

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

**F.A. Lange's 'Standpoint of the Ideal':
Reform or Revolution?**

Victor Heese

**A Thesis
in
The Department
of
Philosophy**

**Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts at
Concordia University
Montréal, Quebec, Canada**

March 1997

© Victor Heese, 1997



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-25965-X

Canada

Abstract

Lange's Standpoint of the Ideal: Reform or Revolution?

Victor Heese

Lange's The History of Materialism (1866) is not only history but a socio-political agenda that argues that the social ills of his context are the consequence of a materialist worldview and that, if violent upheaval is to be avoided, a new worldview must be adopted. The worldview that Lange offers is called the Standpoint of the Ideal. As a modification of Kant's critical philosophy, it asserts that a part of the human constitution is a universal, poetic inclination that underlies experience and acts to synthesize experience into a harmonious unity. This harmonizing principle also has an aesthetic and ethical dimension to it. If we once recognize that the consequences of a materialistic worldview lead to social turmoil and we choose to give due attention to this aspect of our nature, we can not only resolve the metaphysical questions that perpetually bother us but we can also reform society.

This thesis argues that, although Lange hoped that the Standpoint of the Ideal would result in 'beneficent reform' thus averting an impending revolution, the adoption of the Standpoint of the Ideal is revolutionary. This conclusion is based on Kuhn's analysis of 'revolutionary' paradigmatic change as outlined in The Structure of Scientific Revolutions (1970) and uses Collingwood's concept of a 'constellation of absolute presuppositions' as the definition for a social paradigm (An Essay on Metaphysics, 1972). This thesis argues that the 'paradigm' that Lange is critiquing is modernism and that the Standpoint of the Ideal offers an incommensurate paradigm and thus is revolutionary.

Preface to the Reader

The version of The History of Materialism used in the preparation of this thesis is the second edition published by The Humanities Press in 1950. Lange divided his work into two books; “History of Materialism Until Kant” and “History of Materialism Since Kant”. However, this version of the book was published in three volumes with pagination beginning at zero for each volume. For the sake of clarity, all citations from The History of Materialism will refer to volume and page number rather than to book number, e.g., (Lange, 1950, vol. II, p. 33).

Table of Contents

Introduction	1
Chapter 1: History of Materialism	8
sec. 1: Principles and Proponents of Materialism	
sec. 2: Kant's Critical Philosophy	
sec. 3: Lange's Critique of Materialism	
Chapter 2: Critique of Social Institutions	25
sec. 1: Industrialism	
sec. 2: Institutionalized Religion	
Chapter 3: Standpoint of the Ideal	34
sec. 1: Philosophical Argumentation	
sec. 2: Social Reforms	
Chapter 4: Paradigms and Revolution	46
sec. 1: Kuhn's Paradigms and Shifts	
sec. 2: Collingwood's Absolute Presuppositions	
Conclusion	57
References and Bibliography	65

Introduction

The History of Materialism: And a Critique of Its Present Importance by Friedrich Albert Lange (1828-1875) first appeared in 1866 with a second edition in 1873. Its arrival was timely in that the first edition appeared in what had come to be known as 'the materialistic sixties' (Russell, 1950). After the death of Hegel in 1831, idealism became less fashionable in the European intellectual community and realism gained popularity (with materialism being one form of realism), although not without debate. The book was received by the intellectual community with enthusiasm and went through ten printings by 1921 (Willey, 1978). Although contemporary philosophy pays less attention to its author, Lange is credited with being the intellectual founder of the Marburg School, with having influenced, among others, Cohen, Vaihinger and Nietzsche (Stack, 1983) and with being the person "who initiated Kantian socialism" (van der Linden, 1988, p. 222).¹

The History of Materialism is a thorough treatment of the philosophy of materialism beginning with its roots in pre-Socratic Greek thought and chronicling its progress and variations up to the time of Lange. But, it is more than just a compendium that documents the history of materialism; it is also a socio-political document. Lange, who was an outspoken advocate and activist for the fair treatment of workers, believed that the philosophy of materialism had become the underlying principle of the society and of the capitalism which was the cause of the exploitation of the working classes. The History of Materialism

¹ Stack (1983) goes so far as to suggest that Lange's thought may even "have had some influence on the development of the pragmatic concept of truth in Anglo-American philosophy" (p. 6).

is a critique of this underlying philosophy and, therefore, a critique of the society.

