastic hope," which is the optimistic view that "the impossibility of ekphrasis is overcome in imagination or metaphor" (*ibid.*). Finally there is "ekphrastic fear," the moment in which "the difference between verbal and visual mediation becomes a moral, aesthetic imperative rather than . . . a natural fact that can be relied on" (*ibid.*, p. 154). Mitchell associates the writings of Lessing, for example, with the third approach.

In summary, the study of ekphrasis has undergone a number of historical shifts as scholars debate the definition of ekphrasis, the function or purpose of ekphrastic texts, the norms that ought to guide ekphrastic writing, the nature of language and art as sign systems, and the relationship between the two sign systems. In this chapter I build a translation-theoretic approach to ekphrasis using a neopragmatist framework. To an extent, my proposal is an expansion upon Mitchell's emphasis on the dialectical relationship between a work of art, here understood as a source text, and an ekphrastic poem, here understood as the target text or translation. I argue that ekphrastic translators resolve the indeterminate meaning of a visual experience or object by using language to establish connections between elements of the object and other elements of human experience. Language is thus a tool for consummating an integral aesthetic experience in John Dewey's (1934/1958) sense. The ekphrastic translator encounters an environmental conflict, namely the conflict produced by the translator's goal of putting into words a visual experience whose meaning is indeterminate. The translator resolves the conflict by assigning an interpretation to the work of art using particular lexical and formal choices. The translator's choices are mediated by his goals, sociocultural influences, and perceptions. In what follows I focus on modern discourse on ekphrasis and translation, from roughly the seventeenth century

onwards, because the relationship between translation and ekphrasis in ancient times is complicated by their classification as different subcategories of rhetorical exercises (Webb, 2009).

3.2 Ekphrasis as Translation

There has been little attempt to study ekphrasis from the perspective of translation theory, even though verbal accompaniments to images have repeatedly been described as translations by scholars outside of translation studies (e.g. de Boer, 1990; Druce, 1990; Robillard, 1998; Becker, 1995; Shapiro, 2007). The only exception of which I am aware is a paper by the translation scholar Lawrence Venuti entitled "Ekphrasis, Translation, Critique" (Venuti, 2010). In this section I argue that ekphrasis may felicitously be considered a type of translation and, as such, translation theory can make a significant contribution to the discourse on ekphrasis. I motivate my proposal on three grounds. First, the common use of the term "translation" by scholars studying the relationship between image and word is best explained and substantiated by a treatment of ekphrasis as a type of translation. According to "use" theories of meaning, for example as proposed by Ludwig Wittgenstein (1953), one need not look beyond how a word is used in order to determine what the word means (cf. Lycan, 2008). The use of the term "translation" by ekphrasis scholars is, accordingly, a significant point of data that ought to be taken into account by any complete theory of translation. Second, many of the theoretical approaches to ekphrasis have analogous counterparts in the history of translation theory. Third, many of the theoretical approaches to translation and much of the vocabulary employed in translation studies are applicable to ekphrasis. Such commonalities suggest that the two practices can be merged, from both a practical and conceptual perspective. In section 3.3 I provide a further reason for considering ekphrasis to be a type of translation by analyzing a particular case study from a neopragmatist perspective. In sections 3.4 and 3.5 I discuss the implications of my analysis on the nature of art and ekphrasis in particular and on the nature of translation as well.

3.2.1 The Use of "Translation" in Ekphrastic Discourse

The term "translation" has been used repeatedly to describe ekphrastic texts. Andrew Sprague Becker uses the term throughout his 1995 book *The Shield of Achilles and the Poetics of Ekphrasis*, describing ekphrasis in general as "a translation of visual images into words" (p. 31) and Homer's poetry about the shield of Achilles as a "translation of appearance into action" (p. 10). Valerie Robillard writes that she avoids using the term "translation" because it is "intrinsically bound up with the ekphrastic enterprise as a whole" (1998, p. 58). Robert Druce discusses an illustration in an English language textbook that he calls "a graphic translation [of] the verb 'to fain'" (1990, p. 24). Cees de Boer analyses Max Ernst's work of art *La petite fistule lacrymale qui dit tic tac* as a "translation of a text into an image" (1990, p. 193). The utility of the term *translation* in ekphrasis discourse is a preliminary indication that a deeper connection between the two practices is worth examining. As implied in the quotes above, ekphrasis can be understood as a particular case of translation.

3.2.2 Theoretical Similarities to Translation Studies

Many theoretical approaches to ekphrasis have analogues in the history of translation studies, although they do not always coincide chronologically. For example, Druce (1990) likens ekphrasis to hijacking (p. 32), rewriting (*ibid.*), and subversion (p. 17). Each of these concepts has been applied to translation, as illustrated respectively in such works as Luise von Flotow (1991), André Lefevere (1992), and Román Álvarez and M. Carmen África Vidal (1996). Becker (1995) describes ekphrasis using the terms "appropriation" (p. 39-40) and "interpretation, mediation, and mimesis," (p. 37) terms that have been used in translation studies as well. For example, Else Ribeira Pires Vieira (1994) discusses translation as act of appropriation, akin to cannibalism; Roman Jakobson (1959/1978, p. 233) describes translation as a form of interpretation; Michael Cronin (2003) and David Katan (2009) view translators as mediators; and the comparison of translation to mimesis dates to John Dryden (1680/2002) and earlier.

General trends in the conceptualization of ekphrasis have analogues in the history of translation studies. The periodical recurrence of skepticism on the part of ekphrasis scholars regarding the possibility of relating art to text is reflected in the doubt of many translation scholars as to the possibility of finding equivalent terms across languages (Nida, 1969) and, more generally, doubt as to the translatability of texts (Quine, 1960; Berman, 1992). Moreover ekphrasis and translation have both, at various times, been treated as "boundary" problems. That is, both have been conceived as closed fields in which the aim of practitioners is to overcome limits imposed by language and in which "the task of researchers is to fill in more and more detail on the basis of the given parameters and the structure of the defined domain" (Tymoczko, 2007b, p. 17). Such a view is undermined by a neopragmatist approach to translation that seeks to contribute to the expansion of discourse on ekphrasis alongside that on translation (cf. Mitchell, 1995, p. 181). In summary, many conceptual or theoretical approaches towards ekphrasis have counterparts in translation studies.

3.2.3 Applicable Terminology from Translation Studies

Many terms used in translation theory are applicable to ekphrasis and can shed light on some of the debates in the theory of ekphrasis. I agree with Lawrence Venuti (2010) that a first step in building a theoretical connection between ekphrasis and translation is to acknowledge that ekphrasis is simply a case of intersemiotic translation as defined by Jakobson (1959/1978). Viewing ekphrasis as a type of intersemiotic translation opens the possibility of analyzing the elements in ekphrasis and in ekphrasis theory in terms of translation theory. For example, Eugene Nida's distinction between formal and dynamic approaches to translation illuminates the disagreement between scholars such as Lessing and Burke on the one hand and Friedländer on the other regarding the goal of ekphrasis. Lessing and Burke advocate what Nida would call dynamic equivalence translation, the goal of which is to inspire in readers the same reactions as did the painting in its viewers. Friedländer, by contrast, stresses the importance of retaining the formal

qualities of the artwork in the ekphrastic translation. Venuti's (1995) discussion of the translator's

invisibility offers a way of understanding the Greek approach to ekphrasis. Greek norms required

the ekphrastic translator to be both invisible and visible: ekphrasis should create an illusion in

which readers are submerged in the realm of the visual, but ekphrasis should also remind readers

that their experience is an illusion created by the mediation of an interpreter (cf. Becker, 1995).

3.2.4 A Neopragmatist Approach to Ekphrasis as Translation

In summary translation theory can illuminate the nature of ekphrasis, and the study of

ekphrasis can illuminate the nature of translation, especially forms of intersemiotic translation.

Although, historically, the term "ekphrasis" has been applied primarily to poetic descriptions of

symbolic objects or artifacts (Mitchell, 1994, p. 165), from a neopragmatist perspective, ekphrasis

is more inclusive than the translation of artistic images into poetry. For one thing, as mentioned

in chapter 2, a pragmatist view of language is sufficiently broad to include art as a possible form

of language. To reiterate the argument in brief, language is a tool for overcoming the

indeterminacy of meaning in the objects in one's environment by establishing relationships

between objects and experiences. One builds meaning by interacting with objects in one's

environment, perceiving and producing changes, thereby forming integral experiences that lead

one to a deeper sense of harmony with reality. Such meaning-building processes that relate

meanings to the objects in one's environment occur both in the production of art and the use of

verbal language. Therefore it should be unsurprising and indeed even expected that translation

can occur between art and verbal language, because both are different forms of similar processes.

A second reason for expanding the scope of ekphrasis beyond poetry and fine art is that,

as argued in chapter 2, a neopragmatist framework for studying translation leads to an expansion

of the nature of possible source texts. Translation is a tool for interacting with objects in one's

environment to resolve a conflict and attain a deeper level of meaningfulness, and according to

Dewey (1934/1958, p. 44), the term "objects" can be construed broadly to include both

immaterial and material phenomena. Thus translations involve the manipulation of abstract objects such as ideas, perceptions, and concepts, or concrete objects such as a book, a painting, or pen and paper. The particular case of ekphrastic translation is a process in which the conflict and the environmental objects involved are primarily visual in nature. Ekphrastic translators encounter a conflict between the indeterminacy of a visual phenomenon and the desire to understand, express, or give meaning to the phenomenon via a non-visual medium. Verbal translation is the means by which the translator imbues the visual experience with meaning, thereby overcoming the initial conflict, using language as a tool to connect the phenomenon into a network of semantic associations. Ekphrasis, therefore, can be broadly understood as a process of relating the visual to the verbal and can involve a range of forms within each media.

Recent scholarship on ekphrasis has anticipated an expansion of the term. For example Mitchell notes the possibility of viewing ekphrasis as "paradigmatic of a fundamental tendency in all linguistic expression . . . to put language at the service of vision" (1995, p. 153). The expanded perspective, outlined above, accounts for the fundamental drive that Mitchell believes characterizes ekphrasis. The neopragmatist expansion of the term makes ekphrasis a useful characterization of intersemiotic translation as a cross-medial production between verbal and visual systems, contributing to a postpositivist theory of translation that integrates a greater range of perspectives regarding the nature of translation. I therefore modify the definition of ekphrasis of James Heffernan and Mitchell as "*the verbal representation of a visual representation*" (Heffernan, 1998, p. 191; cf. Mitchell, 1995, p. 152; Heffernan, 1991). Ekphrasis is instead the linguistic translation of visual experience or the translation of the visual into the verbal.

I avoid the term "representation" because it implies, misleadingly, that the function of language is representational. Ekphrastic language does not represent the visual but instead sets up a conceptual network in which features of visual experience are brought into relations with features of other types of experience. The network is strategically chosen by the translator to accomplish particular ends, but might also be determined by unconscious influences on the

translator such as norms and ideology. The result is a not translation that represents or mirrors its source, but a goal-oriented translation that creates meaningful, integrated human experiences.

3.3 A Case Study of Ekphrasis from a Neopragmatist Perspective of Translation

In section 3.2 I argued that ekphrasis is the intersemiotic translation of the visual into the verbal. As such, concepts and theories from translation studies can be used to enrich the discourse on ekphrasis. In this section I apply a neopragmatist philosophy to the study of ekphrasis, showing how such a framework can in turn be instrumental in elucidating the nature of translation. I build my proposal through a case study of ekphrasis in the work of Polish-Canadian artist Ewa Scheer and German poet Arek Drozd.

One of Scheer's ongoing projects involves the photography of abstract paintings on ice. She applies natural pigments to patches of ice in the countryside east of Montreal. She photographs the resulting visual patterns. Her colleague Arek Drozd then composes poems in Polish based on the printed photographs, which they together translate into English and German. Figures 1-3 illustrate some of Scheer's photographed paintings. The size of the original paintings is roughly two inches by five inches; all images are reproduced with the permission of the artist.

Figure 3.1. *Blue Veins*. Pigment on ice, 2012. From the collection *Linea*. Reprinted from *ScheerEwa.com*, by Ewa Scheer, 2012, retrieved from http://www.scheerewa.com/#linea-2012/1. Copyright 2012 by Ewa Scheer.

Figure 3.2. *Nothing Ever Happened Here*. Pigment on ice, 2012. From the collection
Celestial Dwellings. Reprinted from *ScheerEwa.com*, by Ewa Scheer, 2012, retrieved from
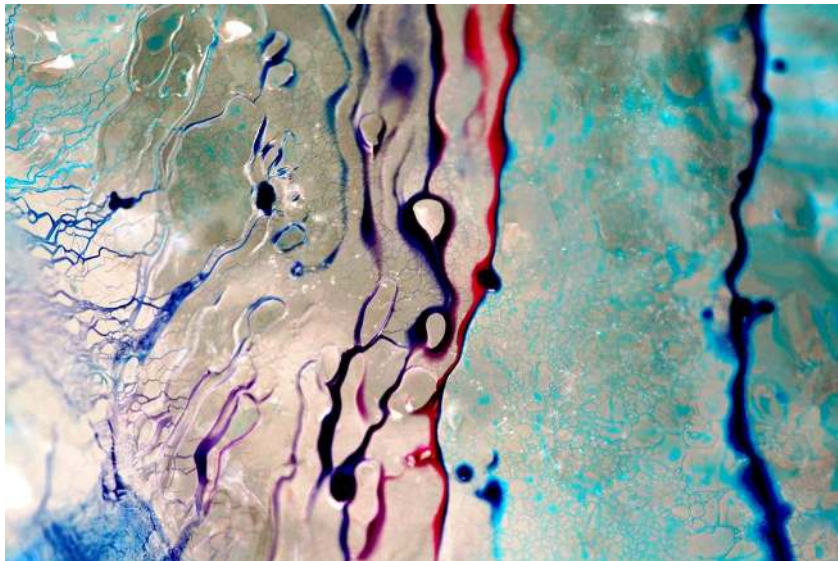http://www.scheerewa.com/#celestial-dwellings-2012/1. Copyright 2012 by Ewa Scheer.

Figure 3.3. *Colorless*. Pigment on ice, 2012. From the collection *Dying Forest*.
Reprinted from *ScheerEwa.com*, by Ewa Scheer, 2012, retrieved from
http://www.scheerewa.com/#dying-forest-2012/5. Copyright 2012 by Ewa Scheer.

As an example of the ekphrastic poetry in Scheer's project, below is a reproduction of Drozd's poem in Polish based on *Nothing Ever Happened Here* in Figure 3.2 above, followed by a translation into English. The poem shares the same title as the artwork.

czyj cień rozproszył więc światło odbite od otwartych oczu pragnienia	*Whose shadow was scattered by the light* *reflected by the open eyes of desire*
skąd fale radości wiedziały w czyim kierunku płynąć i po co	*How did the waves of joy know* *towards whom to flow and to what end*

skąd w kolorach niepokoju ta pewność
że istnieje biel czerń i wszystko co
      pomiędzy
	How come colors of anxiety are so certain
	that white and black and everything in
	     between exists

skąd bezkształtu tęsknota do kształtu i wspomnienie żywsze od życia	*How come formlessness longs for shape* *and memory is more vivid than life*
nie bój się nie czekam bo nic się tu już nie wydarzy	*Don't be afraid, I'm not waiting* *nothing will happen here*
ale nie kłam że nic się tu nie wydarzyło	*But don't lie* *that nothing ever happened*

Drozd's poetry illustrates the applicability of neopragmatist philosophy to translation. Recall that language, according to Rorty, is a tool for establishing conceptual relationships between objects and for defining elements in human experience with the aim of achieving particular ends. By translating the photographs into poetry, Drozd endows the artwork with significance as words relate physical elements in the paintings to different concepts and experiences. Several translation choices demonstrate how ekphrasis contributes to Scheer's project. The word choices in *Nothing Ever Happened Here* translate aesthetic form into emotion. For example, the word *rozproszył* ("scattered") evokes the intricate, random patterns of the pigments in the ice painting, as well as the process of the ice melting. In the context of the poem, *rozproszył* describes the object of the poet's attention, a diffuse shadow that evokes a sensation of desire. The use of the word "scattered" therefore translates a visual feature of the painting into emotion, offering a characterization of the poet's unfulfilled desire. Similarly the word *fale*

("waves") is suggestive of the sweeping motion of the pale blue pigments over the darker hues, but in the context of the poem it describes "waves of joy." Language connects the form of the pigments in the painting to the joy in the poem, both of which are parts of a random event: the splashes of paint and the poet's joy have taken shape by chance. Towards the end of the poem, the poet likens the fluid form of the painting to a longing for concreteness, using language to conceptualize the construction of a solid physical shape as the actualization of a memory.

Drozd may also be understood as using language to link the visual experience of color to the human experience of nostalgia. The poem suggests that the blue pigments of the photograph are the "colors of anxiety," which are "certain" in that they are unchallenged by the presence of other colors. Yet the certainty also refers to an awareness that other colors exist even though only blue is visible. The choice to name white and black as the absent colors evokes a sense of conflict between categorical opposites. The final lines reveal that the tension is ultimately one between the past and the present, and that memory is the underlying theme of the poem. Drozd thus uses language to translate the artwork into an expression of nostalgia produced by a sense of disconnection between past and present. In the final lines, the narrator reveals his hopelessness about the possibility of reviving his memories and his simultaneous desire to legitimize those memories, when he wishes for his audience not to "lie / that nothing ever happened." One goal of the ekphrastic poem is to translate the photograph into a meditation on the ironic tension between the volatility of memory and the endurance of the poet's desire to actualize the past.

The ekphrastic poem based Figure 4 above is presented below, along with a translation into English. The Polish poem is by Drozd and the English translation is by both Drozd and Scheer. The poem, like the painting, is entitled *Colorless*.

bezbarwne mysli	*colorless thoughts*
bezbarwne ruchy	*colorless movements*
bezbarwne slowa	*colorless words*
bezbarwne cienie	*colorless shadows*
bezbarwne sny	*colorless dreams*
bezbarwne nadzieje	*colorless hopes*
ale	*but instead*
jakie ksztaltne	*how shapely*
jakie dynamiczne	*how dynamic*
jakie zawiklane	*how intricate*
jakie zagadkowe	*how puzzling*
jakie plastyczne	*how supple*
jakie beznadziejne	*how hopeless*
za to	*for this*

As with *Nothing Ever Happened Here*, the word choices in *Colorless* translate the visual art into a linguistic context, thereby connecting the physical characteristics of the photograph to a distinct conceptual framework and resolving the indeterminacy of the source "text." The word *bezbarwne* ("colorless") relates the hues in the artwork to a number of different phenomena, including thought, movement, words, shadows, dreams, and hopes. The term *bezbarwne* evokes a pessimism that is dispelled in the latter half of the poem. The dull hues of the photograph are contrasted against the liveliness of its form, which redeems the artwork from the negativity associated with its colors. In the last two lines, however, the term *beznadziejne* ("hopeless") reveals the ultimate failure of any attempt at redemption. As intricate and dynamic as the thoughts and shapes associated with the artwork may be, the dreariness of the black and white prevails. The poem translates the photograph into a reflection on the dialectic between color and form, as well as on the irony that the more elaborate and exciting one's aspirations, the more unlikely they are to be fulfilled.

It is important to recall that Richard Rorty stresses the functional aspect of language. Language is not merely a tool for identifying, conceptualizing, and relating objects; it identifies, conceptualizes, and relates objects to achieve particular human goals. Similarly, Dewey stresses

that truly integral experiences involve the resolution of conflicts through the intentional and active engagement in strategies for resolving the conflict. The question arises as to the aim of Scheer and Drozd in associating particular visual features of the artwork to particular words and concepts.

A number of answers are possible. From a Deweyan perspective, ekphrasis provides artists with a means of completing an integral aesthetic experience through their artwork. Ekphrasis also enables artists to express to their own emotional reactions throughout the aesthetic experience of their artistic production. Recall that for Dewey (1934/1958) an aesthetic experience is a particular type of integral experience that involves bringing about order and harmony in the face of conflict through interactions with objects in one's environment; such interactions must be guided by one's emotions and must involve a balance of receptive perception and active intervention in one's environment in order to be fully aesthetic (Dewey, 1934/1958, p. 41). Ekphrasis serves to consummate an aesthetic experience by resolving a conflict of indeterminacy, using language to build a definite meaning into a visual phenomenon. The aesthetic experience is pushed towards completion via ekphrasis also because the latter provides the artist with a medium to deepen the emotional self-awareness that lies at the heart of aesthetic experiences. For example, in the poem *Nothing Ever Happened Here*, language is a tool for incorporating the meaning of nostalgia into a previously indeterminate work of art. Thus ekphrasis offers a personal means for artists to enrich their own aesthetic experiences and build a comprehensive network of meanings into their works of art. At the same time, artists use ekphrasis for communicative purposes, such as to express their emotions and the meaning of their artwork to their audience.

Dewey stresses that artistic production and consumption are not separable, since the roots of aesthetic experience are found in the everyday interactions of creatures with their environment. The fundamental nature of the aesthetic is contradicted by the contemporary trend of commercializing popular art to the point of disrepute while isolating "true" art in a realm of the sublime (1934/1958, p. 6). Dewey argues that, by contrast with the isolationist or spiritualizing

trend of contemporary fine art, true art involves the merging of perception and production, and as such, true art must be in part "framed for enjoyed receptive perception" (1934/1958, p. 48). In other words, "true" artists seek to create products that can be appreciated by a wide audience, because aesthetic experiences pervade society and life at all levels. Therefore, beyond the enrichment that ekphrasis offers to the artist's personal experience as described above, ekphrasis is also a means for spreading an aesthetic experience to wider audiences. The translation of a visual object into a verbal medium increases viewers' appreciation of the aesthetic by heightening their perception of the emotional and interpretative processes that occur during the production of a work of art. Moreover viewers are presented with an interpretative conflict between an indefinite visual object and an interpretative verbal translation of it. The conflict leads viewers, in turn, into an aesthetic experience of their own, as they begin formulating their own interpretation of the relationship between the two media so as to produce order and meaning in an environment of discord. Thus the dialectic tension that Mitchell (1995) attributes to ekphrasis is explained by an approach to ekphrasis as an aesthetic experience of conflict-resolution in Dewey's sense. In brief, ekphrasis is a means for dissolving the separation between fine art and everyday life by enabling a greater degree of interaction and symmetry between the producers and the perceivers of art.

Another purpose that ekphrastic poetry might achieve is related to the particular medium of Scheer's project. Because Scheer works in nature to create site-specific paintings on ice, the product of her efforts is short-lived. Scheer's photographs are a vital first step in enhancing the longevity of the paintings. The poems give the photographs an "afterlife," as Walter Benjamin famously wrote of translations: the source text receives an afterlife in translation, acquiring new significance "through an embryonic attempt at making it visible" (Benjamin, 1923/2000, p. 72). The poems written about Scheer's work by Drozd bring the artwork into a linguistic dimension, enriching the legacy and significance of an initially ephemeral and indeterminate work of art. In having the paintings translated into poetry, Scheer is also able to build a connection between

nature and humanity. The poems illustrate the human capacity to find meaning and beauty even in the fleeting and random phenomena of nature. The poems, therefore, grant the ice paintings a particular philosophical import by initiating a tacit commentary on the function of art and by encouraging viewers to grasp a deeper appreciation of nature.

Scheer's emotional and philosophical goals might be related to a more general intention with the ekphrastic poems. Artists aspire to spark interest and public appreciation in their works, although different reasons might be underlying. An artist might wish to challenge or change public perceptions on art or on the subject-matter of the artist's work, to acquire reputation throughout the art world, to earn a decent living, and so on. Regardless of the motivations for which an artist engages in her occupation, any professional artist requires support in order to sustain her work. As the journalist Tom Wolf "scandalously" discovered, "abstract artists actually [care] about acquiring money and fame from their painting" (Mitchell, 1994, p. 220). Scheer, by demonstrating the deeper significance of her artwork through ekphrasis, engages in an economic tactic of impressing potential patrons by revealing to them the unique value of her art. It is, therefore, ironic that Scheer both participates in and overcomes the dichotomy between the commercialization and spiritualization of the aesthetic that Dewey criticizes.

3.4 Ekphrasis, Indeterminacy, and the Emergence of Meaning

In section 3.3 above I described how Scheer's poetry translates the abstract paintings into language, thereby conceptualizing a work of art with the goal of achieving professional, philosophical, and personal aims. In this section I focus on what a neopragmatist understanding of ekphrasis implies about the nature of art and its translation into language. At first glance it might seem that antiessentialism suggests that works of art are indeterminate and only acquire meaning by being translated into language. Rorty rejects the notion "that there is something a given text is *really* about," and there seems to be no obvious reason why he should not apply the same antiessentialist thesis to art (1999, p. 141-42). Yet many visual artists consider their work to be

meaningful regardless of whether they have included ekphrasis as part of their project, problematizing the view that verbal language is necessary for imbuing works of art with meaning. Moreover, to interpret Rorty as assigning verbal language a greater potential for determinacy than art would be tantamount to forgetting the flexibility of the pragmatist view of "language," as described in chapter 2. That is, language is indeterminate and subject to interpretation in all of its various forms, whether artistic or verbal. In the following section I consider arguments that art requires verbal language to become meaningful. I refute such arguments by arguing that they erroneously rely on the respective placement of verbal language and art into a false dichotomy of language vs. non-language, where ostensibly verbal language bears the unique capacity to create determinate meaning, while art, being on the "non-language" pole, is indeterminate .

Mitchell and the philosophers Arthur Danto (1964) and Alexander Nehamas (2004) offer related answers to the question of meaning in abstract art, both arguing roughly that *theory* is what gives significance to such artwork. Mitchell considers the case of modernist abstract art, the goal of which was to enforce a rigid delineation between the visual and linguistic arts (1995, p. 216). Mitchell argues that the goal of modernist art was, in fact, impossible, because there is "a necessary connection between the meaning of abstract painting and the theoretical discourse around it" (*ibid.,* p. 221). Thus even abstract art aiming to sever any connections to language must rely upon language for acquiring significance. Ekphrasis, like theory, is a strategy for selecting a network of distinct meanings and applying it to a previously indeterminate work of art.

Danto agrees that "[i]t is the role of artistic theories, these days as always, to make the artworld, and art, possible" (1964, p. 581). Danto argues that viewers must identify objects in a particular manner in order for the objects to constitute art. For example, Danto (*ibid.,* p. 577) considers two hypothetical works of art called *Newton's First Law* and *Newton's Third Law*.[9]

---

[9] Newton's first law of motion states that the speed and direction of any object in motion remains constant unless acted on by a force. According to Newton's second law, when one body exerts a force upon another, the second body exerts an equal and opposite force against the first.

Both consist simply of an upright rectangular outline on a white background, with a horizontal line cutting through the center of each rectangle. Danto shows that both objects, even though physically indistinguishable, can be assigned different "artistic identifications" relating them respectively to Newton's two laws and creating a distinction between them as works of art: in the first artwork, "a mass, pressing downward, is met by a mass pressing upward" and in the second, "the line through the space is the path of an isolated particle" (*ibid.*). Verbal language therefore identifies indeterminate linear objects as works of art with concrete meanings.

Alexander Nehamas focuses on the role of interpretation rather than theory. Interpretation is defined as the attribution of meaning to a particular aesthetic object (Nehamas, 2004, p. 35) whereas theory is the attempt to define art, analyze it into categories, and classify particular objects in terms of those categories (Danto, 1964, p. 571). Nehamas supports the neopragmatist rejection of the dichotomy between appearance and reality, and advocates against drawing any rigid distinction between an interpretation of a work of art and the intrinsic meaning of the art (Nehamas, 2004, p. 34). An interpretation is an attempt to attribute meaning to a work of art, but there is no ultimately "correct" interpretation that "reveal[s] the true meaning, the latent content" of the painting" (*ibid.*). What the writings of Mitchell, Danto, and Nehemas show is that a neopragmatist understanding of language can serve to explain how abstract art becomes meaningful. Theories, descriptions, ekphrastic poems, and even titles identify objects as works of art and provide an interpretation that gives meaning to the artworks. Ekphrasis is simply a particular case of "artistic identification" in Danto's terms (1964). The translation of art into language exemplifies how language is "a way of hooking objects up to one another" (Rorty, 1999, p. 55) and a method for defining and "dealing with what is out there" (*ibid.*, p. xxvi) with the aim of attaining select goals.

The above arguments purport to highlight the importance of verbal language in assigning a meaningful interpretation to an indeterminate abstraction. However, in chapter 2, I speculated that art can itself be considered a form of language within a neopragmatist framework. If art is a

form of language, then it follows that it is misleading to argue that verbal media, such as ekphrasis, give determinate meanings to otherwise indeterminate works of art. Instead, both visual art and verbal language are indeterminate. The determination of meaning is an iterative process that occurs throughout uses of "language" in its various visual and verbal forms. The artist encounters a conflict in his or her environment, for example the tension of wanting to create a permanent vestige of an impermanent object such as ice, and uses the "language" of visual art as a strategy for resolving the conflict. Thus visual media, like verbal ones, create an aesthetic experience out of which arises a sense of meaning and harmony with one's environment. Just as the artist resolves a conflict of indeterminacy in his or her work through painting, the ekphrastic writer resolves a conflict of indeterminacy through writing. Subsequent viewers and readers will attempt to resolve any conflict of indeterminacy that may arise from the differences between the verbal and the visual languages based on their own prior or present experiences. In summary, although the use of verbal language can be a vital strategy for translating indeterminate sources into determinate semantic frameworks, other uses of language, for instance the acts of reading or of artistic production, can also achieve similar ends. It follows that attempts to resolve indeterminacies of meaning abound, a result that falls in line with Dewey's claim that aesthetic experience pervades everyday life.[10]

It is worth noting that the conceptualization of language as a cross-media process attempting to resolve indeterminacy implies that translation occurs at each stage of the process, from the production of art to the reading of an ekphrastic text. Consequently my approach implies a pervasion of translation in everyday life. I believe that such a result is desirable, in view of the plausibility of translation being a type of Deweyan aesthetic experience, the flexible use of the term "translation" colloquially, and the postpositivist valuation of an expansion the concept of

---

[10] The neopragmatist approach offered here, regarding the various stages of language use in resolving indeterminacy, is consistent with reader response theory (e.g. Iser, 1976). A detailed comparison of the two approaches is beyond the scope of this thesis.

translation to include a greater variety of forms. Nonetheless, in chapter 2 I addressed objections to the generalization of translational processes as implied by the present approach, a point to which I return in chapter 6.

3.5 Implications

In this chapter I have argued that ekphrasis is the translation of the visual into the verbal. From the more flexible conceptualization of ekphrasis that I propose, it follows that such linguistic accompaniments to images as titles, captions, theories, and descriptions constitute ekphrastic translations. The literature on ekphrasis is, in fact, already pointing in the direction of greater inclusiveness, because the recognition that "there are no 'purely' visual or verbal arts" forces scholars towards a closer integration of theories of image and language (Mitchell, 1995, p.5). Danto (1964) describes how the evaluation and definition of works of art undergoes paradigm shifts: one theory of art is supplanted by another, causing the entire evaluative structure of art history to change.[12] Ekphrasis is arguably undergoing a paradigm shift in contemporary times, as Mitchell's "pictorial turn" suggests. The appropriate scholarly response is not to debate which conceptualization is correct, but to explore the implications of the shift and to resituate the study of ekphrasis relative to other disciplines such as translation studies.

Consider an article by Robert Druce (1990) that treats captions as a way of narrowing down the meaning of an image with potentially subversive outcomes. Taking captions to be a form of ekphrasis and ekphrasis to be a form of translation opens the possibility of connecting Druce's arguments to the now substantial literature about the ideological and ethical effects of translation (e.g. Tymoczko and Gentzler, 2002; Cunico and Munday, 2007; Tymoczko, 2010;

---

[12] Kuhn (1962) similarly describes scientific knowledge as undergoing paradigm shifts, as I discuss in chapter 4: what is considered "scientific knowledge" under one paradigm might not be considered so under another. For the moment I wish simply to highlight the analogy between art and science and to suggest that ekphrasis and translation are also subject to paradigm shifts that change how they are defined and conceptualized.

Baker and Maier, 2011; Inghilleri, 2012). Resituating the study of ekphrasis in terms of translation theory offers a way of addressing "the question of agency and power . . . central to the way images work" (Mitchell, 1995, p. 6).

A further implication of expanding the conceptualization of ekphrasis and shifting it into the framework of translation studies is the potential for a more thorough examination of the role of the spectator. Mitchell (1995, p. 16) notes the growing problematic of *spectatorship* in media studies and suggests that it "may be as deep a problem as various forms of *reading* (decipherment, decoding, interpretation, etc.)." Indeed the import of audiences has been a major topic in contemporary translation theory, beginning with the "descriptive turn" that promoted the analysis of the functions of a translation in its target culture (Even-Zohar, 1978; Toury, 1995). A single ekphrastic text, such as the title or description of a painting, might be considered as only one of many possible meanings that a spectator might assign to a visual object. Thus the meaning of works of art can, like translations, be analyzed in light of the spectator's cultural, social, and historical context, rather than in light of any determinate meaning in the art.

Yet another implication of a neopragmatist framework for the study of ekphrasis concerns the historical debate on the respective value of artistic and linguistic media. As noted above, Burke (1757/2012) argued for the superiority of text over art. Mitchell (1995, p. 2) and Nehamas (2004, p. 31) both note parallel arguments in contemporary humanities that promote linguistic media such as novels over visual media such as film. A neopragmatist understanding of translation steers clear of proposals that verbal language is better than art or vice versa, even if verbal language works to resolve certain indeterminacies in works of art. Visual art and verbal language achieve similar goals of resolving indeterminacies and consummating experiences, in different and complementary ways. As Nehamas writes, language may be unable to completely describe a visual experience, but that fact "is neither good nor bad . . . merely a feature that is essential to linguistic description, which we should not evaluate by reference to visual depiction but rather in relation to the particular purposes it serves" (2004, p. 29). Although an elaborated

neopragmatist approach to art is beyond the scope of this essay, I believe that language and art serve similar functions of enabling humans to encounter and overcome physical and intellectual tensions in their environment and to build meaningful experiences out of such encounters.

CHAPTER 4

THE TRANSLATION OF SCIENCE

4.1 Scientific Knowledge

Far more has been written on the nature of scientific knowledge than can be addressed in this thesis, but a discussion of certain key approaches will help situate my arguments on the translation of science within a wider philosophical and historical context. One of the positions that has been most widely debated in the past hundred years is scientific realism, the view that scientific theories offer true descriptions of a mind-independent reality (Chakravartty, 2011). Stathis Psillo (1999, p. xix; cf. Chakravartty, 2011) gives a three-part definition of scientific realism. The first thesis of realism is metaphysical and asserts that "the world has a definite and mind-independent natural-kind structure." The second, a semantic thesis, asserts that scientific theories are descriptions that are either true or false of reality, regardless of whether a theory or term refers to observable or unobservable phenomena. As Psillo describes the semantic thesis of realism, the "theoretical terms featuring in theories have putative factual reference" (1999, p. xix). The third epistemic thesis asserts that "mature and predictively successful scientific theories [are] well-formed and approximately true of the world," and as such a true scientific theory constitutes knowledge of the world (Psillo, 1999, p. xix; Chakravartty, 2011).

Oppositions to scientific realism come in many forms. In the first half of the twentieth century, the logical positivists repudiated scientific realism on several grounds. They denied the semantic thesis of realism, claiming that terms referring to unobservable phenomena were meaningless. The positivists also rejected the epistemic realist thesis that successful theories constitute true knowledge of the world. Instead they advocated an "instrumentalist" view of scientific theories according to which "theories are merely instruments for predicting observable phenomena or systematizing observation reports" (Chakravartty, 2011). The positivists' emphasis on observation as the only legitimate source of knowledge demonstrates their commitment to an

empiricist philosophy of science.[13] Their influence began to diminish in the 1950s and 1960s as the tenets of positivism faced devastating criticisms, including, for example, their views about the semantics of scientific terms (Creath, 2011; Chakravartty, 2011).

The demise of positivism was accompanied by a surge in realist philosophies of science as well as a growing awareness of the social dimensions of scientific knowledge (Longino, 2011; Chakravartty, 2011). The philosopher Karl Popper has claimed responsibility for the death of logical positivism, which he asserts began as early as 1934 with his publication of *Logik der Forschung* (Longino, 2011; Popper, 1959; 1974/2002, p. 99). Popper argued that falsifiability is the central criterion of acceptability of scientific theories, rather than verifiability through observation (Thornton, 2011). Popper also placed "special emphasis on the role played by the independent creative imagination in the formulation of theory" and believed that all scientific knowledge is provisional and fallible (Thornton, 2011). Popper's emphasis on critical thinking and falsification has led historians of philosophy to view him as "a precursor of social epistemology" (Longino, 2011). Yet Popper was not the first to initiate the trend. In the late twentieth century, the classical pragmatist Charles Sanders Peirce, for example, conceived of truth as a social concept related to consensus among inquirers. He defines truth as "[t]he opinion which is fated to be ultimately agreed to by all who investigate" (1878/1955, p. 38; cf. Longino, 2011).

One of the most influential works in the shift away from the positivist emphasis on verification to an emphasis on the social aspects of scientific knowledge was Thomas Kuhn's *The Structure of Scientific Revolutions* (1962). Kuhn historicized scientific knowledge by arguing that inquiry proceeds under the influence of paradigms that are periodically supplanted through a revolutionary phase. He suggested that scientific periods operating under distinct paradigms are incommensurable: there is no common standard for assessing all of the different scientific

---

[13] The delineation between logical positivism and logical empiricism is difficult to draw; Richard Creath (2011) suggests that a rigid distinction between the two traditions is impossible.

theories that have been proposed over time. Kuhn influentially argued for a view of scientific progress as being an atelic process of problem-solving driven by the particular socio-historical context of inquiry (Bird, 2011). Theories may progress over time in their capacity to solve problems, but they do not progressively approach any absolute truth.

In the 1980s and 1990s, social construction, or constructivism in brief, emerged as one of the more radical movements in sociological approaches to scientific knowledge. As with logical positivism, there are various metaphysical, epistemological, and semantic stances associated with the movement and considerable disagreement even amongst adherents (Kukla, 2000). In brief, radical constructivists believe that scientific facts are invented rather than discovered, and accordingly, that what is thought of as fact might have been otherwise. Some constructivists take the weaker view that facts are not themselves invented by humans, but our representations of the facts are indeed invented (Kukla, 2000; Goldman, 2010). Moreover the social constructivists urge "that understanding the production of scientific knowledge require[s] looking at all the factors causally relevant to the acceptance of a scientific idea, not just at those the researcher thinks should be relevant" (Longino, 2011). The ethnographic approach to science offered by Bruno Latour and Steve Woolgar (1979/1986) exemplifies a constructivist view of scientific facts, as does the growing research on scientific popularizations and the role of various media in defining and disseminating scientific knowledge (for example, Bourdieu, 1975, 2004; Fahnestock, 1986/1998; Myers, 1990; Gregory and Miller, 1998; Mellor, 2003).

Richard Rorty's neopragmatist approach to scientific inquiry combines elements from Charles Sanders Peirce's consensual theory of truth, the constructivists' sociological approach to scientific knowledge, and Kuhn's theory of science as an atelic process of problem-solving. As described in chapter 1, Rorty views science as a tool for solving problems that change throughout social and historical contexts. He also considers science to be a tool for managing the world rather than a medium for representing reality. He argues that truth is not the goal of inquiry, but rather consensus amongst inquirers. Finally Rorty suggests that theories should be evaluated not

47

according to how well they reflect reality, but how helpful they are in enabling humans to achieve local ends.

In line with the research trend of examining the variety and complexity of factors that lead a community to accept a claim as scientific fact, postpositivist translation scholars have begun to study the role that translation plays in the development of scientific knowledge, although such research is still eclipsed by the contemporary focus on literary translation (Olohan and Salama-Carr, 2011). Examining how translation contributes to the cultural status of science sheds light on the nature of scientific knowledge as the product of ideological, cultural, and historical factors (*ibid.*). Scott Montgomery (2000), for example, describes how the Romans translated Greek texts on astronomy in a manner that reflected their own proclivity to view nature "through the lens of a simplified divine rhetoric" (p. 47) and the achievement of their own patriotic goals of "making the texts accessible to the *res publica,* the common educated Romans" (p. 39), and to "emulate, incorporate, and finally replace Greek learning" (p. 29). One result of the Romans' translation strategies was the creation of a less technical and more metaphorical approach to astronomy, supplied with a wealth of terminology that created a multiplicity of inexact concepts where the Greeks had previously discerned a single precise phenomenon (*ibid.*, pp. 40-41). The role of translation in shaping ancient astronomical knowledge reflects Kuhn's incommensurability thesis, whereby different paradigms employ different vocabularies and a scientific term can take on a different meaning when translated into a new paradigm (Bird, 2011).

In this chapter I contribute to the growing dialogue between translation scholars, philosophers of science, media theorists, and sociologists by examining a particular case of translation that falls at the interface of these fields. I argue that popularizations are a type of translation of academic science. Scientific popularizations are relevant to researchers across disciplines, because they illustrate how scientific knowledge transforms as it spreads through different levels of society. Popularizations also reveal the authority of media such as academic journals, television documentaries, and popular magazines in standardizing facts and establishing

the cultural and epistemic authority of science. The study of popularizations from a neopragmatist perspective on translation illuminates the sociocultural dimensions of scientific knowledge while enriching intralingual and intersemiotic theories of translation. Thus popularizations, like translations, cannot simply be evaluated according to how "faithfully" or "falsely" they reproduce their sources. Within a neopragmatist framework, translations are not mirrors of their source texts. They are instead goal-driven attempts at building a new significance into a source text by inserting it in new conceptual frameworks. I offer a more detailed characterization of popularizations as translations in section 4.2.3 below. First, I discuss a few preliminary motivations for considering popularizations to be a type of translation.

4.2 Popularizations as Translations

In this section I make the case that popularizations are a type of translation, using arguments parallel to those regarding ekphrasis in chapter 3. As such, translation theory can make a significant contribution to the discourse on popularizations. I motivate my proposal on three grounds. First, the abundant use of the term "translation" by scholars studying the relationship between academic and popular science is best explained and substantiated by a treatment of popularization as a type of translation. Second, the studies of popularization and of translation share common methodologies, and certain theoretical frameworks from translation studies can be felicitously applied to the study of popularizations. In particular André Lefevere's (1992) analysis of translation as a type of rewriting supports the view that popularizations are translational. In sections 4.3 and 4.4 I provide a further reason for considering scientific popularization to be a type of translation by analyzing a particular case of popularization from a neopragmatist perspective. In section 4.5 I discuss the implications of my analysis on the nature of science and of scientific knowledge, as well as on the nature of translation in general.

4.2.1 The Use of "Translation" in Popularization Discourse

The term "translation" has been used repeatedly to describe scientific popularizations. In an influential paper on the rhetorical style of scientific writing, Jeanne Fahnestock (1986/1998) notes a "significant difference between an original report and its translation for lay readers" (p. 337). Greg Myers (1986, p. 189) analyzes how "the popularization of texts in evolutionary biology [partially involves] translating some technical terms." In a more recent summary of popularization studies, Myers describes the dominant view as considering popularizations to constitute translations from the discourse of scientific institutions into external discourses (2003, pp. 1-3). Jane Gregory and Steve Miller, in their book *Science in Public* (1998), quote the BBC producer Bill Duncalf as describing his televised popularizations as "the translation of specialist language into lay terms" (p. 43). Gillian Fuller (1998, p. 35) writes that "[t]he difficulty of popular science would seem to lie, for its authors, mainly in 'translating' technicality into 'everyday' terms." From a neopragmatist perspective in particular, the use of the term "translation" in popularization discourse is a preliminary indication that a deeper connection between the two practices is worth examining. As implied in the above quotes, popularization can be understood as a particular case of translation.

4.2.2 Applicable Theories from Translation Studies

As discussed in chapter 3 above, Jakobson categorizes intersemiotic translations between sign systems as a basic type of translation. Many popularizations redistribute the findings of academic science into such media as film, television, and even science fiction (cf. Mellor, 2003), exemplifying the features of intersemiotic translation. For example, Lidia Cámara and Eva Espasa (2011) discuss the importance of multimedia, audio materials, and imagery in scientific translation. While they are primarily concerned with audio or visual material as supplements to intralingual translations of science, such as subtitles or recordings, in this chapter I argue that audiovisual material, in addition to verbal material, are constituent components in intersemiotic

translations of science. Popularizations also exhibit features of intralingual translation, or the "interpretation of verbal signs by means of other signs of the same language" (1959/1978, p. 233). Popularizations are often studied in terms of the linguistic changes that they make to reframe academic texts for more general audiences. Linguistic shifts have similarly been the subject of substantial research in translation studies (e.g. Catford, 1965; Jakobson, 1959/1978). Translations within a single language have also sparked the interest of translation scholars at various times. The particularities of communicating between dialects were noted as early as 1490 by William Caxton in the preface to his translation of the *Aeneid* (1490/2002). Myers (1990) and Fahnestock (1986/1998) show that the popularization of academic texts involves changes in style and vocabulary that are indicative of intralingual translation. Recasting the study of scientific popularizations within the framework of translation theory can illuminate the nature of popularization and translation alike, in particular with regard to intersemiotic and intralingual translations.