With the post-Enlightenment rise of science and scientific thinking, and with the technological capabilities that resulted from the successes of science, it must have seemed that there were no limits to knowledge. But, despite the optimism of the intellectual community, outside the protected walls of academia there were problems and conflicts that threatened the stability of European society. Economically, the industrial revolution, with its potential to free many from the constraints of physical labour, had resulted in the further stratification of the population. Politically, monarchies were being replaced with somewhat more democratic methods of governing--sometimes with the bloodshed of violent revolution being the ultimate means of change. Religious institutions, which ought to have been the source of solace in this time of instability, were often more interested in political power than parishioners. Education remained under the control of the state; teachers were regarded as civil servants and were not permitted to voice dissent.² Lange comments that

the present state of things has been frequently compared with that of the ancient world before its dissolution, and it cannot be denied that significant analogies present themselves. We have the immoderate growth of riches, we have the proletariat, we have the decay of morals and religion; the present forms of government all have their existence threatened, and the belief in a coming revolution is widely spread and deeply rooted. (1950, vol. III, p. 269)

In The History of Materialism, Lange argues that the adoption of the principles of materialism were the root cause of many of these social ills.

A current of Materialism runs through our modern civilization, which carries away with it every one who has not somewhere found 'firmer anchorage'. Philosophers and economists, statesmen and business

² In 1861, Lange was forced to resign a teaching position in Duisburg after deliberately disobeying the decree that forbade dissent from civil servants (Köhnke, 1991; Zweig, 1967; biographical notes in Lange, 1950).

men, agree in praising the present and its achievements. With the praise of the present is combined the cult of actuality. The ideal has no quotation on our exchanges; what cannot scientifically and historically show its legitimacy is condemned to perish, even though a thousand joys and refreshments for the people depend upon it, for which we no longer care. (Lange, 1950, vol.III, p. 332)

Although this may sound as if Lange thought materialism to be the bogey-man from which all evil emanated, this is not the case. For Lange, the fault lay not with the philosophy of materialism but with the failure to recognize its limits. When looked at as the history of the debate between idealists and materialists, The History of Materialism demonstrates that materialism has been a useful counter-argument in the face of systematic idealism that has become too fanciful or superstitious. As well, materialism provides the philosophical foundation for science which has been responsible for much of the technology that has benefited humankind. It is only when materialism bursts its boundaries that the consequences become potentially dangerous--to the point where Lange envisions the dissolution of the civilization. For Lange, the solution lies "solely and entirely in the timely surmounting of Materialism, and in the healing of the breach in our popular life which is produced by the separation of the educated from the people and its spiritual needs" (1950, vol. III, pp. 333-334).

The 'surmounting of materialism' is accomplished through the critical philosophy of Kant's 'Copemican turn'. The attraction of materialism is that "materialism more than any other system keeps to reality, i.e., to the sum total of the necessary phenomena given to us by the compulsion of sense" (Lange, 1950, vol. III, p. 336) Yet, Lange reminds us of what Kant had asserted; our concepts do not conform to the objects, objects conform to our concepts. Despite the 'compulsion of sense' to take the material world as real, when the foundations of materialism are analyzed, we end up via sensationalism in

idealism (Russell, 1950). Lange expands on this Kantian form of idealism to come up with his formula for the resolution of the crisis in European society--the Standpoint of the Ideal. He believes that, with the adoption of the Standpoint of the Ideal as the guiding principle, the crisis can be averted. "*Ideas and sacrifices* may yet save our civilization, and transform the path that leads through desolating revolution into a path of beneficent reforms" (Lange, 1950, vol. III, p. 334).

From this, it is obvious that Lange was not interested in change wrought through the means of violence. Although he was certainly in contact with the Socialists, when their agenda included the violent overthrow of existing structures, Lange did not concur. The Standpoint of the Ideal was meant to be a non-violent alternative that would reform society without recourse to 'the path that leads through desolating revolution'.

Hans Martin Sass, taking a narrow Marxist position, has argued that Lange's agenda was primarily reactionary (Köhnke, 1991). According to Sass, Lange anticipated revolution and, therefore, proposed the Standpoint of the Ideal as a means to effect the reforms that would avert a revolution. This interpretation, however, suggests that Lange thought that the essence of his society was worthwhile and that, with a little tinkering, this society would survive and the violence of a revolution would be avoided.