Perhaps more importantly, André Lefevere's seminal work *Translation, Rewriting, and the Manipulation of Literary Fame* (1992) supports an analysis of scientific popularizations as translations. Lefevere argues that translation is a type of rewriting, along with such other practices as literary criticism, historiography, anthology, and adaptation. Popularization may also be plausibly conceived as a type of rewriting, which would be straightforwardly accounted for if popularization were a type of translation. One might object that popularization is simply another branch of rewriting, separate from translation. Yet the structure and techniques of translation and popularization share many commonalities, more than one would expect if they were distinct branches of rewriting as are, for example, translation and historiography. For instance both translation and popularization, in their basic forms, produce new versions of a source text through linguistic or stylistic transformations that make the text accessible to new audiences. Lefevere summarizes translation in a manner that is easily applicable to popularization: "it is able to project the image of an author and/or a (series of) work(s) in another culture, lifting that author

51

and/or those works beyond the boundaries of their cultures of origin" (1992, p. 9). Popularizations, like translations, lift scientific texts beyond their academic cultures of origin, inserting the texts into new cultural spheres with different audiences.

The distinction between academic scientific writing and popularization exemplifies Lefevere's contrast between "high" and "low" literature, the second of which has been cast off as "trivial" (1992, p. 4). The analysis of popularization in this chapter substantiates Lefevere's repudiation of the trivialization of low literature by showing that popularizations make a crucial contribution to scientific knowledge and culture. Thus popularizations should not be viewed as inauthentic or trivial, but should "identify themselves quite simply with something less partisan, more prestigious, and altogether irreversible like 'the course of history'" (Lefevere, 1992, p. 5).

4.2.3 A Neopragmatist Approach to Popularizations as Translations

From a neopragmatist perspective, popularizations translate academic literature by relating elements from the content and form of the scientific source literature into selectively chosen conceptual networks in order to build new significance out of the source literature. Therefore popularizations cannot be discarded as simply false or misleading deformations of academic science (cf. Liao, 2011). Instead, popularizations are created to achieve certain social, commercial, or pedagogical goals that were either not relevant to or not achieved by their sources.

An objection might be made against the neopragmatist approach to popularization offered here: popularizations can indeed be evaluated according to their accuracy because their source texts are not actually academic research papers but are instead the scientific facts themselves, which are immutably true or false. In other words, popularizations might diverge from academic literature for justifiable reasons, but if they diverge from the scientific facts, they are not only false but condemnable as public channels of incorrect information.

To respond to the objection, I appeal to the indeterminacy of source texts as discussed in chapters 2 and 3. Just as meaning is incorporated into works of art throughout iterative phases of

interpretation, meaning is incorporated into scientific findings throughout iterative phases of interpretation. It does not follow that there are no scientific "facts." Instead, the facts are indeterminate, as they must be interpreted anew by every audience that receives them (cf. Sarukkai, 2002). Popularizers, as translators, must resolve a conflict of indeterminacy in their environment. They confront an academic text and the objects that the text interprets, such as a microscopic organism or a set of measurements, in order to resolve an environmental conflict, such as a contested hypothesis. Like Quine's (1960) field linguist hearing the native utter "gavagai" while pointing to a rabbit, the popularizer cannot determine once and for all the relationship between the academic text and the objects it discusses. This relationship is given meaning through the interpretation of the scientific "facts" with respect to the specific aim of the popularizer. The scientific "facts" thereby undergo shifts as they are interpreted in translation. Bruno Latour (1987, p. 37) notes that the iteration of interpretation continues with the reader, who builds a new interpretation into the "facts" presented in the translation. Such an iterative process of interpretation parallels that noted in chapter 3 regarding the reading of ekphrastic translations. Therefore these acts of translation triggered by indeterminacy pervade in the production and reception of science as in art. Another similarity to the case of ekphrastic translation is worth noting, namely that the translation choices made by popularizers will be determined less by their desire to reproduce the objective "truth" of their source, but rather by an interplay of commercial, communicative, or personal goals, as well as by the unconscious influence of their pre-existing beliefs and sociocultural positioning.

In brief a neopragmatist approach to popularization elucidates the complex status of science as a creative, interpretative, and goal-driven activity that takes place throughout different social spheres, rather than as an isolated, discovery-oriented discipline occurring within the confines of a laboratory or an academic journal. In the following section, I offer a concrete example of the nature of popularization as a type of translation within a neopragmatist framework.

4.3 A Case of Scientific Popularization from a Neopragmatist Perspective of Translation

In section 4.2 I offered theoretical justifications for understanding scientific popularization as intralingual or, at times, intersemiotic translation of academic science into different forms. In this section I apply a neopragmatist philosophy to the study of popularizations, showing how such a framework can in turn shed light on the nature of translation. I build my proposal through a case study of the television documentary *Secret Universe: The Hidden Life of the Cell* which aired on BBC Two in October 2012. The BBC show is an hour-long computer-animated depiction of a virus entering a human cell. The show is narrated by David Tennant, an actor well-known for playing the star character in the British science fiction TV series *Doctor Who*. Throughout the show, the cellular animations are interspersed with interviews with three scientists – Steve Jones, Nick Lane, and Bonnie Bassler – and one Ph.D. student, Susanna Bidgood. Each of the three scientists has been involved in promotions and popularizations of science for lay audiences.

4.3.1 Source Texts

One initial problem with analyzing *Secret Universe* as a translation is its lack of clear source text. The show summarizes a number of scientific findings that span years of research. The lack of source text is not, however, sufficient to rule out *Secret Universe* as a translation. Many of the popularizations analyzed by discourse theorists such as Fahnestock or Myers do, indeed, have source texts. Their studies of popularizations focus on specific academic texts that have been translated into articles for popular journals, such as Myers's (1990) discussion of Lawrence Gilbert's research on the coevolution of the passion vine and butterflies, which was first published in *Science* and subsequently rewritten for the more popular journal *Scientific American*. Moreover translation theorists have noted that many translations do not, in fact, have source texts. Gideon Toury (1985) deemed a translation without a source a "pseudotranslation" and suggested that they are far more common than one might expect (cf. Bassnett and Lefevere, 1998). The

concept of a pseudotranslation has proven fruitful in translation studies, with a number of scholars conducting research into such cases (e.g. Maslen, 1999; Du Pont, 2005; McCall, 2006; Beebee and Amano, 2010).

Nonetheless a sample academic text would be useful for bringing to light the changes that occur in the BBC's popularization of academic research in cellular biology. In January 2013 an article was published online by the academic journal *Science*, describing scientists' observations of a T7 virus infecting an *Escherichia coli* cell (Hu, Margolin, Molineux and Liu, 2013). The article describes similar events as in *Secret Universe*, serving to illuminate the difference between academic and popularized scientific reports. The following abstract summarizes the *Science* article.

> Adsorption and genome ejection are fundamental to the bacteriophage life cycle, yet their molecular mechanisms are not well understood. We used cryo-electron tomography to capture T7 virions at successive stages of infection of *Escherichia coli* minicells at ~4-nm resolution. The six phage tail fibers were folded against the capsid, extending and orienting symmetrically only after productive adsorption to the host cell surface. Receptor binding by the tail triggered conformational changes resulting in the insertion of an extended tail, which functions as the DNA ejection conduit into the cell cytoplasm. After ejection, the extended phage tail collapsed or disassembled, which allowed resealing of the infected cell membrane. These structural studies provide a detailed series of intermediates during phage infection. (Hu, Margolin, Molineux and Liu, 2013, p. 1)

In *Secret Universe* the narrator's language is less technical and provides cues for viewers to interpret the events as a narrative or story. The show begins with the narrator introducing the setting of the events, namely the "world inside a human cell," and the action of the show, namely the "longest war in history." As the narrator talks, viewers hear dramatic classical music and see animations of subcellular objects moving through a space that is reminiscent of an underwater region or a solar system. The following sentence summarizes the show: ". . . every day, our cells confront these ancient virus enemies, tiny, ruthless machines that kill to reproduce . . . .It is a four billion year old struggle that has changed the course of evolution." The contrast between the concise, technical abstract of the *Science* article and the narrative summary of *Secret Universe* demonstrates how popularizations employ distinct vocabulary, metaphors, and style relative to

original academic research papers, and exemplifies the particular importance of audiovisual media in the popularization of science.[14]

4.3.2 The Language of Popularizations

The BBC show translates academic research into a linguistic context that creates a narrative out of the biological events. The show is structured around four central metaphors: war, industry, astronomy, and community. The war metaphor is created through the descriptions by the narrator and interviewees of the cell and the virus as ancient enemies in an epic "billion year arms race." The virions, which are the individual particles comprising a virus, are characterized as "a million invaders, hell-bent on destruction." The cell, meanwhile, is depicted as being on the defensive side of an attack. For example, proteins on the cell surface or membrane are labeled as "sentries," and white blood cells are "moving soldiers" that are the "guardians of our immune system." The industry metaphor is generated by the narrator's characterizations of the viral and cellular particles as machines operating in industrial contexts. For instance the virions are "killing machines" that are "a masterpiece of design" and "a model of efficiency." Cellular structures are also described in industrial terms: "powering all this activity are the cells' power stations. Inside these free-floating structures called mitochondria, turbines spin at over a thousand times per minute, recharging billions of tiny chemical batteries."

The metaphor of community is created through the assignment of different roles to each of the subcellular particles. Proteins are described as "the workers of this incredible world," some of which use actin filaments as "highways" for traveling to other parts of the cell. DNA provides the "instruction manual for life" which is transcribed by an "army of microscopic machines" that prepare the DNA for transportation outside the nucleus. The cell is cast as part of a wider

---

[14] The *Science* article does contain a two-page appendix of figures, which includes blurry, black-and-white images taken via cryo-electron tomography paired with colorized computer models of the images. Section 4.3.4 addresses audiovisual media in science further.

56

"neighborhood" of cells communicating with each other as members of a community. The metaphor of the universe is alluded to by the title and by the narrator's description of the virions as "aliens" in a cellular "world stranger than any science fiction," although the metaphor is primarily reinforced by audiovisual effects likening the interior of the cell to outer space.

Some of the metaphors anthropomorphize of the virus and cell particles, casting them as characters of a plot. The vocabulary primarily drives the anthropomorphism, although syntax is relevant as well. In addition to giving human labels to the cellular particles, such as "workers," "sentries," or "enemies," the verbs that describe their activities are suggestive of agency. For example, the virus is "on the move," "deceives" the proteins, and "kills" the cell; the white blood cells "monitor" the cellular region, "checking" that everything is in order; the proteins "work in concert" to upkeep the cell and "decide" what needs to be done, but may be "fooled" by the enemy virions. Generally the syntax is in the active voice, which reinforces the intentionality of the particles. The syntax and word choices contrast with those of the *Science* article, which frequently uses nouns to describe the activities of the particles. For example the authors describe the cell's receptor "binding" by the virus tail, the "insertion" of the tail into the cell, and the "ejection" of the virus genome. When the authors use a verb, it has a neutral connotation: the virus tail "interacts with the cell surface" and fibers "underwent a large rotation." The latter quote also shows how verbs tend to be passive: "core proteins are ejected through the portal-tail complex" (Hu, Margolin, and Liu, 2013). Myers (1990, pp. 180, 183, 200) notes that nominalization and passive constructions are characteristic of academic science texts, whereas anthropomorphic verb choices in the active voice are characteristic of popularized science.

Bruno Latour and Steve Woolgar (1979/1986, p. 79) and Jeanne Fahnestock (1986/1998) analyze how the language of academic science becomes increasingly definitive as it is translated for wider audiences. Speculation becomes fact, particularized findings are generalized, and new hypotheses become unique and rare discoveries. *Secret Universe* exemplifies such changes. A variety of colorful words describe, for instance, the movements of the subcellular and viral

particles: they "slip inside" the membrane, "target" a destination, "hijack" the cellular transportation system, and get "ferried" across the cell. The *Science* article by contrast selects a limited number of descriptive verbs and repeats them throughout the article, such as "infect" and "interact." The limited word choice conveys a conservative approach to the interpretation of particle activities, whereas the colorful choices of *Secret Universe* insinuate that the phenomenon is sufficiently well understood to be characterized in multiple, creative ways.[15]

The manner in which the presenters comment upon the research constitutes another dimension along which the generalizing trend of popularizations is revealed. The narrator in *Secret Universe* occasionally acknowledges, in definitive terms, that the depicted phenomena have been discovered by scientists. By contrast, the authors of the *Science* article refer to the development of their research more frequently and present their findings more tentatively. Their imaging results "suggest that" the researchers' techniques were effective, "supporting the hypothesis" with which they began their research. The conservative interpretative approach of the scientists is confirmed in their use of a disjunction, "collapsed or disassembled," to describe the movements of the virus tail, showing their unwillingness to commit to a definite characterization of the phenomenon, possibly because of the ambiguity of the data. The researchers also note that there is a variation in the literature of how virions are depicted, whereas the only acknowledgement in *Secret Universe* of alternative characterizations is in two passing comments regarding the speed and randomness of subcellular particle movement. The interviewee Bonnie Bassler notes that "for sure cells are very chaotic and things are bumping into each other and

---

[15] Mark Shuttleworth (2011) notes that languages tend to use different metaphors to describe scientific phenomena in interlingual translations. *Secret Universe* demonstrates that, even within a single language, different sets of metaphors are used in the translations of scientific texts. Popularizations employ a greater variety of metaphors in conjunction with their transformation of hypothetical findings into definite knowledge, perhaps because "metaphor is generally seen as a means of explaining difficult, unusual or abstract concepts . . . .The less familiar is modeled in terms of the more familiar" (Shuttleworth, 2011, p. 302). By contrast, academic texts, tend to use more abstract terms in order to convey the fact that their findings are uncertain or hypothetical.

most of that's just random," and the narrator remarks that the motor proteins have been "slowed down to one-thirtieth of their normal speed" in the computer animations. In summary, as *Secret Universe* translates academic research in cellular biology into popular language, scientific knowledge is recast to a more definitive light.

4.3.3 Audiovisual Media in Popularizations

The audiovisual medium of *Secret Universe* enhances the certainty implicit in the narrator's language, while contributing to the presentation of cellular biology as a narrative. The computer animations provide a plot setting and allow for individual characters to be delineated. The show depicts activity within a single cell, which is presented as a kind of solar system filled with ambient light, deep shadows, and spherical objects floating around the massive nucleus that shines at the core. The camera gradually focuses in on a single virion that penetrates the nucleus. Because visual media rely upon specific examples to substantiate a claim and are less conducive to generalization than language, the animations of *Secret Universe* enhance the concreteness of the plot setting and provide a means of presenting distinct "actors" in the show. The visual medium therefore gives viewers the sense that they are witnessing a story that exemplifies what actually happens inside cells, contributing to the show's narrative style and to its presentation of preliminary research as unchallenged fact.

The anthropomorphism of the subcellular particles is not only achieved by their presentation as plot characters with distinctive roles, but also by their aesthetic qualities and the sounds accompanying their movements. The virions' black, shiny color connotes evil and stealth, much like Darth Vader, whereas the golden nucleus and shining mitochondrion appear majestic and even heavenly. The motor proteins carry the virions through the cell with the help of tiny feet hurrying across the actin filaments, and typewriter sounds accompany the particles that transcribe the DNA in the nucleus. The proteins and virions float in the direction of their respective destinations, as though to reflect their determination and sense of purpose. The intonation of the

narrator focuses viewer attention on the individual actors by pausing at key words such as "cell" or "DNA," and increases the drama associated with the conflict between the virions and subcellular particles by means of whispers and crescendos during key moments of the plot. The dramatization is, in turn, fueled by the violin music that builds suspense throughout the show. In brief the visual animations of *Secret Universe* and their acoustic accompaniments transform scientific research into a suspenseful narrative enacted by determinate, goal-oriented characters. The show, unlike the *Science* article, significantly downplays the hypothetical nature of the depictions, focusing instead on the production of an entertaining story.

It is important to note that academic science also employs visual and auditory media, although in a different manner compared with popularizations such as *Secret Universe*. The authors of the *Science* article, by presenting illustrations in pairs, acknowledge the contrast between the original cellular images developed during their research and the computerized elaborations of those images. The illustrations are, moreover, accompanied by labels and arrows highlighting different parts of the virion, as well as a graph summarizing the research findings and an extended image showing the stages by which the virion bonds to the cell membrane. The authors' choices demonstrate the tendency, noted by Greg Myers (1990, p. 158-65), of academic researchers to use visual media to summarize experimental results, illustrate scientific concepts rather than natural phenomena, and highlight the hypothetical nature of the research.

4.4 A Conflict of Interest

In section 4.3 I discussed how *Secret Universe* translates scientific research into more definitive knowledge compared with academic texts and uses particular stylistic techniques such as narrative and metaphor to present the research. One might be inclined to excuse or rationalize such strategies, because the producers might simply want to educate viewers in a manner that maximizes attention and understanding. However popularizations such as *Secret Universe* are not only worth studying because they make particular choices for translating technical data into new

forms, but because in so doing, they change the nature of the "facts." For viewers, the fact is that

nature is purposeful, well-ordered, and easily analyzed. For the scientists, the fact is that nature is

unpredictable, chaotic, and endlessly reinterpretable. The scientific knowledge granted to the

television viewers is not the same as the knowledge of the scientists; the translation strategies

used for popularizations can change knowledge in ways that have been described as "far from

benign" (Fahnestock, 1986/1998, p. 340). I will first examine why the conflict arises and

conclude in section 4.5 by discussing what the conflict entails.

4.4.1 Conflicting Facts

There are a number of inconsistencies that distinguish the presentation in *Secret Universe*

from academic research on the subject. The directional movements of the virions and proteins

through vast spaces and the agentive verb choices of the narrator conflict with the scientific

finding that the movement of subcellular particles is random (Lilil et. al., 2012). The interior of a

cell is densely packed with molecules, proteins, and ions, constantly bombarding each other in

such a way as to produce Brownian motion (Yamada and Kuo, 2003). Virions are not drawn to

the nucleus by any kind of force or intentionality, but rather by chance, which is increased simply

by the sheer number of virions that enter the cellular space. Indeed none of the motions would be

visible at all, because the interior of a cell is not lit up as *Secret Universe* presents it to be. Some

subcellular organelles are autofluorescent but not enough to produce the glowing light that the

show presents (Monici, 2005). Moreover subcellular sounds are beyond the aural range of the

human ear and researchers are only just beginning to develop technologies that can detect

microscopic sounds (Wilkins, 2012). In other words the sounds made by subcellular particles in

Secret Universe are entirely hypothetical, which the show does not acknowledge.

4.4.2 Conflicting Motivations

The definitiveness of the show in spite of the tentativeness of academic research, as well as their opposing depictions of subcellular activity, can be traced to the distinct goals of popular and academic science. Greg Myers (1990) contrasts academic and popular science in terms of the different types of narrative they employ. Texts in academic science employ a "narrative of science": "they follow the argument of the scientist, arrange time into a parallel series of simultaneous events all supporting their claim, and emphasize in their syntax and vocabulary the conceptual structure of the discipline" (*ibid.*, p. 142).[16] The plot in a narrative of science follows the parallel development of concepts and the process of theorization, using linguistic techniques such as compound sentences, speculative statements, passive voice, nominalization, and conciseness. Texts in popular science employ instead a "narrative of nature": "the plant or animal, not the scientific activity, is the subject, the narrative is chronological, and the syntax and vocabulary emphasize the externality of nature to scientific practices" (*ibid.*). The plot in a narrative of nature follows the activities of objects in nature and the chronology of their actions, using techniques such as simple sentences, affirmative statements, active voice, use of verbs more than nouns, and elaborate descriptions. Myers suggests the two modes are incompatible and yet together play a part "in creating the cultural authority of science" (1990, p. 142).[17]

The cellular narrative of *Secret Universe*, developed through audiovisual representations and Tennant's narration, is a popular one. By casting viruses, proteins, and cells as agents of the action in a war story, the show maintains nature as its subject matter rather than scientific activity. The substantial use of active agentive verbs, as described above, is also characteristic of a

---

[16] Latour (1987, p.87) notes that "academic science" is not, in fact, as homogeneous as Myers's analysis would suggest: there are stages of academic science throughout which undefined objects gradually become tacit knowledge. I focus here on academic texts as published in scientific journals, dealing with findings that have not yet become tacit knowledge.

[17] Bas van Fraassen (2008) suggests that the goal of academic science is, in fact, to represent natural phenomena, but that theories are the crucial vehicles by which such representation occurs (cf. Barrett, 2009). While van Fraassen's elaborate theory of scientific representation is beyond the scope of this thesis, I believe it is consistent with my arguments.

narrative of nature, and the audiovisual medium serves as a descriptive elaboration of the objects and actions constituting the narrative. Indeed the centrality of the cellular animations confirms that the show is meant to be about biological phenomena rather than scientific activity. Nonetheless, certain features of the show signal a secondary, more academic discourse. The very fact that *Secret Universe* aired as a television show rather than as a film challenges the storytelling reading, because television has "taken over the domain of the documentary" (Ryan, 2004, p. 199). As Marie-Laure Ryan notes, however, television has also introduced "a new hybrid between the real and the fictional" (*ibid.*). The story/documentary hybridity of *Secret Universe* largely stems from the interspersion of scientist interviews throughout the narrative. Camera techniques reinforce the documentary style of the interviews through unstable focus and haphazard zooms. Switches in register during Tennant's narration also signal the dual nature of the show. His occasional use of passive verbs, his intermittent loss of suspenseful intonation, and his references to the discoveries of scientists lures viewers away from the narrative and into a seemingly more report-like, academic interpretation.

The insertion of documentary features into the storyline of the show gives rise to a double narrative. While the cellular animations create a narrative of nature in which the focus is on the activity of particles within cells, the cuts to interviews create a narrative of science in which the focus is on the activity of scientists within their profession. As such, *Secret Universe* translates its body of source texts into a hybrid context where the translation retains certain features of the sources while introducing a new presentational and conceptual framework. The show thus lends support to Maria Tymoczko's (1999) metonymic theory of translation whereby a translation elaborates upon a subset of the content and features of its source text.

The narrative of nature and the narrative of science reproduce subcellular activity in conflicting ways in *Secret Universe*. The narrative of science presents cellular biology as a phenomenon of human knowledge, which has come about through years of dedicated research and which may yet be refined by future discoveries. The narrative of nature presents cellular

biology as a phenomenon of nature, which has come about through billions of years of evolution and which continues to progress independently of human interventions. Despite the tension between the narratives of science and nature, they work in tandem. The former lends legitimacy and authority to the latter by confirming that the depictions of subcellular activity have been corroborated by scientific research. Both narratives contribute the entertainment value of the show. A sense of mystery and majesty is attributed to the scientists' discoveries through the sweeping scenes of subcellular activity. A sense of excitement is built through the expressive, animated interviewees who are familiar with popularization strategies and by the use of camera techniques that offer a lively contrast to the slow, majestic pans within the cell. The role of the narrative of science in *Secret Universe* points towards the show's similarity to pseudotranslation, which introduce novelties "under [the] disguise" of mere reportage (Toury, 2005).[18]

The complex narrative structure of *Secret Universe* sheds light on why it presents scientific facts differently from its academic sources. The goal of the show is not to contribute to academic discourse, the focus of which is on the development of hypotheses, the definition of concepts, argumentation, and refutation. Instead, the show has a variety of goals that are typical of popularizations. Stephen Hilgartner (1990, p. 531) writes:

> Obviously, it would be naive to assume that their [scientists'] simplified representations are politically neutral. On the contrary, a mountain of evidence shows that experts often simplify science with an eye toward persuading their audience to support their goals: whether they seek to motivate people to follow public health recommendations, build support for research programmes, convince investors that a finding shows commercial promise, or advocate positions in science-intensive policy controversies.

The first goal of *Secret Universe* is pragmatic, and relates to the show being a televised presentation. Ryan notes that "television shows must compete with countless distractions: eating dinner; doing homework in front of the tube; talking on the phone; surfing to other channels"

---

[18] The relationship between the narratives of science and nature is also similar to the relationship between captions and photographs as discussed in chapter 5. Photographs purportedly offer an "objective" depiction of reality unmediated by human intervention, whereas captions enrich the depiction with interpretative significance.

(2004, p. 199). By contrast film enjoys a more captive audience. The cellular narrative of *Secret Universe*, with its definitive presentation of scientific fact and entertaining use of audiovisuals, maintains interest in a distracted audience, who are more easily spellbound by beautiful, dramatic computerized animations than by dry, stagnant scientist reports.

The second reason is pedagogical. One of the purposes of popular science is to make science "more publicly available and accessible" (Mellor, 2003, p. 1). By employing familiar discourse techniques such as narrative and by using presentational strategies that spark viewer interest, *Secret Universe* brings cellular biology within the grasp of the layperson. Yet Felicity Mellor (2003, p. 1) notes that the educational goal of popular science has a "propagandist pay-off" in that it establishes the authority of scientists in deciding what kind of information the public should have access to. Such a pay-off is related to the third reason for why *Secret Universe* uses a double narrative, which is to establish the epistemic authority of science within a wider social and cultural context (cf. Hilgartner, 1990). Myers writes that narratives of nature serve the "public relations" function of popular science to persuade the public about the value of science to society as a whole (1990, p. 191). Narratives of nature also present "science as the public wants it to be," namely as the unmediated encounter of humans with nature (*ibid.,* p. 190). Shows like *Secret Universe* reinforce and reflect the epistemic authority of science in culture by simultaneously satisfying and manipulating the public's perception of scientific knowledge.

The fourth reason, particularly relevant to *Secret Universe*, is commercial. Even if the content of popularizations is largely determined by scientists, many popularizations are sponsored by magazines or companies that are not run by scientists. Many sponsors seek profit above all. The BBC receives most of its revenue through license fees paid by the public, which means that it is in the corporation's interest to receive high viewer ratings in order to maintain its funding (The BBC Executive's Review and Assessment, 2012). *Secret Universe* aired on BBC Two, which is traditionally associated with educational and documentary shows. In recent years BBC Two has shifted its programming towards more popular shows that appeal to younger audiences and secure

higher ratings (McLean, 2007). The narrative and rhetorical strategies of *Secret Universe* may, therefore, be understood as functioning within a wider commercial goal of keeping the BBC afloat as a popular corporation that the public remains happy to sponsor.

4.5 Implications

In section 4.4 I argued that the changes made by *Secret Universe* relative to academic research papers (such as that of Bo Hu et al., 2013) stem from the differing goals of academic and popular science. A commonplace response to the contrast is normative or evaluative: "The question, then . . . is whether the changes are *significant*" (Hilgartner, 1990, p. 529). Some reject popularizations as oversimplified, misleading, and misguided (Hilgartner, 1990). Such an evaluation, however, rests upon the "idealized notion of pure, genuine scientific knowledge against which popularized knowledge is contrasted" (*ibid.*, p. 519). Within a neopragmatist framework such an assumption is unwarranted, because it suggests that "genuine scientific knowledge" constitutes a more accurate representation of reality. However, as I have shown in chapter 2 and in section 4.1, neopragmatists reject the view of science as a mode of representation and repudiate the dichotomy between appearance and reality. They evaluate scientific theories not based on how well they represent reality but on how well the theories enable humans to work through problems, manage their lives, and achieve their goals.

Consequentially one cannot evaluate *Secret Universe* in terms of the degree to which it distorts the "true facts" represented in academic texts. As Stephen Hilgartner (1990, p. 538) puts it, "'popularization' is a matter of degree," and there are no generalizable criteria for drawing the line between academic and popular science. Similarly, Latour and Woolgar (1979/1986) have argued that "scientific knowledge is constructed through the collective transformation of statements, and popularization can be seen as an extension of this process" (Hilgartner, 1990, p. 522-24). The evaluation of a popularization, therefore, cannot be drawn in relation to a dichotomy

between popular and scientific knowledge, but in relation to the particular goals of the discourse at hand.

Secret Universe fulfills some of its goals through particular translation strategies. For example the narrative and audiovisual techniques secure viewer interest and the interviews reinforce the authority of scientists in shaping public knowledge (Hilgartner, 1990; Mellor, 2003). One might argue that Secret Universe is less successful in its pedagogical goals because viewers were not fully notified about how the show's depictions contrast with those in academic science (cf. Liao, 2012). For instance, the show might be criticized for insufficiently emphasizing the randomness of cellular activity and the hypothetical status of scientific findings. At the same time, if the pedagogical goal of the show was simply to introduce viewers to some of the basic features of cells or viruses, then we might say that the show chose its narrative and audiovisual techniques wisely, using an entertaining and exaggerated style to focus viewer attention and boost the memorability of the information. In summary the evaluation of a popularization is as complex as the goals of the popularization and cannot be reduced to a matter of how accurately the popularization represents the knowledge of academic scientists.[19]

A further implication concerns the nature of scientific translations. Analogously to the evaluation of popularizations, one cannot evaluate a scientific translation in terms of how accurately it represents either the knowledge found in its source text or the "genuine facts" found in reality. Translations change the facts only to the extent that the facts themselves constantly change as they are reinterpreted and as we shift our attention to different problems as guidelines for inquiry. More accurately, translations contribute to the growth and development of science as a social activity in which knowledge is constantly being reshaped as it is translated from context to context (cf. Montgomery, 2000). Scientific translation is, therefore, an act of communication rather than dissemination (Franco Aixelá, 2009). The choices made by a translator can impact

---

[19] I was unable to find information regarding viewership ratings for the show, which would indicate whether Secret Universe was successful in terms of its commercial goals.

science as a whole; translation strategies must be examined and evaluated based on their communicative, ideological, and goal-specific implications and effects. A neopragmatist approach orients the evaluation and production of translations towards the fulfillment of local goals, supplanting traditional approaches to translation based solely on accuracy and fidelity to the source text.

CHAPTER 5

THE TRANSLATION OF POLITICS

5.1 Negotiating Ethics and Ideology in Translation

Recent scholarship in translation studies has brought to light the complex interplay of ethics and ideology in translation. Traditionally commentators on translation in the West have stressed the importance of neutrality, prescribing strategies that minimize the voice of the translator in order to create an "illusion of transparency" as though the source author were being read through the translation (Venuti, 1995/2008, p. 1). However, the recent "power turn" in translation studies has demonstrated that translators are not unbiased mediators, often having strategic goals in translating that require the disruption of elements in the source text (Tymoczko and Gentzler, 2002). Other translators manipulate source texts unconsciously or unintentionally, for example by inadvertently engaging in self-censorship in their translations (Tymoczko, 2007a). A number of case studies have shown, moreover, that translations have the capacity to resist, subvert, or propagate various ideologies, political positions, or cultural power structures (e.g. Cheyfitz, 1991; Sengupta, 1995; Fenton and Moon, 2002; Brisset, 1990/2012; Tymoczko, 2010). Such research has problematized the traditional view of translation as a neutral process of decoding and encoding information (cf. Tymoczko, 2006). In this chapter I demonstrate that a neopragmatist framework contributes to recent attempts at shifting our understanding of translation to reflect its inseparable connection to ideology and ethics. I also supply a new case study in the form of intersemiotic translation, showing that the negotiation of ethical and ideological positions also occurs in the translation of texts across different media.

5.2 Photographic Publication as Translation

Unlike previous chapters, I begin chapter 5 by introducing the case study immediately to enable a smoother segue into the complex theoretical, historical, semiotic, and ethical

considerations involved in this case. The source texts that I am considering are two photographs of the mushroom clouds resulting from the atomic bombings of Hiroshima and Nagasaki respectively, in August 1945. The photographs are reproduced in Figures 5.1 and 5.2 below. I argue that the publication of the photographs in various target texts is a form of translation. As understood within a neopragmatist framework, the photographs are translated into particular networks of significance in being published alongside select headlines, captions, or verbal descriptions. The type of publication, for example a newspaper, a fiction novel, a historical textbook, or a scientific journal, also plays a role in building meaning into the photograph. Finally, the format of the publication connects the photographs to select concepts, for instance through page layouts or through the display of other photographs on facing pages. The textual, paratextual, modal, and formal publication choices mentioned above can be understood as translation strategies that serve to relate the photographs to particular meanings or concepts.

5.2.1 Source Texts and Iterative Translation in a Neopragmatist Approach to Publication

The mushroom cloud, in general, has been an iconic image in American culture since the 1940s (Rosenthal, 1991). One might wonder why I have chosen to study the mushroom cloud specifically as presented in the photographs of Hiroshima and Nagasaki. The choice derived in part from limitations on space, time, and scope of research. More importantly, the bombings of Hiroshima and Nagasaki formed part of a chain of historical events that have been subject to intense ethical and political debate. For example, in 1995, a special National Air and Space Museum exhibit about the *Enola Gay*, the plane that dropped the atomic bomb on Hiroshima, was forced to shut down due to the controversy it triggered: some critics accused the exhibit of failing to acknowledge the positive consequences prompted by the bombs, such as the end of World War II in the Pacific, while others feared the exhibit would underplay the devastation and death caused by the dropping off the bombs in the first place (Linenthal, 1996). One of the basic goals of this chapter, as discussed in section 5.1, is to demonstrate that a neopragmatist approach accords with

the evidence given by recent research that any compelling theory of translation should take into account the negotiation of political and ethical positioning that occurs in translation. The controversial history of the bombings offers a context for studying how translators handle the ethical implications of publishing such highly charged photographs and for studying how particular publication strategies stem from the translator's own framework of interpretation.

Another reason for studying these photographs in particular is that they were initially published with the goal and audience expectation of documenting historical events in politics. The first publications of the photographs in Figures 5.1 and 5.2 occurred in *Life Magazine* and in *Newsweek* on August 20, 1945. In the 1940s, *Life* magazine was one of the most important visual sources for the American public to learn about the events occurring around the world and in World War II in particular (Garner, 2007). *Newsweek* had formed in 1937 and had quickly earned the reputation of being one of the least prejudiced news magazines in America (Sumner, 2010, p. 85). It is reasonable to assume, therefore, that when the photographs of the mushroom clouds over Japan were first published in the United States, they were read as unbiased "reports" of the political events happening in the Pacific Theater. Thus, from a translation analytic perspective, the publication of the photographs into such magazines can be studied as the translation of ostensibly political texts. In section 5.3 I address the fact that photographs have been used and interpreted in far more ways than as political documents and the ways that the case study analyzed in this chapter relates to views of photography as a medium of fine art, technology, or social commentary rather than as a medium for documenting political events.

I limit my study of target texts, or publications, to those that would have been most conducive to a reading of the photographs as political documents. For example, I include in my set of target texts newspapers, history books, and pictorial records of World War II, but I have not studied how the photographs have been reproduced into such publication forms as cartoons or fiction novels. The motivation for this scope limitation is to focus on photography as a tool for political documentation, in order to narrow down my examination of how the positioning of the

translator plays a role in translations that are highly political. While ethical and ideological considerations do occur in the translation of artistic or scientific texts, my focus here is on the influence of ethics and bias on the translation of political texts.

Another issue worth mentioning concerns my reasons for considering the source texts to be the mushroom cloud photographs and the target texts to be publications thereof, rather than, for example, analyzing the source as the historical event of the bombings and the photographs as the target texts. I have argued in chapters Two and 3 that a neopragmatist approach admits to many possible forms of source texts. I have also suggested that translation can be understood as a process that consummates an experience, in a Deweyan (1934/1958) sense: the translator encounters a conflict in his or her environment and interacts with certain material or intellectual objects to resolve the conflict and attribute a deeper significance to the experience. It would seem to follow that a historical event can be a source "text" of which a photograph is a translation. The photographer encounters a conflict – namely, the desire to permanently capture an event that is impermanent, similarly to Ewa Scheer's project using ice as a medium – and interacts with the camera as an object in order to resolve the conflict. Publications, like ekphrasis, would seem to be nothing more an extension of the initial act of photographic translation.

An appeal to indeterminacy and the iterative stages of translation can address the objection. I have argued in chapters 3 and 4 that indeterminacy is resolved into meaning throughout iterative stages of translation. For example, a scientist "distills" a natural phenomenon into a hypothesis, which enters into a new stage of interpretation by the translator, and yet another by the reader. In each of these successive translations, an environmental conflict is resolved into a complete, meaningful experience. No translation takes priority in defining or determining its source; the process is ongoing. Similarly, photography and the publication of photography can be understood as different stages in an iterative process of translation in which an individual constructs a meaningful interaction with his or her environment. For the purposes of this thesis, my focus will not be on the debate about whether photography is a type of translation, just as I

avoided elaborate argumentation in chapters 3 and 4 about whether art and science are forms of translation. Instead I focus my discussions on the second-order translations of the first-order products of art, science, or politics. In this chapter the second-order translational products are the publications of photographs, while photographs might in turn be considered the first-order products in the domain of politics, analogous to paintings in art or academic papers in science.[20]

A final point worth mentioning concerns the motivation behind an analysis of publications as translations. I noted in chapter 2 that I intend to enlarge the concept of "translation" only to the extent of how the term is used, in accordance with Wittgensteinian "use" theories of language and descriptivist theories of translation. In other words, I aim to provide a neopragmatist understanding of translation that is sufficiently broad to take into account the variety of uses of the term "translation" while remaining within the boundaries of the term's usage. Recently translation scholars have begun to investigate the inseparability of form and content in translations. For example, Guyda Armstrong (2007) argues that paratextual elements such as typeface, illustrations, capitalization, headers, and titles are "translational phenomena" (p. 57) that shift the meaning of a translated text with each subsequent re-edition, leading her to use the term "editor-translator" (p. 42) rather than separating the two functions. Relatedly, Anna Strowe (forthcoming) argues in her dissertation that the juxtaposition and configuration of tales in translational editions of Boccaccio's *Decameron* promote particular interpretations of the tales and their authors.   David Harrah (1954, p. 167) and David Bendiksen (2013) similarly make the case that film size, montage, and soundtrack are integral components of filmic "translations."

The research put forth by scholars such as Armstrong, Harrah, Strowe, and Bendiksen and their use of the term "translation" to include physical and paratextual elements of the target text, suggest that the semantic content of a translation is inseparable from the format and medium

---

[20] Indirect translations (Toury, 1995; cf. Ringmar, 2006), in which the translation of a source text is in turn translated for a third culture, are closely related to iterative translations as proposed here. Although I do not discuss the precise nature of the relation, indirect translations might conceivably be considered as a specific type of iterative translation.

in which it is published. Such arguments for the inseparability of translation studies, book history, and camera technology can be generalized into a hypothesis that publication and translation are overlapping concepts. A translation does not merely consist of set of paragraphs or film shots, but also consists of the pages and film upon which the translation is published as well as particular strategies of publication. An analysis of publications as translations would account for the evidence that media and form are integral components in the meaning of a target text.

The following section examines the uses and interpretations of photography proper. In sections 5.4 I turn to the history surrounding the bombings of Japan, in order to lead up to my discussion in section 5.5 regarding the translations of the photographs of the mushroom clouds.[21]
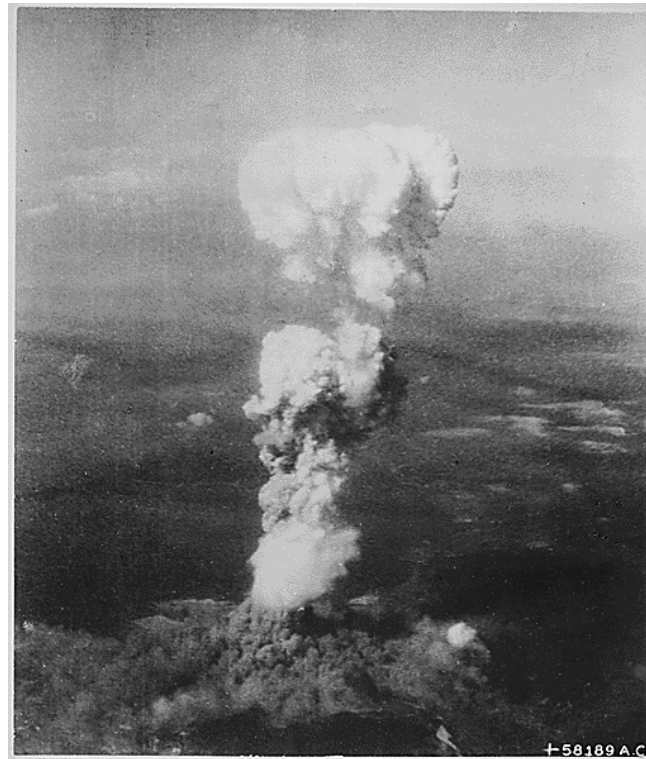
Figure 5.1. The bombing of Hiroshima. Photograph No. 542192; Local Identifier 342-
AF-58189; August 1945; Black and White Photographs of U.S. Air Force and
Predecessors' Activities, Facilities, and Personnel, Domestic and Foreign, 1930-1975;
Records of U.S. Air Force Commands, Activities, and Organizations, 1900-2003, Record
Group 342; National Archives and Records Administration.

---

[21] This very thesis might notably be considered a translation of Figures 5.1 and 5.2. Here the photographs are not, however, published with the intention of documenting political history, as is the case with the translational publications discussed in this chapter. The present intention is instead to foreground the photographic source texts as being interpretatively indeterminate.
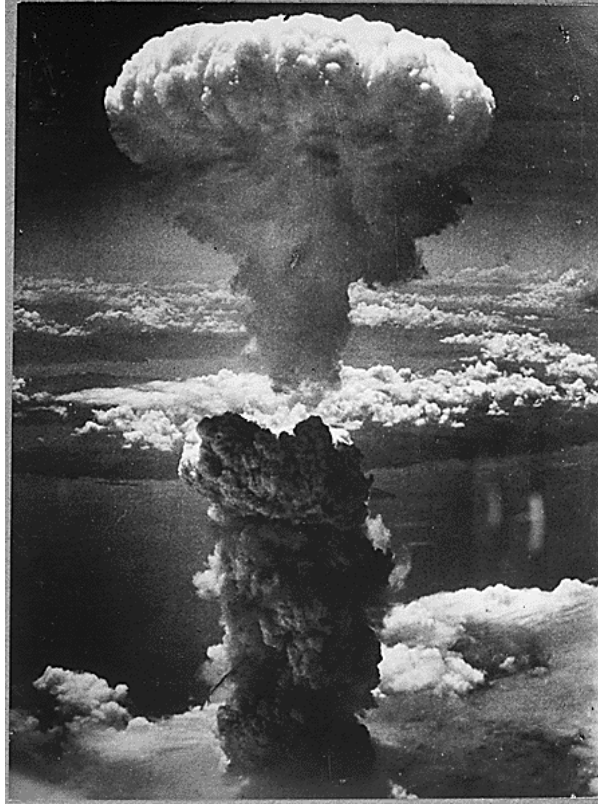
Figure 5.2. The bombing of Nagasaki. Photograph No. 535795; War and Conflict
Number 1242; August 1945; Photographs of Allied and Axis Personalities and
Activities, 1942-1945; Records of the Office of War Information, Record Group
208; National Archives and Records Administration – New York Office.

5.3 A Brief History of Photographic Interpretation

The goal of this section is twofold. First, recall that in chapter 3, section 3.4, I addressed

the view that the production of art is an activity that builds meaning into objects, prior to any

translation of the art into verbal form. In this section, I similarly wish to address the view that

photographs bear meanings of their own, prior to their translation into published form. Certain

formal elements contribute to a photograph's meaning, such as framing, juxtaposition, color, and

angle.[22] From the perspective of an onlooker, the meaning of a photograph is nonetheless

indeterminate as it can be interpreted in any number of ways (Berger, 1995). Publications resolve

---

[22] For example see Roy Quan's "Photography and the Creation of Meaning" (1979) or
Richard Bolton's *The Contest of Meaning: Critical Histories of Photography* (1989).

the indeterminacy of the meaning of a photograph, just as ekphrastic texts resolve the indeterminacy of a painting and popularizations resolve the indeterminacy of a scientific text. It does not follow that photographs themselves are meaningless, nor that their publications offer a final conclusion about what the photographs signify. "Translator-publishers" form interpretations of their own regarding the relationship between the photograph and its possible meanings, and the manner in which they publishe the photograph reflects their interpretation. The translator is, moreover, influenced by often unconscious socio-historical biases. Such influences will also determine how he or she resolves the meaning of the photograph through select publication strategies. This section sheds light on the ways in which a photographic source text initially acquires a meaning which the translator-publisher subsequently reinterprets in his or her target text publication.

Second, this section sheds light on the historical norms of photographic interpretation that stand to influence translator-publishers in their reading of a photograph. I wish to show that photography is a medium that has been associated with various uses, including technological, scientific, artistic, activist, and documentary uses. Such uses have influenced how photographs have been interpreted. As explained above, my intention is to examine the translation of photographs that were primarily documentary, in that they have been used explicitly to report political events.[23] Such an intention falls in line with the overall goal of this chapter to demonstrate that translations are not neutral transmitters of historical events, as many translation scholars have already suggested (e.g. Bastin, Echeverri, and Campo, 2010), but instead reflect the ideological positioning of the translator and his or her socio-historical context of publication.

---

[23] Gretchen Garner (2007) uses the label "journalistic/editorial" to describe photography used to report world events in the manner that I am discussing. In her view, "documentary photography" is associated instead with more activist or ideological goals, for example the use of photography to argue for the need for political reforms that address poverty rates in certain social groups. I consider the latter use to constitute "activist" or "social" photography and reserve the label "documentary" for photography that aims to report world events.

Since the invention of the photograph in 1822, theoretical paradigms for the interpretation of photographs have shifted periodically. In the mid-nineteenth century, photographs were generally thought of as direct, objective impressions of the visible world (Meyers, 1980, p. 71). The photographer was viewed as a type of mechanic, manipulating photographic tools without contributing a personal or subjective element to the photographs he or she produced. Consequently photography was viewed more as a science than as an art. Charles Baudelaire, for instance, writes that photography has shamefully "erupte[d] into the sphere of art" and should instead remain a "secretary and record-keeper of whomsoever needs absolute material accuracy for professional reasons" (1859/1980, p. 88). Towards the end of the century, certain photographers and critics began to question the supposed objectivity of photography. The photographer Henry Peach Robinson insisted that photographs can represent "not so much the subject which was before the camera as the photographer's individual impression of the subject" (1896/1980, p. 96). Thus the photographer is an artist whose personal intervention upon his or her products is inevitable.