This reactionary interpretation speaks directly to the character of Lange and does not seem to be supported by what we know about him. Unlike most academics, Lange was directly involved in working for progressive change. He set up a consumer cooperative; he opened his own publishing house that printed a newspaper directed at the working class; and, he advocated land redistribution (van der Linden, 1988).

Although these actions suggest a desire for improvement in living conditions for the working class, Lange's agenda went significantly further. In the foreword to Die Arbeiterfrage, a booklet in which he sets out his views concerning the problems between workers and employers, Lange advocates the

complete renewal of the principles of living . . . (and that) we must await the effect of the enhancement of pure joy in living, of the dissemination of spiritual and spiritualized sensual pleasures, lastly however also of a deepening of the inner life and an ennoblement of the character such as we shall be able to realize when the oppressed classes are . . . offered not only material betterment but also leisure and fellowship in free and novel modes of life. (cited in Köhnke, 1991, p. 154)

One can see that Lange's progressive agenda extends beyond mere 'material betterment'. Lange hoped for and was working toward 'the complete renewal of the principles of living'.

In Lange's context, the connotation of 'revolution' would most certainly have evoked the image of the guillotine. Although involved in the socialist movement of his time, Lange obviously hoped to avoid the tearing down that is the consequence of violent revolution. To this end, he offered the Standpoint of the Ideal as a "path that leads through desolating revolution into a path of beneficent reforms" (Lange, 1950, vol. III, p. 334).

Yet, the adoption of Lange's Standpoint of the Ideal can be seen as more than just a path to reform society; it can be understood as being revolutionary. In The Structure of Scientific Revolutions (1970), Thomas Kuhn outlines how a new idea can so transform how science defines itself and its subject matter that Kuhn calls the idea revolutionary. Kuhn shows how science in general or a specific scientific discipline operates from a particular set of assumptions. The complete set of assumptions makes up a particular paradigm. However, within

any paradigm, there are always anomalies that place a strain on the paradigm. When the strain from these anomalies becomes too great, a new idea is required to explain the data. Often, this new idea contradicts the assumptions of the paradigm. If the existent paradigm is unable to accommodate the anomaly, in some cases, a new explanation is required and a new paradigm is established. As the new paradigm and the old are incommensurate, a paradigm shift is necessary and Kuhn labels this shift as 'revolutionary'.

Although Kuhn restricts his analysis to science, the principles which he discusses can be applied to socio-political change--as long as appropriate modifications are made. If one translates the scientific assumptions that underlie any particular scientific paradigm as 'absolute presuppositions' as described by R.G. Collingwood in An Essay on Metaphysics (1972) and Kuhn's scientific paradigm as Collingwood's 'constellation of absolute presuppositions', one can then apply Kuhn's analytical criteria to socio-political change.

Although the term had not yet been invented, when Lange describes the philosophical underpinnings of his time, he is describing what has come to be known as 'modernism'. In The History of Materialism, Lange is very critical of this philosophy and provides the Standpoint of the Ideal as an antidote.

Lange offered the Standpoint of the Ideal as a means both to avoid the destruction of a revolution and to transform his society through 'beneficent reforms'. His stated goal was reform not revolution. This thesis argues that, if one applies the Kuhnian analysis with the above-mentioned modifications, the Standpoint of the Ideal is revolutionary and not just a policy that would initiate social reform. The absolute presuppositions of the Standpoint of the Ideal are irreconcilable with the absolute presuppositions of dogmatic materialism and

with modernism in general. The adoption of the absolute presuppositions of the Standpoint of the Ideal would constitute a paradigmatic shift significant enough to be legitimately called revolutionary.

Chapter 1

History of Materialism

For any student of the philosophy of science, The History of Materialism offers a thorough survey of the philosophy of materialism beginning with its roots in pre-Socratic Greece up to the middle of the 19th century. Lange's treatment of the individual thinkers is even-handed--usually offering a description of the ideas without comment or critique and at the same time providing the context in which the thinker was proposing his or her ideas. From the time of its inception in pre-Socratic science to the present, there has been a debate over materialism. This chapter will briefly sketch the history of this debate, with a particular focus on Kant and on the importance of Kant to Lange's critique of materialism.