Peter Henry Emerson, an eminent photographer at the end of the nineteenth century, agreed with Robinson that photography has the potential to be fine art (1889/1980). At the same time, Emerson criticized Robinson's use of painting techniques in photography, such as brush touch-ups, thus foreshadowing the modernist imperative of distinguishing and separating artistic media from one another. Emerson also initiated a more innovative style of photography called pictorialism, which rejected sharp focus and detail in favor of more impressionistic photographs. While Emerson considered himself an artist, he acknowledged the existence of different categories of photography, such as scientific or commercial photography (Meyers, 1980, p. 99). As an example of the emerging categorical conceptions of photography at the turn of the twentieth century, the photographer Lewis Hine pioneered "social photography," the use of the camera as an agent of social change and as a tool for enabling the representation of different classes of society (Hine, 1909/1980, p. 112).

Although Emerson retracted his views about photography as a fine art later in life, his influence had already been felt. Alfred Stieglitz was initially a follower of pictorialism, but later realized that photography had the unique potential amongst artistic media to convey detail and clarity. Stieglitz went on to become one of the most influential modernist photographers in the first half of the twentieth century. He urged photographers to use a highly detailed technique as is particular to the photographic medium, a movement that has been called "straight photography," and also encouraged technical experimentation. Nonetheless Stieglitz believed that "Lens, camera, plate, developing-baths, printing process, and the like are used by [photographers] simply as tools for the elaboration of their ideas" (1899/1980, p. 118). In other words, the fundamental goal of photography, in Stieglitz' opinion, is to enable the self-expression of the photographer. Similarly other modernist photographers, such as Marius De Zayas, stressed that the goal of art is to represent objective form in order to express subjective ideas (1913/1980).

By the time of Stieglitz, photography had also gained ground in public spheres. The camera became a household product with the invention of the Kodak camera in 1888, the Ermanox camera in 1925, the Polaroid in 1947, and the Nikon in 1948 (Garner, 2007). By the 1930s photographs were widespread in printed advertisements, where they followed a set of norms of form, purpose, and content distinct from those of fine art photography (*ibid.*). Photography also enjoyed a massive expansion in newspapers and general interest magazines in the 1920s and 1930s. The Associated Press began sending wire photos to its member networks in 1935 and *Life Magazine* was founded in 1936. *Life* was the first American photographic news magazine and explicitly stated its goal as enabling readers "to see things thousands of miles away . . . to see and be instructed" (cited in Garner, 2007, p. 193). Many news magazines soon followed suit in bringing photography to the forefront of their articles.

After the death of Alfred Stieglitz in 1946, fine art photographers took a greater interest in the relationship between photography and the public. Stieglitz' valorization of the self-expression of the photographer gradually lost influence as the postmodernists challenged the

concepts of originality and the role of the artistic subject. Participants in the postmodernist and

Pop Art movements used techniques such as mechanical reproduction to undermine assumptions

of authenticity and highlight the role of photography in mass culture (Grundberg and McCarthy

Gauss, 1987; Ostrow, 2007). Conceptual artists, such as Edward Ruscha, began to use

photographs as elements or tokens in a conceptual system (Grundberg and McCarthy Gauss,

1987, p. 85). Throughout the 1960s and onward, the purist photography advocated by modernists

such as Stieglitz shifted as photographers began to use view photography as a starting point for

art and communication rather than as a medium that should stand on its own. Photography was

seen as one tool amongst others for expressing messages. In the 1970s, artists such as Hans

Haacke revisited the notion of the photograph as an objective record, demonstrating how politics

and photography are deeply intertwined (Grundberg and McCarthy Gauss, 1987, p. 136).

The ethical, political, and ideological implications of photography have been noted by

critics in more recent years as well. John Berger writes that "[e]very photograph is in fact a means

of testing, confirming and constructing a total view of reality. Hence the crucial role of

photography in ideological struggle" (1980, p. 294). Berger even describes a photograph as "a

weapon which we can use and which can be used against us" (*ibid*.). Similarly Karin Becker

writes that national archives institutionalize particular "ways of seeing" through their

photographic documentation, showing that the act of choosing a photograph to represent a

historical or political phenomenon is not ideologically neutral (1992, p. 16-17). Becker notes that

photographs have the potential to aestheticize objects in ways that obscure the historical. For

example Becker explains that ethnographic photography in Sweden "has been criticized for

romanticizing folk culture by ignoring what was dirty, ugly, or in other ways lacked aesthetic

appeal" (1992, p. 12). In her article "On Photography" (2002), Susan Sontag underscores the

ethical import of photography by suggesting that the very act of taking a picture can be immoral:

> Even if incompatible with intervention in a physical sense, using a camera is still a form
> of participation. . . . [T]he act of photographing is more than passive observing. Like
> sexual voyeurism, it is a way of at least tacitly, often explicitly, encouraging whatever is

going on to keep on happening. To take a picture is to have an interest in things as they are, in the status quo remaining unchanged . . . to be in complicity with whatever makes a subject interesting, worth photographing-including, when that is the interest, another person's pain or misfortune. (p. 178)

Sontag's views as presented here might not properly take into account photographers who have used their medium to actively fight against injustices, such as Lewis Hine. Her comment, when contrasted with the work of such photographers as Hine, illustrates the potential for photography to be ethically ambiguous.

The form and subject of a photograph shed light on the point of view of the photographer without necessarily defining that point of view, causing an interpretative conflict especially when the form and subject might be ethically loaded. For example, Barbie Zelizer (2010) discusses how photographs of events in which numerous deaths are presumed, such as natural disasters or wars, tend use forms that are reminiscent of a spectacle: "Systematic about what gets emphasized and hidden in the events being depicted, the form of these images is familiar. Devastation is generally beyond doubt, its parameters disproportionate to the photo and often spilling beyond the camera's frame" (2010, p. 77). Zelizer notes that the formal strategies of photographs of presumed death have ethical implications:

Images of presumed death thereby provide multiple levels of distancing from the depiction of death itself, forcing the public to fill in a number of gaps created by their informational load . . . .Doing so cannot only mitigate any ambivalence about displaying and seeing graphicness but can also enhance a certain kind of public attentiveness and involvement in an event with high existential stakes. (Zelizer, 2010, p. 77)

In addition to formal strategies, the mode of presentation of a photograph also contributes to the significance and ethical implications of a photograph. For instance, the publication of the photographs of the Hiroshima and Nagasaki bombings in a military document might convey different connotative and ethical interpretations than a publication of the same images in a popular science magazine or on the front cover of a novel. The historical period in which the photographs are published also plays a role in networking the photographs into select conceptual frameworks. In section 5.5 below, I demonstrate how the local and historical context of the

translational publications, as well as the particular strategies of publication, create particular interpretations of the mushroom clouds that are often ethically positioned.

5.4 Historical Context of the Photographs

On the order of President Harry Truman, the American military dropped an atomic bomb on Hiroshima on August 6, 1945, and a second one was dropped on Nagasaki three days later. The decision to use the atomic bombs as weapons against Japan was enormously complex and controversial, from the period leading up to the bombings to today. I briefly summarize the main arguments for and against using the bombs, not with the aim of pronouncing an ethical judgment upon the decision, but with the aim of elucidating why the decision has been controversial and what the different ethical positions on the bombings have been.

The Empire of Japan, established with the Meiji Restoration in 1868 and lasting until 1947, was strongly focused on modernization, militarism, and expansion. Conflicts with Russia and China were ongoing during the last decade of the nineteenth century and the first decades of the twentieth. Taiwan (then called Formosa) was ceded to Japan in 1895 after the First Sino-Japanese War and Japan annexed Korea in 1910. In 1931 Japan invaded Manchuria, a region populated by ethnic Chinese and Russians, in an effort that marked the beginning of a period of aggressive Japanese expansionism in East Asia (United States Holocaust Memorial Museum, 2012). Japan invaded China in 1937 in a series of attacks upon major Chinese cities. The Japanese attack on the city of Nanking, now called the Nanking Massacre, resulted in the gruesome deaths of as many as 300,000 people and included widespread rape, murder, arson, and theft by the Japanese troops (Gao et. al., 1962/1996). The Pacific War began in 1941 after Japan launched a surprise attack against the American naval base at Pearl Harbor in Hawaii. Immediately following the attack, the United States declared war on Japan, which in turn led to a declaration of war by Italy and Germany against the United States and a declaration of war by Great Britain against Japan (Churchill, 1941). In the winter of 1941-42, Japan invaded the

Philippines, North Borneo, Thailand, Hong Kong, Singapore, and British Malaya (Liddell Hart, 1970/1999).

The Japanese atrocities in the Pacific theater have been widely documented. In China and Southeast Asia, the Japanese murdered enemy troops who had surrendered, forced prisoners and civilians into brutal labor on military constructions without food or supplies, practiced the random execution of prisoners through gruesome means such as beheading or bludgeoning, engaged in biological warfare, conducted experiments on live prisoners, engaged in mass rape, and forced women into prostitution (Yang, 2006; Stich, 2010). The death rate among the prisoners of war of the Japanese have been estimated to be as high as 30%, with the causes of death including starvation, disease, exhaustion, and execution (*ibid.*). More than 100,000 prisoners and civilians forced into labor on the Siam railway by the Japanese died (Harper, 1985, p. 184). American prisoners of war suffered particularly brutal conditions at the hands of the Japanese: "nine out of ten American POWs who died in captivity during World War II did so under the Japanese" (Yang, 2006, p. 31). In the Japanese homeland, civilians were on the brink of starvation. By August 1945 the majority of the Japanese population was malnourished and related crimes such as food theft were becoming rampant (Dower, 1999). Japanese troops were likewise dying from malnutrition and disease (*ibid.*). Foreigners and prisoners conscripted for industrial labor in Japan often died during the passage to Japan and many died as a result of abominable working conditions (Rummel, 1994; Yang, 2006).

Nonetheless by July 1945 Japan had suffered severe losses against the Allies in the Pacific War. In February 1945 the Japanese had lost the battle of Iwo Jima, an island between Tokyo and the Mariana Islands. That same spring the Japanese suffered a devastating loss in Burma, with an estimated 300,000 casualties (Harper, 1985). In March, the Allied firebombing, or air raids, of Tokyo caused an estimated 100,000 deaths (Selden, 2007). Allied air raids on another 162 other cities in Japan, including Osaka and Nagoya, resulted in an estimated 500,000 casualties (The United States Strategic Bombing Survey, 1947, p. 142). The Japanese lost the

island of Okinawa in June 1945 and by August had suffered enormous losses in the Philippines. The Pacific War was causing tremendous devastation on all sides, with the Americans having suffered a total of over 150,000 casualties in the Pacific theatre (Department of the Army, 1953). By July 1945 the evidence strongly pointed towards an Allied defeat of Japan.

On July 26, 1945, U.S. President Truman, British Prime Minister Winston Churchill, and Soviet Communist Party General Secretary Joseph Stalin issued the Potsdam Declaration which stated the terms for Japan's surrender. The terms required unconditional surrender at the cost of "prompt and utter destruction," although did not explicitly mention the Allies' possession of atomic bombs (Harper, 1985, p. 120). The Japanese authorities were divided on the issue and debated whether to accept the terms. In the meantime they had sent out "peace feelers" to the Soviet Union in hopes that Stalin would help mediate new terms of peace between Japan and the Allies. Truman and British Deputy Prime Minister Clement Atlee were made aware of Japan's efforts at establishing terms of peace, but agreed with Stalin that the Soviet Union should not receive the Japanese ambassador in Moscow (Harper, 1985, p. 107). By early August the surrender of the Japanese according to the terms of the Potsdam Declaration seemed unlikely to the Allies (Frank, 1999). At President Truman's command, on August 6 Lieutenant-Colonel Paul Tibbets piloted a plane over Hiroshima and dropped the first atomic bomb on Japan, which was photographed by the tail-gunner Sergeant Robert Carron (Harper, 1985, p. 123). On the eve of August 9, Japanese-occupied territory in Manchuria was invaded by the Soviet Union. Japanese authorities continued to debate about whether to accept the unconditional surrender required by the Potsdam Declaration, and the Japanese public was ill-informed about the extent of damage of the first atomic bomb (Harper, 1985). The second bomb was dropped on the morning of August 9 over Nagasaki. Together the bombs killed more than 100,000 people (Zelizer, 2010, p. 84). The Emperor of Japan officially announced capitulation on August 15.

In July 1945 scientists who had been working on the Manhattan Project developing the atomic bombs, including Leo Szilard, petitioned to the American government not to use the

atomic bombs as weapons of war (Gest, 2001). The potential effects of atomic bombs as weapons were not fully understood at that time (*ibid*.). Some have argued that the bombs were not necessary because Japan was on the verge of surrender, although others have noted that Japan's delayed response to the Potsdam Declaration suggested otherwise to the Allied forces (Harper, 1985; Skates, 1994). The Americans were additionally concerned that a land invasion of Japan, which was proposed if Japan did not surrender, would cause hundreds of thousands more deaths on both sides (Harper, 1985). Others have suggested that the Americans might have chosen to present a demonstration of the bombs on unpopulated territory to sway the Japanese into capitulation rather than use the bomb immediately as a weapon (Gest, 2001; Harper, 1985). However the Americans only had two bombs ready for use, with no additional bombs immediately forthcoming (Stimson, 1947). From one point of view, the atomic bombs were a necessary measure that resulted in fewer deaths than prolonging the war through a land invasion while offering international leaders for decades to come a valuable lesson about the costs of nuclear warfare. From another point of view, the atomic bombs, which might not have been necessary to end the war and which were not fully understood to begin with, led to the death and disease of thousands of civilians who were unable to defend themselves.

5.5 A Case of Photographic Translation from a Neopragmatist Perspective

In this section, I analyze how the photographs of the mushroom clouds resulting from the bombings of Hiroshima and Nagasaki have been translated into different contexts that reflect the complex and controversial ethical positions surrounding the decision to use the bombs.

The photographs of the mushroom clouds resulting from the bombings of Hiroshima and Nagasaki in 1945 have been appropriated to symbolize a variety of phenomena: the end of a war (Rosenthal, 1991), the triumph of America (Hales, 1995), the power of technology (Zeman, 2008), political annihilation and the devastation of war (Kirsch, 1997; Bousquet, 2006), the dawn of a new historical era (Hales, 1991; Utsumi, 2011), and the formation of national identity (Saito,

2006). The photographs have become symbols of each of these phenomena in part through their formal characteristics and in part through their translation into different publication contexts. I first discuss how the formal qualities of the photographs contribute to their ethical positioning and also trigger an ambiguity of ethical interpretation.

5.5.1 The Ethics of Form

In section 5.3 above I discussed different views regarding the status of photography as an artistic, a scientific, a commercial, or a political activity. A photograph is the product of the technical manipulation of a tool for capturing an image from one's environment. For certain critics, such as Lewis Hine or Karin Becker, the capacity of the photograph to report reality gives the medium particular ideological or social power, since the photographer or curator selects which facets of reality the public is exposed to. Other critics, such as Robinson or Stieglitz, have argued that photographs inevitably mark the opinions or values of the photographer. Thus photographs are powerful tools, on the one hand because they seem to depict reality without biases, and on the other hand because they masquerade as objective depictions when, in fact, they are the creations of a biased individual. The interpretative ambiguity of the photograph is important to consider when examining how the form of the photographs of the atomic bombings reflects particular ideological or ethical biases.

The photographs of the bombs over Hiroshima and Nagasaki do report a historical event. Yet the diversity of theories about the interpretation of photographs suggests that the images in Figures 5.1 and 5.2 might carry political or interpretative significance that extends beyond their status as objective reports. Indeed critics have noted that the photographic form of the images of the mushroom clouds is ideologically significant. However they have disagreed as to the nature of that significance. Scott Kirsh (1997) argues that the bird's eye view of the photographs is a "privileged abstraction" that diminishes the reality of human suffering (p. 237). He also writes

that the focus on aesthetic features turns viewers' attention to the "beautiful, spectacular qualities

of the explosions," likewise neglecting the ethical aspects of the events (*ibid.*).

By contrast, Barbie Zelizer (2010) suggests that the mushroom cloud, as an immense

photographic object that obscures ground-level events and shatters all scales, successfully

conveys the vastness of the destruction caused by the bombings: the photographs encourage "the

involvement of the emotions, contingency, and the imagination because they completed a

fundamental lack of clarity in the depiction" (p. 84). Similarly Susan Moeller agrees that the

photographs convey the enormity of the devastation: "The atomic cloud pictures [include] no

hints of the ground-level destruction they had wreaked, yet the enormity of their existence

[portends] ill" (1989, p. 237). If the photographs in Figures 5.1 and 5.2 have come to represent

the bombings of Japan and the consequences of war, then the manner in which the photographic

form distances viewers from a detailed reality of the destruction also allows viewers to appreciate

the scale of devastation that can and has occurred in those bombings in particular, in nuclear

warfare more generally, in World War II even more generally, and in war on the whole.

5.5.2 Translational Publications of the Photographs

Within a neopragmatist framework, translation is a tool for resolving an interpretative

conflict by re-networking the objects involved in the conflict into new conceptual relations.

Translator-publishers encounter a conflict in that the photograph they wish to publish has

ambiguous interpretative potential, as detailed in sections 5.3 and 5.5.1 above. They resolve the

ambiguity or indeterminacy of meaning through select strategies of publication that translate the

photograph into networks of associations that reflect their own interpretations. The strategies they

choose will also be determined by the socio-historical norms of interpretation within which they

are working. For example, a Japanese publisher might choose different strategies for presenting

the photographs of the mushroom clouds than an American due to the different historical

relationships between their respective nations and the atomic bombings. Non-translation might

also be a strategy, as when, for instance, the American government censored the publication of the photographs in Japan during the Occupation of Japan (Edwards, 2006). I focus on the publication of the photographs in American media and their shifting strategies throughout the decades after 1945.

I've selected three time periods for comparison: publications of the mushroom cloud photographs between 1945 and 1955 around and immediately following the end of World War II; publications between 1975 and 1995 towards and immediately following the end of the Cold War; and publications in the 2000-2013 period in which weapons of mass destruction have re-emerged as a major national issue. I examine how particular attitudes towards nuclear weaponry in each of these periods are reflected in the publication strategies of the photographs of the bombings of Hiroshima and Nagasaki.

Early publications of the photographs fall in line with a narrative of victory, appropriating the images as emblems of the end of war. For example, on August 20, 1945, *Life* published the photographs on facing pages in the first photojournalistic report of the atomic bombing of Japan. The headline below the first photograph reads, "Hiroshima: Atom bomb No. 1 obliterated it," while the headline on the facing page reads, "Nagasaki: Atom bomb No. 2 disemboweled it." [24] The text below these large-scale images reports the reactions of the military staff on the plane at the time of the bombing and describes the immense physical impact of the bomb. The bolded, capitalized lettering of the headlines, the use of emphatic terms such as "obliterated" and "disemboweled," and the textual focus on the perspective of the military cast the photographs into an interpretative framework in which the mushroom clouds become symbols of the overwhelming success of the American military in dropping the bombs. Also on August 20, *Newsweek* published the two photographs in an article whose headline reads, "The Greatest Weapon: Conquest by

---

[24] Disembowelment was one of the forms of prisoner execution that Japanese troops ostensibly practiced during the Pacific War and was also a form of ritual suicide in Japan (Stich, 2010).

Atom." The subtitles within the article are "Targets of Fate" and "Boiling Nagasaki Inferno." The caption under the photograph of Nagasaki reads, "The atoms of Nagasaki rise 50,000 feet high." Similarly to the *Life* article, the choice of terms such as "greatest weapon," "conquest," and "fate" connect the images into a narrative of overwhelming victory. Such publication strategies reflect the relief felt by many Americans upon the Japanese announcement of surrender on August 15, and conceptualize the bombings as a critical event in bringing the war to a close.

A similar translation is put forth in Tom Maloney's (1946) edition of *U.S. Camera*, a publication that played an important role in establishing the profession of photojournalism in the first half of the twentieth century. The 1946 publication opens with an elaborate dedication to the "men and women who served the United States of America in the greatest war in the history of the world" (p. 5). In the introduction, the editor describes the photos as "thrilling" and "breath-taking" and that he has "really tried to cover the war" (1946, p. 8). The publication begins with photographic portraits of military figures, with boldface captions that are suggestive of the glamor of victory. The photographs of Nagasaki and Hiroshima are found in a section that focuses primarily on the development of the atomic bombs rather than on the debates surrounding their use or the impacts of their use. The publication's translation strategies depict the bombs as tools in a successful war, demonstrating the publisher's alignment with the opinion of the majority of its readers immediately following the war, namely that the atomic bombs were a valuable weapon for securing victory over the Japanese and ending the war.

The ideological alignment of the publisher also has an effect on the conceptual network into which the photographs are translated. Kent Roberts Greenfield (1952) edited a primarily photographic military publication intended to supplement other narrative volumes about World War II. In the preface, Greenfield describes his editorial intentions: to enable a "clear understanding of military history," while showing the "capabilities and limitations of weapons in the hands of both our troops and those of the enemy" (1952, p. vii). He also describes his methodology for choosing photographs: "The photographs have been especially selected to show

important terrain features, types of equipment and weapons, living and weather conditions, military operations, and matters of human reference"(*ibid.*). His choice to present the photograph of the second atomic bomb in a chapter about the end of the war, facing a photograph that depicts military celebrations, transforms the photograph into a rhetorical symbol of the end of war. The manner in which the photograph is presented reflects the publisher's position regarding the bombings: the military has been a particularly strong advocate of the argument that the bombs were necessary to end the war and spare an even greater number of future casualties had the war persisted (Linenthal, 1996). In summary, early publications of Figures 5.1 and 5.2 translate the photographs into conceptual networks that emphasize the bombs' role in the victory of the United States and the end of war.

The photographs gradually took on new significance through their publications in the decades of the Cold War. In 1946, writer and journalist John Hersey published an influential article in *The New Yorker* in which he details the experiences of six Japanese individuals who were in Hiroshima at the time of the bombing and how their lives were affected by the event in the days and years thereafter. The article was published as a book entitled *Hiroshima* in the same year, which has subsequently been reprinted into a number of editions. The 1975 edition, published by Bantam Books, features Figure 5.1 on the front cover. The use of the photograph on the cover of a book that exposes the magnitude of destruction and personal suffering caused by the bombs stands in contrast to the early publications of the photographs as symbols of victory. Such a contrast is not surprising given that the 1975 edition of *Hiroshima* was published during the middle of the Cold War, an era marked by heightened anxiety regarding the dangerous spread of nuclear weapons. Indeed, around 1975, the U.S.S.R. achieved nuclear parity with the United States (Norris and Kristensen, 2006), giving cause for worries that "What that atomic bomb had done to Japan, it could do to [the United States]" (Holmes, 1945, as cited in Boyer, 1985, p. 3). Nonetheless, in the early 1970s, a policy of *détente* or cooperation was established between the U.S.A. and the U.S.S.R., reducing tensions relative to other periods of the Cold War.

In the late 1970s and early 1980s, however, the tension between the U.S.S.R. and the

U.S.A. increased as both parties became increasingly militaristic. Paul Boyer (1985, p. *xv*)

recounts how the "profound public apathy toward the threat of nuclear war" of the late 1970s

promptly shifted in the early 1980s towards a climate of intense anxiety. In his book *By the*

Bomb's Early Light (1985), Boyer accordingly aims to contribute "to the process by which we are

again, at long last, trying to confront, emotionally as well as intellectually, the supreme menace of

our age" (p. *xx*). Boyer's book includes a publication of Figure 5.2 in the first chapter, entitled

"The Whole World Gasped." He repeatedly casts doubt upon the historical strength of the

narrative of victory mentioned above in order to emphasize the role of the bombings in producing

a climate of fear, reflecting the Cold War context of his writing. The following passages illustrate

Boyer's frequent minimization of the narrative of victory and emphasis of the bombs as threats:

> Despite the outpouring of post-Hiroshima atomic ephemera, it would be wrong to
> conclude that Americans took the bomb casually or that its impact quickly faded. Just
> below the surface, powerful currents of anxiety and apprehension surged through the
> culture. (1985, p. 12)

> But given the heavily racist wartime climate, post-Hiroshima vindictiveness proved
> surprisingly short-lived and was quickly overshadowed by a growing fear of what might
> lie ahead. (1985, p. 13)

> Nor did the promise of a peacetime atomic Utopia initially do much to diminish post-
> Hiroshima fear. (1985, p. 13)

> While the news of Hiroshima and Nagasaki did not have as sharp and immediate an
> impact in Europe (itself devastated and prostrate) as it did in the United States, awareness
> of the bomb's ominous implications came quickly. (1985, p. 14)

> This fear pervaded all society, from nuclear physicists and government leaders to persons
> who barely grasped what had happened, but who sensed that it was deeply threatening.
> (1985, p. 15)

Ironically, while Boyer's goal is to provide a historical perspective on the cultural

attitudes leading up to the intense anxiety about atomic warfare that characterized the period in

which he is writing, Boyer himself contributes to the narrative of fear associated with the atomic

bombs in his own book. The photograph of the Nagasaki cloud occurs with the following caption:

Enter the mushroom cloud. Photographs like this one taken over Nagasaki and described in *Life* as "a big mushroom of smoke and dust" were widely reprinted in newspapers and magazines in August 1945, quickly becoming the universally recognized visual symbol of atomic-age menace. (Boyer, 1965, p. 17)

The caption's dramatic opening and its use of the term "menace" again conceptualizes the bomb as an agent of fear. The caption is also somewhat misleading, given that only *Life* and *Newsweek* published the photographs of the mushroom cloud over Nagasaki in August 1945.[25] The caption suggests that Figure 5.2 played a causal role in producing the climate of fear of the 1980s, suggesting that the photographs of the bombings are inherently menacing. Yet the author fails to acknowledge that his own publication strategies contribute to the association of the bombs with the threat of nuclear annihilation. In brief Boyer's publication of the photographs, including his accompanying text that stresses the fear produced by the bombs, demonstrates that translations reflect localized historical attitudes while simultaneously propagating those attitudes.

By the end of the Cold War, the "Great Fear" (Boyer, 1985, p. 14) of atomic warfare that shaped publications such as Boyer's had subsided and a more explicit debate regarding the ethics of the bombings of Japan re-emerged. The ethical debate primarily concerned the necessity of the bombs in ending the war. Many publications of the mid-1990s use the photographs of the mushroom clouds to denounce the use of the atomic bombs. Upon the fiftieth anniversary of the bombings, *Time* magazine published an article featuring Figures 5.1 and 5.2. The surrounding text and headlines convert the photographs into symbols of horror as well as of the irony that such destructive acts were necessary to end an equally destructive war. A large-scale reproduction of Figure 5.1 is presented on page forty-eight accompanied by a massive headline, "Doomsdays" (Gray, 1995). On the same page, the subtitle reads, "A merciless war comes to an appalling end with the use of atomic bombs and the instant incineration of two cities," and the caption reads, "A

---

[25] I searched through August and September 1945 issues of the following journals, without finding any publications of Figures 5.1 or 5.2: *New York Times, Time, Look, Saturday Review*, *Christian Century*, *Popular Science*, *Pittsburgh Courier*, *Washington Post*, *Bulletin of the Atomic Scientists* and *Boston Globe*.

mushroom cloud towers over Hiroshima after the blast" (*ibid.*). On the facing page, a header

reads, "War of the Worlds" above a two-column textual article. In the middle of the page, a

small-scale reproduction of Figure 5.2 is presented between the columns, with the caption, "Aug.

9, 1945 – The Nagasaki sky" (*ibid.*). The phrases "merciless war" and "appalling end" point

towards the popular view that the bombs were a tragic necessity for ending the war. The huge

scale of the tragedy is emphasized through the headline "Doomsdays," the size of the Hiroshima

image, and the use of phrases such as "instant incineration" and "towers over Hiroshima."

Similarly, in *The Invasion of Japan: Alternative to the Bomb* (1995), John Ray Skates

argues that the invasion rather than the bombing of Japan would have ended the war in a more

practical and less destructive manner than has been supposed. The front of his book features the

photograph in Figure 5.2 in black and red, along with the book title placed in capital white letters

below the stem of the mushroom cloud. The word "Japan" is significantly larger than the other

words in the title. The layout and color choice creates a metaphor that the use of the atomic bomb

essentially destroyed the possibility of ending the war through invasion, with catastrophic and

bloody results upon the nation of Japan. Such publication strategies highlight the bomb's negative

impact and ethical reprehensibility given that there purportedly existed a less destructive

alternative for ending the war.

By contrast, in *Downfall* Richard B. Frank (1994) argues that the bombs were necessary

catalysts for the surrender of Japan. The front cover of his book features the mushroom cloud

over Nagasaki with the enlarged title "Downfall" printed over the center of the photograph. The

subtitle, "The End of the Imperial Japanese Empire" reinforces the symbolic use of the

photograph as depicting the end of the war. The author served in the U.S. Army during the

Vietnam War, illustrating a similar case as Greenfield (1952) of military authors using the

mushroom cloud photographs as emblems of victory.

In recent years nuclear warfare has once again become an important international topic,

as have issues regarding American patriotism and media control over public perceptions in the

United States. Such skeptical attitudes towards the legitimacy of the American media and military are reflected in the strategies of publication of Figures 5.1 and 5.2. In *Photos that Changed the World* (2000), the photograph of the mushroom cloud over Hiroshima is presented as one of one hundred fifty images that have "changed the world." In the introduction to the book, the editor, Peter Stepan, claims that the photographs have not changed the world by virtue of what they depict, but by virtue of how they have been used as ideological tools. Stepan mourns that photography has become commercialized and that "news has become fatally entwined with entertainment" (2000, p. 7). He writes that "aesthetic censorship" has become the norm in mainstream media: images of disaster must be stylistically pleasing in order for the media to consider them worth publishing, and as a result, media publications "often contribute to the simplification of an event, or promote prejudice and partial knowledge" (2000, p. 11). Stepan discounts the possibility of objective reporting, suggesting instead that "images deliver an interpretation of an event from a specific perspective: subjective, sometimes partisan, sometimes manipulative" (*ibid.,* p. 12). While Stepan does not discuss the Hiroshima photograph in his introduction, the publication of the photograph in a book with such an introduction conceptualizes the photograph as an ideological, and possibly manipulative, tool that has misrepresented the complex history and ethics of the atomic bombs so as to promote a particular political position.

Contemporary publications of the photographs also reflect the reemergence of World War II history into current public culture and media, which Barbara Biesecker suggests is a conservative response to criticisms or doubts about American identity: World War II images are taking on a rhetorical function of encouraging the formation of a collective memory and reinforcing American patriotism (2002, p. 406). Such a reemergence might be reflected in *Memories of World War II* (2004), edited by Kelly Smith Tunney, Ann G. Bertini, Chuck Zoeller, and Eric Himmel. The book is primarily photographic, and presents the image of the Nagasaki bombing near the end of the book. In the book's foreword by Bob Dole, Dole announces that the photographs in the book are primarily in black and white because "the causes and objectives of

the United States and our Allies in World War II were just that – black and white, good against

evil" (2004, p. 6). He contrasts World War II against modern doubts about the motivations of the

United States in contemporary wars, claiming that World War II "had to be waged and it had to

be won" (*ibid*). The translation of the Nagasaki photograph into such a publication exemplifies

the rhetoric outlined by Biesecker of reinforcing a sense of shared national cause in the face of

contemporary worries regarding the image and activities of the American government abroad.

The publication translates the photograph as evidence of the integrity of American military

activity, specifically in the Pacific War and perhaps also in general.

5.6 Implications

A close inspection of the publications of the Hiroshima and Nagasaki photographs

demonstrates that translations are not unbiased objective communications of information. Instead,

translations reflect the biases of the translator as well as local historical attitudes regarding the

subject matter of the translation. In turn, translations contribute to particular socio-historical

interpretative norms through their publication strategies including paratextual elements such as

titles, layout, captions, and introductions. Translations of the atomic mushroom cloud

photographs have associated the images with different concepts or phenomena depending on the

historical era of publication and the interpretations particular to the publisher. It follows that the

photographs and their historical context of publication are reciprocally influential: no photograph

can be published in a manner that is completely neutral.

The impossibility of producing a neutral translation does not mean that translators

necessarily take one side in an ethical or political debate. Translators are often sensitive to the

controversy that their work might entail. In such cases, illustrated by the early closure of the

Enola Gay exhibit mentioned above, a strategy of non-translation might seem to be the only

viable option for remaining impartial, although even the decision to avoid translating a source is

itself a form of negotiating ideologies. Similarly one might question the possibility of neutrality

in the photographs that act as source texts in the publications I have discussed. Because photographs, even in the context of political documentation, reflect photographers' choice to highlight one aspect of their experiences rather than another and their choice to frame that experience using certain stylistic or formal techniques rather than others, it is reasonable to suggest that photographs can no more be neutral than their translational publications. Such a suggestion is not surprising given the speculations in section 5.2.1 that photography is itself a type of translation.

The publication of photographs shares certain similarities with ekphrastic translations as discussed in chapter 3. For example I suggested that captions might be seen as ekphrastic translations of an image. The type of translation with which this chapter is concerned is somewhat broader. Ekphrasis is concerned solely with the translation of images into words. Publications translate images into contexts that can include captions, headlines, article text, advertisements, and additional photographs. Moreover the publication of a photograph involves certain choices about page layout and image size, color, or quality. Viewing such publications as translations suggests that verbal language is simply one tool amongst others for communicating or conceptualizing an experience. Indeed Roman Jakobson's (1959) category of intersemiotic translation might be thought of as an operation on any two sign systems, even if neither is linguistic. In this chapter I have presented a case of intersemiotic translation in which the source "text" is an image and the target text is a publication that might include language as but one element within the system.

The manner in which Figures 5.1 and 5.2 are presented in published form offers a particular conceptualization of the bombings. The translator, therefore, may be thought of as engaging in a process of *historical identification* in the context of the Hiroshima and Nagasaki photographs, analogously to Danto's artistic identification. To reiterate Arthur Danto's example, a rectangle bisected by a straight horizontal line "is" a meaningless visual object until it enters into a context in which it is artistically identified as Newton's first or second law. Likewise, the

95

photographs that I discuss in this chapter "are" mushroom clouds resulting from the bombings of Hiroshima and Nagasaki. But the usage of the photographs in particular publications and in distinct socio-historical contexts can lead to the historical identification of the images as any number of things: the end of World War II, the beginning of the Atomic Age, the success of the American military, the threat of nuclear warfare, the destruction of a nation, and so on. The manner in which a publication connects the photographs to various phenomena is not random: publishers resolve the interpretative indeterminacy of the photographs in a fashion that promotes or criticizes certain ethical attitudes towards the bomb.

5.7 Conclusion

A neopragmatist approach serves to elucidate the complex analysis of translation offered in this chapter in the following ways. First, the concepts of antiessentialism and indeterminacy provide an explanation of how photographs of historical events are appropriated for various symbolic uses. As a historical document, a photograph is semantically indeterminate. In other words a photograph can be assigned any number of different interpretations, none of which is necessarily consistent with the other interpretations and none of which is necessarily the "correct" interpretation. A publisher forms a particular interpretation of the indeterminate photograph. The interpretation is both reflected and created by particular publication strategies. For example, the publication of Figure 5.1 immediately preceding a photograph of soldiers celebrating might evoke an interpretation of Figure 5.1 as the final episode in a chain of events that ended World War II with the victory of the Allies. The publication of Figure 5.1 next to a photograph of a victim of radiation sickness might evoke an interpretation of Figure 5.1 as the epitome of the vast destructive potential of nuclear warfare. None of these interpretations determines the meaning of Figure 5.1 once and for all, not only because the photograph is indeterminate, but also because the publication itself gives rise to new interpretative ambiguities. In turn viewers of the publication form their own interpretations of the publication in which a photograph has been

placed. As the photograph passes through successive stages of publication and interpretation, it acquires a richer symbolic profile and can eventually become a powerful cultural or historical icon.

The iterative attempt to resolve indeterminacy is a feature of translations in general. Translators, whether they might be writers, artists, poets, scientists, or publishers, formulate an interpretation of their source texts. Their translations are subsequently reinterpreted by the target audience and perhaps also by indirect translators using a previous translation as a source text (Ringmar, 2006). The iterative phases of resolving indeterminacy through writing, rewriting, and reading illustrate Walter Benjamin's (1923/2000) proposal that translations provide source texts with an afterlife. Although translations owe their existence to their source texts, the embryonic relationship also produces difference: "no translation would be possible if in its ultimate essence it strove for likeness to the original. For in its afterlife – which could not be called that if it were not a transformation and a renewal of something living – the original undergoes a change" (Benjamin, 1923/2000, p. 73). Thus translations do not determinately finalize the meaning of their sources but instead initiate an evolving process of interpretation and generation of new indeterminacies. Andre Lefevere's (1992) analysis of translation as rewriting is also elucidated by the neopragmatist framework. A translation is a rewriting or reinterpretation of a source text and provides the source with an afterlife in which readers continue to interpret previous attempts at resolving the indeterminacy of the source text.

Second, a neopragmatist framework elucidates the translational analysis of publication presented in this chapter by offering a more flexible approach to the terms "text" and "language." A publication can be understood as a type of text, even if it includes nonverbal elements such as photographs, because language itself can take on various nonverbal forms. Each form of language has a distinct set of units and formal structures. The elements of the language of publication include juxtaposition, headlines, photographs, and layout in addition to the subset of properties belonging to the formal language of photography, such as color and perspective. Such units and

structures join together in different ways to form individual "texts," such as the photographs in Figures 5.1 and 5.2 as well as their publications described in section 5.5. Formal properties generate meaning in such texts, but the meaning is indeterminate. Interpretations attempt to resolve the indeterminacy of a text into a concrete set of meanings. The attempt to resolve indeterminacy is iterative: there is no final interpretation of the text. Therefore the translation of a text into new forms is an ongoing activity of interpretation. The process of translating a photograph into a publication is one such stage of interpretation. Language and text remain central to the process, acting respectively as the tool of translation and the locus of meaning.

Finally, the neopragmatist approach sheds light on the role of ethics and ideology in the translation of political documents such as photographs. Translator-publishers have a certain degree of ideological power in influencing public perceptions of historical events, because they can use strategies to promote particular interpretations of indeterminate photographs. For example publication strategies that emphasize Figures 5.1 and 5.2 as photographs of a nuclear holocaust might be employed by particular organizations that oppose the use of nuclear energy. By contrast a government agency might select publication strategies that encourage the interpretation of Figures 5.1 and 5.2 as photographs of a decisive military victory, in order to win public support for the controversial decision to drop the bombs. Widely read publications, such as *Life* magazine, can play a major role in shaping popular perceptions historical events.

However, while translator-publishers might find themselves in a position of ideological power, their interpretations are often driven by factors beyond their control. Popular attitudes towards the atomic bombings within a particular historical era or demographic group might preclude an interpretation of Figures 5.1 and 5.2 as images of military and technological success. Such attitudes might discourage translator-publishers from admitting such interpretations into their publications, for example to avoid controversy or economic failure. Translator-publishers might themselves be biased by the prevailing attitudes in their sociocultural sphere, leading them to promoting certain interpretations of the photographs that conform to public opinions. Even

when translators actively strive to be neutral or to acknowledge the complexity of the ethical

situation they are negotiating, they cannot avoid being in a position of bias and ideological power.

As Maria Tymoczko notes, translators "are always responsible for the force of their translations,

even when they think they are merely reporting the speech of others" (2009, p. 37).

CHAPTER 6

CONCLUSION

6.1 Summary

In this thesis I have argued that neopragmatism supplies a productive framework for studying translation. Neopragmatism can elucidate the nature of translation across media by expanding the concepts of "language" and "text" beyond simply verbal forms. The scope of the term "translation" is also expanded by a neopragmatist framework to cover a range of activities across disciplines, sharing in common the attempt to resolve indeterminacies of meaning into "texts" with specific semantic networks. Moreover neopragmatism offers an alternative to the traditional Western approach to evaluating translations based on the metrics of accuracy and fidelity, an approach which has been problematized by postpositivist researchers in translation studies. The fulfillment of local goals becomes the new metric of translation evaluation in the neopragmatist framework, admitting higher levels of nuance and complexity in the analysis of particular translations. Finally a neopragmatist framework sheds light on the ideological position of translators in view of their interpretative power with regards to the indeterminate source texts. The interpretation provided by a translator generates an afterlife for the source text with the potential to initiate subsequent chains of interpretation by readers, eventually resulting in the translation having shaped public beliefs and perceptions about the source text.

I have demonstrated the applicability and productivity of neopragmatism in translation theory via three case studies. In chapter 3 I showed that neopragmatism helps to justify and clarify forms of translation between nonverbal semiotic systems including abstract visual art. I argued that neopragmatism provides an understanding of ekphrasis as the translation of visual experience into verbal language. The translator formulates an interpretation of a semantically indeterminate visual phenomenon, such as a work of art, and uses verbal language to articulate the interpretation in order to achieve specific goals. In chapter 4 I argued that a neopragmatist

framework supports an analysis of scientific popularizations as forms of translation, shedding light on the nature of both translation and science as sociocultural goal-oriented activities rather than as technical exercises attempting solely to represent external bodies of fact. In chapter 5 I demonstrated that neopragmatism enables the analysis of publications as forms of translation, revealing the powerful role of the translator in shaping popular interpretations of historical events. The three case studies cumulatively show that the neopragmatist framework establishes that translation occurs across disciplines and media and is an iterative attempt at interpreting semantically indeterminate experiences using various forms of language and text.

6.2 A Neopragmatist Approach to Understanding Translation

I conclude this thesis with a brief rearticulation of how translation may be conceptualized in a neopragmatist framework. Translators encounter a source of indeterminacy in their environment and seek to resolve it through the use of language, with which they construct an interpretation of the source. A translator might seek to resolve other goals as well, such as the introduction of a text or a set of ideas into a particular cultural or linguistic milieu that the translator feels would profit from the source. Further goals include financial gain, political resistance, artistic enrichment, or the formation of a textual or authorial legacy. Translators interact with objects in their environment in order to achieve their goals and create an interpretation of the indeterminate source. Such objects might be material, such as computers, paintbrushes, and cameras as well as the people that the translators consult during their work. Other objects might be abstract, including the beliefs and ideas perceived or held by a translator or the political atmosphere of the geo-historical context in which the translator is working. The translator builds an integral experience out of the translational process, resolving the indeterminacy of the source into a distinct set of meanings that contribute, in turn, to the achievement of particular goals.

The methods of translation are strategically selected by translators in order to promote their own interpretation or to fulfill particular goals in translating. However, translation choices are also determined by factors that extend beyond a translator's conscious decisions. For example, one's culture might restrict the possible interpretations that one might locate in a source text. Even seemingly straightforward terms such as "cat" or "cow" will evoke different interpretations across cultures and historical eras: in certain cultures, the animals have been revered or worshiped as sacred creatures, whereas in others they have been viewed as household pets or a source of nourishment. The usage of terms in particular contexts, such as the word "cow" in Hindu scriptures or on a milk carton label, also restricts their initially vast interpretative potential. Finally the norms in the discipline and medium in which the translator is working will affect his or her methodological choices. Lawrence Venuti (1995/2008), for instance, has discussed how the norm of fluency has affected translation strategies in the English-speaking world, resulting in translations that domesticate foreign ideas to conform with the target culture. Translators might unconsciously abide by certain literary norms or consciously violate those norms in order to achieve particular goals in their translation, such as domestication or foreignization.

The neopragmatist thesis of antifoundationalism implies that there is no universal standard of "correctness" for translations. There is no ideal conceptual or semantic perspective from which to build a translation, nor any one correct way of "knowing" the source text. Every translator forges his or her own interpretation of the source in order to fulfill his or her own goals in translating. A translation might fulfill some of its goals but not others. The evaluation of a translation is therefore not a simple task, and various metrics can be used (e.g. commercial success, communicativity, management of cultural relationships, and so forth). The historical norms of fluency, elegance, clarity, and resistance may be understood as but a small set of possible norms for translation. A neopragmatist perspective thus enriches the growing realization among translation scholars that translations may be evaluated relative to a multiplicity of

standards, not all of which are necessarily consistent. Translations are not consequently obscure or epistemically valueless; instead translations are a testament to the complexity and contingency of knowledge.

In light of the broadened theoretical perspective it offers, a neopragmatist framework supports recent trends in translation studies to avoid prescriptive approaches to translation, which focus on how translations should be produced. Instead the framework promotes a descriptivist approach, which focuses on why translations have been produced in a particular historical context using particular translation strategies and with what effect (cf. Pym, 2008). Such a focus releases translators from the impossible task of producing replicas of their source texts, enabling them to empower themselves and acknowledge their own active role in the constitution of knowledge.

The neopragmatist approach to translation offered in this thesis not only expands upon the definition of translation as being more than a simple epistemological tool for the transmission of information, but also upon the range of possible source and target texts involved in translational activities. I have shown that translations can result from a variety of possible environmental sources, including visual phenomena, bodies of literature, and historical events. Similarly the target texts of translations can take on a variety of forms, including publications, film, and poetry. It follows that intersemiotic translations between different forms of language or sign systems might be far more common than has previously been assumed.

A major concern is whether the neopragmatist approach overextends the concept of translation to apply to activities, such as description, that would not normally be considered as translations. By consequence the discipline of translation studies might fall into disarray as it loses grasp upon a clear notion of its object of study. One response to the concern is simply assent to the possibility that the discipline of translation studies has not yet defined the types of texts that fall within its scope of research (cf. Tymoczko, 2006). The purpose of this thesis is to contribute to the expansion of our understanding of translation in accordance with the postpositivist goal of broadening our theoretical perspectives. While I have attempted to remain within the limits of

current usage of the term "translation," there is a possibility that translation studies as a discipline will want to progress within a narrower scope than the one proposed here.