To understand the natural world and perhaps, thereby, to modify it to the advantage of humankind is an important part of the human story. The debate concerning of what the world is made and the manner in which it operates is as old as philosophy itself and materialism is one of the most successful theories in this debate.

Simply put, materialism is the belief that 1) matter is the sole reality and 2) matter functions according to the dictates of laws (Russell, 1950). These are the two dogmas upon which materialist theory rests.

Lange begins his survey with the antecedents to and the atomic theory of Democritus. Although the sciences of astronomy and mathematics predate Democritus, these sciences were able to co-exist with the mythic cosmogony of ancient Greece and did not rely upon a materialistic philosophy. If one wished

to chart the movement of celestial bodies or to determine that the square of the hypotenuse of a right angle triangle is equal to the sum of the squares of the two other sides, it was not necessary to assert that matter was the sole reality. Democritus' declaration that there is nothing but tiny, indestructible particles of stuff and empty space and that all change is but the combination and separation of these 'atoms' was the beginning of materialism and thereby of natural science.

This theory, however, did not spring fully clothed from the head of Zeus. Other lesser-developed atomic theories predate that of Democritus (Brumbaugh, 1981), however, he is credited with its fullest systematic formulation of that time. In his propositions that nothing arises out of nothing, that nothing that is can be destroyed, and that all change is only combination and separation of atoms are found the two doctrines of the conservation of matter and of energy. Democritus went further to say that nothing happens by chance but everything through a cause and of necessity. This is an early expression of materialism's second dogma.

To answer criticisms that this seemingly reductionist approach does not explain the variety manifest in the sensible world, Democritus declared that there are an infinite number of atomic particles and that they vary in shape and size, and that the infinite variety of discernible objects is the consequence of the infinite possibilities of their combination. There is, however, no qualitative difference between the varieties of atoms. As well, there are no internal conditions which dictate how an atom will act. As these atoms fall eternally through eternal space, they act on each other by means of pressure or collision and the effect of these atoms upon each other determines what is and what happens. To explain the apparent qualitative difference between animate and

inanimate objects, Democritus proposed that life and soul were but two special forms of matter; that the soul consists of atoms that are fine, round and smooth like those of fire. These atoms are the most mobile and permeate the whole body. Through their motion, the phenomena of life are produced.

When the atomic theory of Democritus was combined with Thales' declaration that 'all is water', which is an assertion that the physical world has a unitary nature, it was now possible to conceptualize that there might be commonalities between the various existing fields of inquiry. Prior to this, although empirical and systematic observation of the physical world was ongoing, the various budding sciences functioned independently without the consideration of the unification of the disciplines under a single over-arching designation--natural science (Collingwood, 1972).

The comparatively simple systematization of Democritus was profound given the context into which it was interposed. According to popular belief, what happened in the natural world was subject to the capricious actions of the gods. What Democritus and Thales were suggesting was that the observable phenomena of the physical world were better explained through theories based upon systematic observation than through the pantheon of fickle gods who populated Mount Olympus.

Although the materialistic explanation of the cosmos found some support in the sensationalism of Protagoras and the Sophists, it did, of course, meet with opposition. Not only did these theories intrude on the territory (and income) of institutional religion,¹ but it also contradicted the ideas of other contemporary

¹ To give some idea of the ire with which ancient philosophers have been met from the "haughty priesthood", Lange (1950) lists a few examples: Socrates, who chose hemlock over retraction; Aristotle, who fled rather than permit a similar "sacrilege against philosophy" (vol. I, p. 6); Protagoras, who also fled and had his work publicly burnt; Anaxagoras, arrested and forced to flee; Theodorus and Diogenes, prosecuted as deniers of the gods. "And all of this happened in humane and enlightened Athens" (vol. I, p. 7).

philosophers.

Platonic philosophy looks at the world with the eyes of the idealist. What is apparent to the senses are mere 'shadows cast upon the wall of a cave'. That which has the greatest reality is not the 'stuff' of sensation nor even the assumed external objects, but the ideas or 'forms' which give these shadows their content and meaning. Effort spent cultivating knowledge of the physical world is not highly valued for what is truly important can only be found and understood in the realm of ideas (Lange, 1950). The knowledge of Platonic philosophy seeks to find the universal essence of things. The questions of Platonism are directed toward the discovery of the beautiful, the just, the good, which are given the full status of being, and to which the search for knowledge of the physical world must always be subordinate.