One possible answer to questions about the definition of "translation" is a gradational approach to the term. Research into the extent to which a text is "translatable" already exists in the discipline (e.g. van den Broeck, 1981). Research into the extent to which a text is a translation is still emerging. Products such as intersemiotic translations and pseudotranslations have illustrated the difficulty of categorizing certain texts within the simple dichotomy of "translation" vs. "non-translation." A scalar approach to the definition of translation might be productive in elucidating that certain uses of language are more translational than others. While further research is needed to investigate the nature and relative importance of the criteria that determine the extent to which a work is a translation, I would speculate that intention is a major factor. That is, for a work to be a translation, the producer must have intended to conceptualize the source text in a particular way. Such a criterion is motivated in part by John Dewey's (1934/1958) claim that intention is fundamental to aesthetic experiences and I have speculated that translation might be viewed as a process of experience formation in the Deweyan sense.

A scalar view of translation vs. non-translation could help explicate ongoing debates in the definitional branch of translation studies. Certain text types, such as pseudotranslations, and certain uses of "language," such as photography, might not have an obvious placement on the scale, giving rise to controversies regarding their status as translations. Description, as exemplified by certain ekphrastic texts, might also fall on middle ground between the poles of translation and non-translation. By contrast, more expressive linguistic utterances, such as "Ouch!" or "It's hot out," might fall clearly on the non-translational side of the scale, as they do not involve any intentional resolution of a semantic indeterminacy. Likewise a critic might object that publications are not sufficiently "translational" to be included in the scope of the definition of translation. It would not follow that publication is irrelevant to translation studies. Indeed its very

presence on the scale would attest to its importance in the discipline and would justify further research into its relation to translation.

A scalar approach is problematic in certain regards. It mistakenly assumes that we have a firm understanding of the two poles of the scale of translation. The positive pole of translation has not yet been fleshed out in full. If we consider interlingual translations to be paradigmatic of translation, for example, then it would be unclear where intersemiotic translations would fit in. Moreover, the scale would have to be adapted to take into account Ludwig Wittgenstein's (1953) theory of family resemblances according to which terms are not defined by a list of necessary and sufficient criteria but rather by properties that overlap in particular uses of the term. Finally I suggested that intention might play an important role in determining to what extent a text is a translation, but the concept of intention is not straightforward and has notably been debated among neopragmatists (Knapp and Benn Michaels, 1985a; Rorty, 1985). Regardless of specific problems and debates, I believe that the acknowledgement that "translation" is not a concept with a clearly delineated definition will encourage postpositive research in highlighting the nuances and multiplicity of perspectives that factor into defining translation.

BIBLIOGRAPHY

Álvarez, Roman and Vidal M. África Vidal, *Translation, Power, Subversion*. Clevedon: Multilingual Matters, 1996.

Apoptosis. By Drew Berry. The Walter and Eliza Hall Institute for Medical Research. 2006. Web accessible film. <http://www.youtube.com/watch?v=9KTDz-ZisZ0>.

Armstrong, Guyda. "Paratexts and their Functions in Seventeenth-Century English Decamerons." *The Modern Language Review* 102.1 (2007): 40-57.

Army, Department of the. *Army Battle Casualties and Nonbattle Deaths in World War II: Final Report*. Washington, D.C.: Statistical and Accounting Branch Office of the Adjunctant General, 1953.

Ethics and the Curriculum: Critical Perspectives. Spec. issue of *The Interpreter and Translator Trainer (ITT)*. Vol. 5. 1. Ed. Mona Baker and Carol Maier. Manchester: St. Jerome, 2011.

Barrett, Jeffrey. "Book Review of Scientific Representation: Paradoxes of Perspective." *The Journal of Philosophy* 106.11 (2009): 634-39.

Bassnett, Susan and Andre Lefevere, *Translation, History, Culture*. London: Pinter, 1990.

Bassnett, Susan. *Translation Studies*. New York: Routledge, 2002.

Bastin, Georges, Alvaro Echeverri and Angela Campo. "Translation and the Emancipation of Hispanic America." *Translation, Resistance, Activism*. Ed. Maria Tymoczko. Amherst: University of Massachusetts Press, 2010. 42-64.

Baudelaire, Charles. "The Modern Public and Photography." Meyers, Amy Weinstein. *Classic Essays on Photography*. Ed. Alan Trachtenberg. New Haven, CT: Leete's Island Books. (Original work published 1859), 1980. 83-90.

Beaton, M. "Interpreted Ideologies in Institutional Discourse." *Translation and Ideology, Encounters and Clashes*. Spec. issue of *The Translator*. Manchester: St. Jerome, 2007. 271-96.

Becker, Andrew Sprague. *The Shield of Achilles and the Poetics of Ekphrasis*. London: Rowman & Littlefield, 1995.

Becker, Karin. "Picturing Our Past: An Archive Constructs a National Culture." *The Journal of American Folklore* 105.415 (1992): 3-18.

Beebee, Thomas O. and Ikuho Amano. "Pseudotranslation in the fiction of Akutagawa Ryunosuke." *Translation Studies* 3.1 (2010): 17-32.

Ben-Ari, Nitsa. "Reclaiming the Erotic: Hebrew Translations from 1930 to 1980." *Translation, Resistance, Activism*. Ed. Maria Tymoczko. Amherst: University of Massachusetts Press, 2010. 129-48.

Bendiksen, David. "Louder Than Words: The Language of the City and the Voice of the Cinema in Strand and Sheeler's Manhatta (1921)." *UMass Graduate Student Conference in Translation Studies*. Amherst: Unpublished, 2013.

Benjamin, Walter. "The Task of the Translator." *The Translation Studies Reader*. Ed. Lawrence Venuti. Trans. Harry Zohn. London: Routledge. (Original work published 1923), 2000. 69-82.

Berger, John and Jean Mohr. *Another Way of Telling*. New York: Vintage International, 1995.

Berman, Antoine. *The Experience of the Foreign: Culture and Translation in Romantic Germany*. Trans. S. Heyvaert. Albany, NY: State University of New York Press. (Original work published 1984), 1992.

Biesecker, Barbara. "Remembering World War II: The Rhetoric and Politics of National Commemoration at the Turn of the 21st Century." *Quarterly Journal of Speech* 88.4 (2002): 393-409.

Bird, Andrew. "Thomas Kuhn." *The Stanford Encyclopedia of Philosophy*. Ed. Edward Zalta. 2011. <http://plato.stanford.edu/archives/win2011/entries/thomas-kuhn/>.

Boer, Cees de. "Max Ernst: La Petite Fistule Lacrymale qui dit Tac Tac. Seeing the Poetic Possibilities of Freud's Metapsychology." *Verbal/Visual Crossings: 1880-1980*. Ed. Theo D'haen. Amsterdam: Rodopi, 1990. 151-98.

Boersema, David. "Introduction: Pragmatism and Neopragmatism." *Essays in Philosophy* 3.2 (2002).

Boghossian, Paul. *Fear of Knowledge*. Oxford: Clarendon, 2006.

Bolton, Richard, ed. *The Contest of Meaning: Critical Histories of Photography*. Cambridge: The MIT Press, 1989.

Bordwell, David. "Neo-Structuralist Narratology and the Functions of Filmic Storytelling." *Narrative Across Media: The Languages of Storytelling*. Ed. Marie-Laure Ryan. Lincoln, NE: University of Nebraska Press, 2004. 203-19.

Bourdieu, Pierre. *Science of Science and Reflexivity*. Trans. Richard Nice. Chicago: University of Chicago Press, 2004.

—. "The Specificity of the Scientific Field and the Social Conditions of the Progress of Reason." *Social Science Information* 14.6 (1975): 19-47.

Bousquet, Antoine. "Time Zero: Hiroshima, September 11 and Apocalyptic Revelations in Historical Consciousness." *Millennium - Journal of International Studies* 34.3 (2006): 739-64.

Brandom, Robert. *Between Saying and Doing: Towards an Analytic Pragmatism*. Oxford: Oxford University Press, 2008.

—. *Perspectives on Pragmatism: Classical, Recent, and Contemporary*. Cambridge, MA: Harvard University Press, 2011.

Brennen, Bonnie and Hanno Hardt. *Picturing the Past: Media, History, and Photography*. University of Illinois Press, 1999.

Brisset, Annie. "The Search for a Native Language: Translation and Cultural Identity." *The Translation Studies Reader*. Ed. Lawrence Venuti. Trans. Rosalind Gill and Roger Gannon. London: Routledge. (Original work published 1990), 2012. 281-310.

Brothers, Caroline. *War Photography: A Cultural History*. London: Routledge, 1997.

Burch, Robert. "Charles Sanders Peirce." *The Stanford Encyclopedia of Philosophy (Fall 2010 Edition)*. Ed. Edward N. Zalta. 2010. <http://plato.stanford.edu/archives/fall2010/entries/peirce/>.

Burke, Edmund. *A Philosophical Inquiry into the Origin of our Ideas of The Sublime and Beautiful*. London: The University of Adelaide. (Original work published 1757), 2012.

Cámara, Lidia and Eva Espasa. "The Audio Description of Scientific Multimedia." *The Translator: Special Issue: Science in Translation* 17.2 (2011): 415-37.

Catalano, Dominic. "The Roles of the Visual in Picturebooks: Beyond the Conventions of Current Discourse." Ph.D. Thesis. Ohio State University, 2005.

Catford, J. C. *A Linguistic Theory of Translation: An Essay in Applied Linguistics*. Oxford: Oxford University Press, 1965.

Caxton, William. "Prologue to Aeneid." *Western Translation Theory from Herodotus to Nietzsche*. Ed. Douglas Robinson. Manchester: St. Jerome. (Original work published 1490), 2002. 60-62.

Chakravartty, Anjan. "Scientific Realism." *The Stanford Encyclopedia of Philosophy*. Ed. Edward Zalta. 2011. <http://plato.stanford.edu/archives/sum2011/entries/scientific-realism/>.

Cheung, Martha. *An Anthology of Chinese Discourse on Translation: From Earliest Times to the Buddhist Project*. Manchester: St. Jerome, 2006a.

—. *An Anthology of Chinese Discourse on Translation: From Earliest Times to the Buddhist Project*. Manchester: St. Jerome, 2006.

Cheung, Martha. "From 'Theory' to 'Discourse': The Making of a Translation Anthology." *Translating Others*. Ed. Theo Hermans. Manchester: St. Jerome, 2006b. 87.

Cheyfitz, Eric. *The Poetics of Imperialism: Translation and Colonization from The Tempest to Tarzan*. Oxford: Oxford University Press, 1991.

Churchill, Winston. "Prime Minister Winston Churchill's Broadcast on War with Japan." *British Library of Information*. Pearl Harbor History Associates, Inc., 1941. <http://www.ibiblio.org/pha/timeline/411208ewp.html>.

Crawford, Keith. "Re-Visiting Hiroshima: The Role of US and Japanese History Textbooks in the Construction of National Memory." *Asia Pacific Education Review* 4.1 (2003): 108-17.

Creath, Richard. "Logical Empiricism." *The Stanford Encyclopedia of Philosophy*. Ed. Edward Zalta. 2011. <http://plato.stanford.edu/archives/win2011/entries/logical-empiricism/>.

Translation and Ideology: Encounters and Clasher. Spec. issue of *The Translator*. Vol. 13. 2. Ed. Sonia Cunico and Jeremy Munday. Manchester: St. Jerome, 2007.

Danto, Arthur. "The Artworld." *The Journal of Philosophy* 61.19 (1964): 571-84.

Davidson, Donald. *Inquiries into Truth and Interpretation*. Oxford: Clarendon Press, 1984.

"Department of the Army ." *Army Battle Casualties and Nonbattle Deaths in World War II: Final Report*. Washington, D.C.: Statistical and Accounting Branch Office of the Adjunctant General, 1953.

Descartes, Rene. *Meditations on First Philosophy*. Trans. John Cottingham. Cambridge: Cambridge University Press, 1996.

Dewey, John. *Art as Experience*. Ed. J. Boydston. Vol. 10. New York: Capricorn Books. (Original work published 1934), 1958.

—. *The Later Works, 1925-1953*. Ed. Jo Ann Boydston. Vol. 12: 1938. Southern Illinois University. (Original work published 1938), 2008.

—. *The Quest for Certainty: A Study of the Relation of Knowledge and Action (Gifford Lectures 1929)*. Capricorn. (Original work published 1929), 1960.

Dower, John. *Embracing Defeat: Japan in the Wake of World War II*. New York: Norton and Company, 1999.

Druce, Robert. "Colorless Green Signifieds Sleep Furously: Reconciling the Image and the Word." *Verbal/Visual Crossings: 1880-1980*. Ed. Theo D'haen. Amsterdam: Rodopi, 1990. 15-44.

Dryden, John. "Preface to Ovid's Epistles." *Western Translation Theory from Herodotus to Nietzsche*. Ed. Douglas Robinson. Manchester: St. Jerome. (Original work published 1680), 2002. 172-75.

Duncum, Paul. "Holding Aesthetics and Ideology in Tension." *Studies in Art Education* 49.2 (2008): 122-135.

Edwards, Steve. *Photography: A Very Short Introduction*. Oxford: Oxford University Press, 2006.

Emerson, Peter Henry. "Hints on Art." Meyers, Amy Weinstein. *Classic Essays on Photography*. Ed. Alan Trachtenberg. New Haven, CT: Leete's Island Books. (Original work published 1889), 1980. 99-108.

Even-Zohar, Itamar. *Papers in Historical Poetics*. Tel Aviv: University Publishing Projects, 1978.

—. "The Position of Translated Literature within the Literary Polysystem." *Poetics Today* 11.1 (1990): 45-51.

Fahnestock, Jeanne. "Accomodating Science: The Rhetorical Life of Scientific Facts." *Written Communication* 15.3 (1998): 330-50.

Fenton, Sabine and Paul Moon. "The Translation of the Treaty of Waitangi: A Case of Disempowerment." *Translation and Power*. Ed. Maria Tymoczko and Edwin Gentzler. Amherst, MA: University of Massachusetts Press, 2002. 25-44.

Field, Richard. "John Dewey (1859-1952)." *Internet Encyclopedia of Philosophy*. 2005. <http://www.iep.utm.edu/dewey/#H5>.

Fish, Stanley. *Doing What Comes Naturally: Change, Rhetoric, and the Practice of Theory in Literary and Legal Studies.* Durham: Duke University Press, 1989.

Flotow, Luise von. "Feminist Translation: Contexts, Practices and Theories." *TTR: Traduction, Terminologie, Redaction* 4.2 (1991): 69-84.

Fraassen, Bas C. van. *Scientific Representation: Paradoxes of Perspective*. Oxford: Clarendon Press, 2008.

Franco Aixelá, Javier. "An Overview of Interference in Scientific and Technical Translation." *The Journal of Specialised Translation.* 11 (2009): 75-88. <http://www.jostrans.org/issue11/art_aisela.pdf>.

Frank, Richard B. *Downfall: the End of the Imperial Japanese Empire*. Random House, 1999.

Fraser, Karen. *Photography and Japan*. London: Reaktion Books, 2011.

Friedländer, Paul. *Johannes von Gaza und Paulus Silentiarius, Kunstbeschreibungen justinianischer Zeit*. Berlin: B. G. Teubner, 1912.

Fuller, Gillian. "Cultivating Science: Negotiating Discourse in the Popular Texts of Stephen Jay Gould." *Reading Science: Critical and Functional Perspectives on Discourses of Science*. Ed. J. R. Martin and Robert Veel. London: Routledge, 1998. 35-62.

Gao, Xingzu, et al. *Japanese Imperialism and the Massacre in Nanjing*. Trans. Robert Gray. Nanjing: Nanjing University. (Original work published 1962), 1996.

Garner, Gretchen. "Photography and Society in the 20th Century." *The Focal Encyclopedia of Photography*. Ed. Michael Peres. 4th. Amsterdam: Elsevier, 2007. 187-98.

Gest, Howard. "The 1945 Szilard Petition: Memoir by a Signer in Oak Ridge." 2001. <http://sites.bio.indiana.edu/~gest/hgSzilard.pdf>.

Glasersfeld, Ernst von. *Radical Constructivism: A Way of Knowing and Learning*. London: The Falmer Press, 1995.

Goldman, Alvin. "Social Epistemology." *The Stanford Encyclopedia of Philosophy*. Ed. Edward Zalta. 2010. <http://plato.stanford.edu/archives/sum2010/entries/epistemology-social/>.

Gray, Paul. "Doomsdays." *Time* 7 August 1995: 49-55.

Greenfield, Kent Roberts, ed. *United States Army in World War II Pictorial Record: The War Against Japan*. Washington, D.C.: Department of the army, 1952.

Gregory, Jane and Steve Miller. *Science in Public*. New York: Plenum Press, 1998.

Grundberg, Andy and Kathleen McCarthy Gauss. *Photography and Art: Interactions since 1946*. New York: Abbeville Press, 1987.

Hacking, Ian. *Historical Ontology*. Cambridge, MA: Harvard University Press, 2002.

Hales, Peter. "The Atomic Sublime." *American Studies* 32.1 (1991): 5-31.

—. "The Mass Aesthetic of the Holocaust: American Media Construct the Atomic Bomb." *Tokyo Daigaku Amerika Kenkyu Shiryo Senta nenpo* 17 (1995): 1-16.

Harper, Stephen. *Miracle of Deliverance: THe Case for the Bombing of Hiroshima and Nagasaki*. New York: Stein and Day, 1985.

Harrah, David. "Aesthetics of the Film: The Pudovkin-Arnheim-Eistenstein THeory." *The Journal of Aesthetics and Art Criticism* 13.2 (1954): 163-74.

Heffernan, James. "Ekphrasis and Representation." *New Literary History* 22.2 (1991): 97-316.

Heffernan, James. "Entering the Museum of Words: Ashbery's 'Self-Portrait in a Convex Mirror'." *Pictures into Words: Theoretical and Descriptive Approaches to Ekphrasis*. Ed. Valerie Robillard and Els Jongeneel. Amsterdam: VU University Press, 1998. 189-212.

Heidegger, Martin. *Basic writings from Being and time (1927) to The task of thinking (1964)*. Ed. David Farrell Krell. New York: Harper and Row, 1977.

Heller, Steven. "The Ministry of Fear." *Social Research* 71.4 (2004): 849-62.

Hermans, Theo. "Norms and the Determination of Translation: A Theoretical Framework." Hermans, Theo. *Translation, Power, Subversion*. Ed. R Alvarez and C Vidal. Multilingual Matters, 1996. 25-51.

—. "On Modelling Translation: Models, Norms and the Field of Translation." *Livius* 4 (1993): 69-88.

—. *The Manipulation of Literature: Studies in Literary Translation*. New York: St. Martin's Press, 1985.

—. "Translation and Normativity." *Current Issues in Language & Society* 5.1-2 (1998): 51-72.

Hersey, John. *Hiroshima*. New York: Bantam. (Original work published 1946), 1975.

Hildebrand, David L. "The Neopragmatist Turn." *Southwest Philosophy Review* 19.1 (2003).

Hilgartner, Stephen. "The Dominant View of Popularization: Conceptual Problems, Political Uses." *Social Studies of Science* 20.3 (1990): 519-39.

Hine, Lewis. "Social Photography." Meyers, Amy Weinstein. *Classic Essays on Photography*. Ed. Alan Trachtenberg. New Haven, CT: Leete's Island Books. (Original work published 1909), 1980. 109-14.

Holmes, James. *Translated! Papers on Literary Translation and Translation Studies*. 2nd. Amsterdam: Rodopi, 1988.

Holmes, John Haynes. "Editorial Comment." *Unity* (1945): 99.

Hookway, Christopher. "Pragmatism." Spring 2010. *Stanford Encyclopedia of Philosophy*. Ed. Edward N. Zalta. Website. 1 October 2012. <<http://plato.stanford.edu/archives/spr2010/entries/pragmatism/>>.

Hoquet, Thierry. "Translating Natural Selection: True Concept, but False Term?" *Bionomina* 3 (2012): 1-23.

Hu, Bo, et al. "The Bacteriophage T7 Virion Undergoes Extensive Structural Remodeling During Infection." *Science*. 2013. Web. <http://www.sciencemag.org.silk.library.umass.edu/content/early/2013/01/09/science.1231887.full.pdf>.

Inghilleri, Moira. *Interpreting Justice: Ethics, Politics and Language*. Taylor & Francis Group, 2012.

Iser, Wolfgang. *Der Akt des Lesens: Theorie ästhetischer Wirkung*. Munich: Wilhelm Fink, 1976.

Jakobson, Roman. "On Linguistic Aspects of Translation." *On Translation*. Ed. James Holmes, J. Lambert and Raymond van den Broeck. Louvain: Acco. (Original work published 1959), 1978.

James, William. "Philosophical Conceptions and Practical Results." *University Chronicle*. Vol. 1. University of California Berkeley, 1898. 287-310.

—. *Pragmatism*. Amherst, NY: Prometheus. (Original work published 1907), 1991.

—. "The Will to Believe." *The New World* 5 (1896): 327-47.

Johnson, Robert. "Kant's Moral Philosophy." *The Stanford Encyclopedia of Philosophy*. Ed. E. N. Zalta. Stanford University, 2012. <http://plato.stanford.edu/cgi-bin/encyclopedia/archinfo.cgi?entry=kant-moral>.

Kant, Immanuel. *Groundwork of the Metaphysics of Morals*. Trans. Mary Gregor. Cambridge: Cambridge University Press. (Original work published 1785), 1997.

Katan, David. *Translating Cultures: An Introduction for Translators, Interpreters, and Mediators*. Manchester: St. Jerome, 1999.

Kirsch, Scott. "Watching the Bombs Go Off: Photography, Nuclear Landscapes, and Spectator Democracy." *Antipode* 29.3 (1997): 227-55.

Knapp, Steven and Walter Benn Michaels. "A Reply to Richard Rorty: What Is Pragmatism?" *Critical Inquiry* 11.3 (1985a): 466-73.

Knapp, Steven and Walter Benn Michaels. "Against Theory." *Against Theory: Literary Studies and the New Pragmatism.* Ed. W. J. T. Mitchell. Chicago: University of Chicago Press, 1985b. 11-30.

Kuhn, Thomas. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press, 1962.

Kukla, André. *Social Constructivism and the Philosophy of Science*. London: Routledge, 2000.

Lamb, Brett. "Narrative." *LessonBucket.com*. n.d. Web. 10 December 2012.

Langley, Andrew. *Hiroshima and Nagasaki: Fire from the Sky*. Minneapolis, MN: Compass Point Books, 2006.

Latour, Bruno and Steve Woolgar. *Laboratory Life: The Construction of Scientific Facts*. Princeton, NJ: Princeton University Press. (Original work published 1979), 1986.

Latour, Bruno. *Science in Action: How to Follow Scientists and Engineers Through Society*. Cambridge, MA: Harvard University Press, 1987.

Le Feuvre, Lisa. "Bombing Hiroshima." *Photos that Changed the World: The 20th Century*. Ed. Peter Stepan. Munich: Prestel, 2000. 68-69.

Leddy, Tom. "Dewey's Aesthetics." *The Stanford Encyclopedia of Philosophy* . Ed. Edward N. Zalta. Stanford University, 2012. <http://plato.stanford.edu/entries/dewey-aesthetics/#ArtExp>.

Lee, Rensselaer. "Ut Pictura Poesis: The Humanistic Theory of Painting." *The Art Bulletin* 22.4 (1940): 196-269.

Lefevere, Andre. "Composing the Other." *Post-Colonial Translation: Theory and Practice*. Ed. Susan Bassnett and Harrish Trivedi. London: Routledge, 1999. 75-94.

Lefevere, Andre. "Enhancing Cultural Changes by Means of Fictitious Translations." *Translation and Cultural Change*. Ed. Eva Hung. Amsterdam: John Benjamins, 2005. 3-18.

—. "Literary Theory and Translated Literature." *Dispositio* 7.19-20 (1982): 3-22.

—. "Slauerhoff and 'Po Tsju I': Three Paradigms for the Study of Influence." *Tamkang Review* 10.1 (1979): 67-77.

—. *Translation, Rewriting, and the Manipulation of Literary Fame*. London: Routledge, 1992.

Lefevere, Andre. "Why Waste Our Time on Rewrites?" *The Manipulation of Literature: Studies in Literary Translation*. New York: St. Martin's Press, 1985. 215-43.

Lessing, Gotthold. *Laocoon: An Essay on the Limits of Painting and Poetry*. Oxford: Longman, Brown, Green, and Longmans, 1853.

Lewenstein, B. "Science and the Media." *Handbook of Science and Technology Studies*. Ed. S. Jasanoff, et al. Thousand Oaks, CA: Sage, 1995. 343-360.

Liao, Min-Hsiu. "Interaction in the Genre of Popular Science." *Science in Translation.* Spec. issue of *The Translator* 17.2 (2011): 349-68.

Liddell Hart, B. H. *History of the Second World War*. New York: Da Capo Press. (Original work published 1970), 1999.

Lill, Yorikol, et al. "Single-Molecule Study of Molecular Mobility in the Cytoplasm of Escherichia Coli." *Physical Review E* 86.2 (2012): 021907.

Linenthal, Edward T. "Anatomy of a Controversy." *History Wars: The Enola Gay and Other Battles for the American Past*. Ed. Edward T. Linenthal and Tom Engelhardt. New York: Metropolitan Books, 1996. 9-62.

Longino, Helen. "The Social Dimensions of Scientific Knowledge." *The Stanford Encyclopedia of Philosophy*. Ed. Edward Zalta. 2011. <http://plato.stanford.edu/archives/spr2011/entries/scientific-knowledge-social/>.

Lycan, William. *Philosophy of Language: A Contemporary Introduction*. New York: Routledge, 2008.

MacBeth, Danielle. "Pragmatism and the Philosophy of Language." *Philosophy and Phenomenological Research* 55.3 (1995): 501-23.

Mackenzie, Dana. "What Larry Summers Said—And Didn't Say." *Swarthmore College Bulletin*. Swarthmore, PA: Swarthmore College, January 2009. Web.

Maloney, Tom. *U.S. Camera 1946: Victory Volume*. U.S. Camera Publishers, 1956.

Martinez, Miriam and Janis M. Harmon. "Picture/Text Relationships: An Investigation of Literary Elements in Picturebooks." *Literary Research and Instruction* 51.4 (2012): 323-43.

Maslen, Robert. "'The Cat Got Your Tongue': Pseudo-Translation, Conversion, and Control in William Baldwin's 'Beware the Cat'." *Translation and Literature* 8.1 (1999): 3-27.

McCall, Ian. "Translating the Pseudotranslated: Andreï Makine's La Fille d'un héros de l'Union soviétique." *Forum for Modern Language Studies* 42.3 (2006): 287-97.

McDermid, Douglas. "Pragmatism." 2006. *Internet Encyclopedia of Philosophy.* Website. 1 October 2012. <http://www.iep.utm.edu/pragmati/>.

McLean, Gareth. "BBC Funding Debate: Why BBC2 & BBC4 Should Merge." *Organ Grinder Blog*. The Guardian, 2007. <http://www.guardian.co.uk/media/organgrinder/2007/sep/05/bbcfundingdebatewhybbc2bb>.

Megehee, Carol M. and Arch G. Woodside. "Creating Visual Narrative Art for Decoding Stories That Consumers and Brands Tell." *Psychology and Marketing* 27.6 (2010): 603-22.

Mellor, Felicity. "Between fact and fiction: demarcating science from non-science in popular physics books." *Social Studies of Science* 33.4 (2003): 509-38.

Meyers, Amy Weinstein. *Classic Essays on Photography*. Ed. Alan Trachtenberg. New Haven, CT: Leete's Island Books, 1980.

Mitchell, W. *Picture Theory: Essays on Verbal and Visual Representation*. Chicago: University of Chicago Press, 1995.

Miyamoto, Yuki. "Rebirth in the Pure Land or God's Sacrifical Lambs? Religious Interpretations of the Atomic Bombings in Hiroshima and Nagasaki." *Japanese Journal of Religious Studies* 32.1 (2005): 131-59.

Moeller, Susan. *Shooting War: Photography and the American Experience of Combat*. New York: Basic Books, 1989.

Monici, M. "Cell and tissue autofluorescence research and diagnostic applications." *Biotechnological Annual Review* 11 (2005): 227-56.

Montgomery, Scott. "English and Science: Reality and Issues for Translation in the Age of an Expanding Lingua Franca." *The Journal of Specialised Translation* 11 (2009): 6-16.

—. *Science in Translation: Movements of Knowledge Through Cultures and Time.* Chicago: Chicago University Press, 2000.

Myers, Greg. "Discourse Studies of Scientific Popularisation: Questioning the Boundaries." *Discourse Studies* 5.2 (2003): 265-79.

—. "The Pragmatics of Politeness in Scientific Texts." *Applied Linguistics* 10 (1989): 1-35.

—. *Witing Biology: Texts in the Social Construction of Scientific Knowledge*. Madison: University of Wisconsin Press, 1990.

Nagy, Gregory. "Foreword to Greek Studies: Interdisciplinary Approaches." Becker, Andrew Sprague. *The Shield of Achilles and the Poetics of Ekphrasis*. Lanham, MD: Rowman & Littlefield, 1995. ix-x.

Nehamas, Alexander. "Art, Interpretation, and the Rest of Life." *Proceedings and Addresses of the American Philosophical Association* 78.2 (2004): 25-42.

Nida, Eugene. "Science of Translation." *Language* 45.3 (1969): 483-98.

—. *Towards a Science of Translating*. Boston: Brill, 1964.

Nikolajeva, Maria and Carole Scott. *How Picturebooks Work*. New York: Garland, 2001.

Nishiwaki, Yasuhi. "Death in the Rain: A Report from Japan." *The Nation* 1955: 111-114.

Nodelman, Perry. *Words about Pictures: The Narrative Art of Children's Picture Books*. Athens: The University of Georgia Press, 1988.

Norris, Robert and Hans Kristensen. "Global Nuclear Stockpiles, 1945-2006." *Bulletin of the Atomic Scientists* 62.4 (2006): 64-66.

O'Connor, Kim. "Dialectic." *The Keywords of Media Theory*. The University of Chicago, 2003.

Oittinen, Riitta. "Where the Wild Things Are: Translating Picture Books"." *Meta : journal des traducteurs / Meta: Translators' Journal* 48.1-2 (2003): 128-41.

Olohan, Maeve and Myriam Salama-Carr. "Science in Translation." *Science in Translation.* Spec. issue of *The Translator* 17.2 (2011): 179-88.

Olohan, Maeve. "The Status of Scientific Translation." *Journal of Translation Studies* 10.1 (2007): 131-44.

Ostrow, Saul. "Photography, Fine Art Photography, and the Visual Arts: 1900-2001." *The Focal Encyclopedia of Photography*. Ed. Michael Peres. 4th. Amsterdam: Elsevier, 2007. 180-87.

Peirce, Charles Sanders. "How to Make our Ideas Clear." *Philosophical Writings of Peirce*. Ed. Justus Buchler. Mineola, NY: Dover. (Original work published 1878), 1955. 23-41.

—. "Some Consequences of Four Incapacities." *Journal of Speculative Philosophy* 2 (1868): 140-157.

Peirce, James. *The Essential Pierce: Selected Philosophical Writings*. Ed. Natha Houser and Christian Kloesel. Vol. 1. Bloomington, IN: Indiana University Press, 1992. 2 vols.

Pfeiffer, Raymond. "An Introduction to Classic American Pragmatism." *Philosophy Now*. 43. Ed. Raymond Pfeiffer. November/December 2012. Web. <http://philosophynow.org/issues/43/An_Introduction_to_Classic_American_Pragmatism>.

Pont, Olaf Du. "Robert Graves's Claudian Novels: A Case of Pseudotranslation." *Target* 17.2 (2005): 327-47.

Popper, Karl. *The Logic of Scientific Discovery*. Trans. Karl Popper. New York: Basic Books, 1959.

—. *Unended Quest: An Intellectual Autobiography*. London: Routledge. (Original work published 1974), 2002.

Psillo, Stathis. *Scientific Realism: How Science Tracks Truth*. London: Routledge, 1999.

Pumphrey, S. and R. Cooter. "Separate Spheres and Public Places: Reflections on the History of Science Population and Science in Popular Culture." *History of Science* 32 (1994): 237-67.

Putnam, Hilary. *Words and Life*. Ed. James Conant. Cambridge, MA: Harvard University Press, 1995.

Pym, Anthony. *Method in Translation History*. Manchester: St. Jerome, 1998.

Quan, Roy. "Photography and the Creation of Meaning." *Art Education* 32.2 (1979): 4+6+8-9.

Quine, W. V. O. *Word and Object*. Cambridge, MA: Massachusetts Institute of Technology Press, 1960.

Rampley, Matthew. "Identity and Difference: Jackson Pollock and the Ideology of the Drip." *Oxford Art Journal* 19.2 (1996): 83-94.

—. "The Poetics of the Image: Art History and the Rhetoric of Interpretation." *Marburger Jahrbuch für Kunstwissenschaft* 35 (2008): 7-30.

Ringmar, Martin. "'Roundabout Routes': Some Remarks on Indirect Translations." *CETRA Research Seminar in Translation Studies*. 2006.

Robillard, Valerie. "In Pursuit of Ekphrasis: An Intertextual Approach." *Pictures into Words: Theoretical and Descriptive Approaches to Ekphrasis*. Amsterdam: VU University Press, 1998. 53-72.

Robinson, Doug, ed. *Western Translation Theory from Herodotus to Nietzsche*. Manchester: St. Jerome, 2002.

Robinson, Henry Peach. "Idealism, Realism, Expressionism." Meyers, Amy Weinstein. *Classic Essays on Photography*. Ed. Alan Trachtenberg. New Haven, CT: Leete's Island Books. (Original work published 1896), 1980. 91-98.

Rorty, Richard. *Contingency, Irony and Solidarity*. Cambridge: Cambridge University Press, 1989.

—. *Philosophy and Social Hope*. New York: Penguin, 1999.

—. *Philosophy and the Mirror of Nature*. Princeton, NJ: Princeton University Press, 1979.

—. "Philosophy without Principles." *Critical Inquiry* 11.3 (1985): 459-65.

—. *Truth and Progress*. Cambridge: Cambridge University Press, 1998.

Rosenthal, Peggy. "The Nuclear Mushroom Cloud as Cultural Image." *American Literary History* 3.1 (1991): 63-92.

Rummel, R. J. *Death by Government*. New Brunswick, NJ: Transaction, 1994.

Ryan, Marie-Laure, ed. *Narrative Across Media: The Languages of Storytelling*. Lincoln, NE: University of Nebraska Press, 2004.

Saito, Hiro. "Reiterated Commemoration: Hiroshima as National Trauma." *Sociological Theory* 24.4 (2006): 353-76.

Sarukkai, Sundar. *Translating the World: Science and Language*. Lanham, Maryland: University Press of America, 2002.

Scheer, Ewa. 2012. 1 July 2012. <http://scheerewa.com/#home>.

Schulenberg, Ulf. "Wanting Lovers Rather than Knowers - Richard Rorty's Neopragmatism." *Amerikastudien / American Studies* 48.4 (2003): 577-608.

Secret Universe: The Hidden Life of the Cell. Dir. Mike Davis. BBC Two. BBC, 2012. Web-accessible movie. <http://www.bbc.co.uk/programmes/b01nln7d>.

Sekula, Allan. "On the Invention of Photographic Meaning." Thesis (M.F.A.). University of California San Diego, 1974.

Selden, Mark. "A Forgotten Holocaust: US Bombing Strategy, the Destruction of Japanese Cities and the American Way of War from World War II to Iraq." *Japan Focus*. 2007. <http://www.japanfocus.org/-Mark-Selden/2414>.

Sengputa, Mahasweta. "Translation, Colonialism, and Poetics: Rabindranath Tagore in Two Worlds." *Translation, History, and Culture*. Ed. Susan Bassnett and Andre Lefevere. London: Pinter, 1990. 56-63.

Sengupta, Mahasweta. "Translation as Manipulation: The Power of Images and Images of Power." *Between Languages and Cultures: Translation and Cross-Cultural Texts*. Ed. Anuradha Dingwaney and Carol Maier. Pittsburgh: University of Pittsburgh Press, 1995. 159-74.

Settz, Daniel. "Atomic Bombs: New Museums, New Approaches." *Radical History Review* 75 (1999): 92-108.

Shapiro, Gary. "The Absent Image: Ekphrasis and the 'Infinite Relation' of Translation." *Journal of Visual Culture* 6.1 (2007): 13-24.

Shuttleworth, Mark. "Translational Behaviour at the Frontiers of Scientific Knowledge: A Multilingual Investigation into Popular Science Metaphor in Translation." *Science in Translation.* Spec. issue of *The Translator* 17.2 (2011): 301-23.

Skates, John Ray. *The Invasion of Japan: The Alternative to the Bomb*. Columbia, SC: University of South Carolina Press, 1994.

Smith, John Maynard. "The Concept of Information in Biology." *Philosophy of Science* 67.2 (2000): 177-94.

Sontag, Susan. "On Photography." *Communication in History: Technology, Culture, and Society*. Ed. David Crowley and Paul Heyer. 4th. Boston: Allyn and Bacon, 2002. 174-78.

Sperber, Dan and Dierdre Wilson. *Relevance Theory: Communication and Cognition*. Oxford: Blackwell, 1995.

Steiner, George. *After Babel: Aspects of Language and Translation*. 1992.

Stepan, Peter. *Photos that Changed the World: The 20th Century*. Ed. Peter Stepan. Munich: Prestel, 2000.

Stich, Rodney. *Japanese and U.S. World War II Plunder and Intrigue*. Silverpeak, 2010.

Stieglitz, Alfred. "Pictorial Photography." Meyers, Amy Weinstein. *Classic Essays on Photography*. Ed. Alan Trachtenberg. New Haven, CT: Leete's Island Books. (Original work published 1899), 1980. 115-24.

Stimson, Henry Lewis. "The Decision to Use the Atomic Bomb." *Harper's Magazine* 1947: 97-107.

Strowe, Anna. *Io Scrittore: Authorial Construction in the Italian Renaissance Novella and Its Translation into English*. Dissertation. University of Massachusetts Amherst., forthcoming. Dissertation.

Stulberg, Robert B. "Heidegger and the Origin of the Work of Art: An Explication." *Heidegger and the Origin of the Work of Art: An Explication* 32.2 (1973): 257-65.

Sullivan, Edward. *The Ultimate Weapon: The Race to Develop the Atomic Bomb*. New York: Holiday House, 2007.

Sumner, David. *The Magazine Century: American Magazines since 1900*. New York: Peter Lang, 2010.

"The BBC Executive's Review and Assessment." *Annual Report 2011/2012*. London: British Broadcasting Corporation Broadcasting House, 2012.

"The Greatest Weapon: Conquest by Atom." *Newsweek* 20 August 1945: 22-23.

The United States Strategic Bombing Survey. *The Effects of Bombing on Health and Medical Services in Japan*. Washington, 1947.

"The War Ends: Burst of Atomic Bomb Brings Swift Surrender of Japanese." *Life* 20 August 1945: 25-31.

Thomas, Julia. "Photography, National Identity, and the "Cataract of Times": Wartime Images and the Case of Japan." *The American Historical Review* 103.5 (1998): 1475-1501.

Thornton, Stephen. "Karl Popper." *The Stanford Encyclopedia of Philosophy*. Ed. Edward Zalta. 2011. <http://plato.stanford.edu/archives/win2011/entries/popper/>.

Toury, Gideon. *Descriptive Translation Studies: And Beyond*. Amsterdam: John Benjamins, 1995.

Trupej, Janko. "Translating Racist Discourse in Slovenia during the Socialist Period: Mark Twain's Adventures of Huckleberry Finn." *Translation and the Reconfiguration of Power Relations*. Ed. Beatrice Fischer and Matilde Nisbeth Jensen. Zurich: Lit Verlag, 2012. 91-108.

Tunney, Kelly Smith, et al., *Memories of World War II*. Harry N. Abrams Inc , 2004.

Turk, Marija and Maja Opašić. "Linguistic Borrowing and Purism in the Croatian Language." *Suvremena Lingvistika* 65.1 (2008): 73-88.

Tymoczko, Maria and Edwin Gentzler, *Translation and Power*. Amherst: University of Massachusetts Press, 2002.

Tymoczko, Maria. "Censorship and Self-Censorship in Translation." *Translation and Censorship: Patterns of Communication and Interference*. Ed. Eiléan Ní Chuilleanáin, Cormac Ó Cuilleanáin and David Parris. Manchester: St. Jerome, 2007a. 24-45.

—. *Enlarging Translation, Empowering Translators*. Manchester: St. Jerome, 2007b.

Tymoczko, Maria. "Ideology and the Position of the Translator: In What Sense is a Translator 'In Between'?" *Apropos of Ideology: Translation Studies on Ideology - Ideologies in Translation Studies*. Ed. Maria Calzada Perez. Manchester: St. Jerome, 2003. 181-201.

Tymoczko, Maria. "Reconceptualizing Translation Theory: Integrating Non-Western Thought about Translation." *Translating Others*. Ed. Theo Hermans. Vol. I. Manchester: St. Jerome, 2006. 13-32.

—. "Trajectories of Research in Translation Studies." *Meta: Journal des traducteurs* 50.4 (2005).

—. *Translation in a Postcolonial Context: Early Irish Literature in English Translation*. Manchester: St. Jerome Publishing, 1999.

Tymoczko, Maria. "Translation Theory." *Encyclopedia of Applied Linguistics*. Wiley-Blackwell, 2012. S.v.

—. *Translation, Resistance, Activism*. Ed. Maria Tymoczko. Amherst: University of Massachusetts Press, 2010.

United States Holocaust Memorial Museum. "World War II in the Pacific." *Holocaust Encyclopedia*. Washington, D.C., 2012. <http://www.ushmm.org/wlc/en/article.php?ModuleId=10005155>.

Utsumi, Hirofumi. "Nuclear Images and National Self-Portraits: Japanese Illustrated Magazine Asahi Graph, 1945-1965." *Annual Review of the Institute for Advanced Social Research* 5 (2011): 1-29.

van den Broeck, Raymond. "The Limits of Translatability Exemplified by Metaphor Translation." *Poetics TOday* 2.4 (1981): 73-87.

Vandepitte, Sonia, Liselotte Vandenbussche and Brecht Algoet. "Travelling Certainties: Darwin's Doubts and Their Dutch Translations." *Science in Translation.* Spec. issue of *The Translator* 17.2 (2011): 275-99.

Venuti, Lawrence. "Ekphrasis, Translation, Critique." *Art in Translation* 2.2 (2010): 131-52.

—. *Rethinking Translation: Discourse, Subjectivity, Ideology*. Taylor and Francis, 1992.

—. *The Translator's Invisibility: A History of Translation*. London: Routledge. (Original work published 1995), 2008.

Vieira, Else Ribeira Pires. "A Postmodern Translational Aesthetics in Brazil." *Translation Studies: An Interdiscipline*. Ed. Mary Snell-Hornby, Franz Pochhacker and Klaus Kaindl. Amsterdam: John Benjamins, 1994. 65-72.

Villarreal, Luis. "Are viruses alive?" *Scientific American - American Edition* 291 (2004): 100-05.

Wakabayashi, Judy. "A Japanese Perspective on the Universalism vs Particularism Debate." *Beyond the Western Tradition: Translation Perspectives XI*. Ed. Marilyn Gaddis Rose. Binghamton: State University of New York at Binghamton, 2000. 174-271.

"Was A-Bomb on Japan a Mistake? Unpublished Story of fateful argument 15 years ago." *U.S. News and World Report* 1960.

Weart, Spencer. *Nuclear Fear: A History of Images*. Cambridge, MA: Harvard University Press, 1988.

Webb, Ruth. *Ekphrasis, Imagination and Persuasion in Ancient Rhetorical Theory and Practice*. Surrey: Ashgate, 2009.

Welsh, Ryan. "Ekphrasis." *The Keywords of Media Theory*. The University of Chicago, 2007.

White, Hayden. *Metahistory: The Historical Imagination in 19th-century Europe*. Baltimore: Johns Hopkins University Press, 1973.

Wilkins, Alasdair. *Ultra-tiny 'nano-ear' can hear bacteria and viruses*. Ed. Annalee Newitz. io9. 2012. Web article. <http://io9.com/5876669/ultra+tiny-nano+ear-can-hear-bacteria-and-viruses>.

Wittgenstein, Ludwig. *Philosophical Investigations*. Trans. G. Anscombe. Oxford: Blackwell, 1953.

Wolf, Werner. "Narrative and narrativity: A narratological reconceptualization and its applicability to the visual arts." *Word and Image: A Journal of Verbal/Visual Enquiry* 19.3 (2012): 180-97.

Yamada, S. and S. Kuo. "The Inside Story of Brownian Motion: Revealing Intracellular Mechanics." *Biophysics* 43.4 (2003): 180-85.

Yang, Daqing. "Documentary Evidence and Studies of Japanese War Crimes: An Interim Assessment." *Researching Japanese War Crimes Records: Introductory Essays*. Washington, D.C.: National Archives and Records Administration for the Nazi War Crimes and Japanese Imperial Government Records Interagency Working Group, 2006. 21-56.

Zayas, Marius De. "Photography and Artistic-Photography." Meyers, Amy Weinstein. *Classic Essays on Photography*. Ed. Alan Trachtenberg. New Haven, CT: Leete's Island Books. (Original work published 1913), 1980. 125-32.

Zelizer, Barbie. *About to Die: How News Images Move the Public*. Oxford: Oxford University Press, 2010.

Zeman, Scott. "'Taking Hell's Measurements': Popular Science and Popular Mechanics Magazines and the Atomic Bomb from Hiroshima to Bikini." *The Journal of Popular Culture* 41.4 (2008): 695-711.