Platonic philosophy strikes at materialism at one of its weakest points--ethics. Because of the determinism inherent in any system that proposes that everything that happens happens according to natural law, materialism has always had difficulty in explaining why it is that humankind has such a deep sense of morality and how it is possible to derive a system of ethics that has any universal prescriptive authority (i.e., how does one arrive at an ought given only an is?).

Thus, with philosophy barely into its infancy, the debate over the nature of reality has begun. The lines are drawn and the opening salvos are fired in a battle that continues even to the present.

"Materialism always rests upon the contemplation of nature" (Lange, 1950, vol. II, p. 297). It denies the existence of anything that cannot be verified through observation and postulates a world that makes sense and is open to the senses. As a philosophical tool, it is most effective when it is directed

“against the literalism of traditional dogmas” (Lange, 1950, vol. III, p. 292).

Yet, despite its anti-dogmatic efficacy and an epistemological foundation that is available to all rather than only a select few in some inner circle,

the human spirit will never be content with the world of understanding, which an exact empiricism might afford us, so the Platonic philosophy will ever remain the first and most elevated type of a poetical exaltation of the spirit above the unsatisfying patchwork of knowledge, and we are as much justified in this exaltation on the wings of imaginative speculation as in the exercise of any function of our mental and physical faculties. (Lange, 1950, vol. I, p. 79)

Knowing how to split an atom, how to neutralize an acid with a base, how to design a flying buttress that will support the side wall of a great cathedral, how to predict a lunar eclipse; these are all useful, but they do little to refresh the human spirit.

This is the dilemma to which both Democritus and Plato speak. Although the materialism of Democritus and the idealism of Plato have similar objectives (i.e., the critique of Olympus), their solutions are in contradiction one to the other. But in their principles are found the bases of the perennial debate over the nature of reality. Is reality the sum total of the bits of stuff that move about according to laws that are indifferent and unbreakable? Or, is there something more--an authority of some kind that is concerned and involved in the workings of the universe and serves as the guarantor of morality? And, how is it possible to determine the answer one way or the other?

After Democritus and Plato, the debate continues with Aristotle. Although the systematization with which Aristotle classifies the natural world somewhat resembles the methodology of science, his metaphysics, which are the basis of the Scholastic worldview, in fact, deter the development of science.

Democritus' principle that nothing happens by chance, but everything

through a cause and of necessity denies the possibility of a teleology. There is no God guiding the affairs of the world; there is no Great Principle that ensures that the events of the universe are progressive. For Aristotle, whose philosophy Lange (1950) deems to be conservative and traditional, there must be something that animates the universe and guarantees the good. His answer is the Prime Mover which is a form of perfection that gave the universe its initial impetus and which is the model and motivation for the progressive perfection that Aristotle believes to be happening.

Following Aristotle, two Greek schools of thought tried to infuse an ethical dimension to a materialist worldview. Epicureanism and Stoicism denied the gods and the immortality of the soul yet, the essential component of both these schools was a standard of conduct. Basing their ethics on 'natural law', these schools taught that the greatest good was to bring one's conduct into harmony with nature.

Unfortunately for materialism and science, with the decline of Hellenic culture and the rise of Rome, a new pantheon of interfering gods ascended the throne of popular belief. With the notable exception of Lucretius, who attacked popular religion and offered his own theory of the natural social development of humankind from cave dwellers to users of language, arts and politics, Western culture became enwrapped in the darkness and terror of superstition thereby suppressing the development of natural science.

When the more sympathetic God of the Christians replaced the unruly Roman mob of deities, the physical world came to be seen in a more benign light, yet, the perfection of the soul, as highest calling, valued the spiritual over the physical and thus further inhibited the pursuit of knowledge of the natural world.

Scholasticism, the philosophy of this period, was based on the notions of Aristotle; objects in the physical world were taken to have inherent qualities and empirical investigation, if it can even be called that, was the search for these qualities.² The influence of Aristotle's ideas of matter and form resulted in the ascription of subjective qualities to physical objects (e.g., bronze was considered to have the inherent quality of desiring to become a statue rather than considering that its physical properties were conducive to the artisan's ideas and needs for making a statue).

Although Christianity as the dominant religion of the Western world devalued the pursuit of empirical knowledge, science continued to develop, albeit slowly. Given that the penalties for heresy were severe, apparent contradictions between science and theology were explained by the theory of two truths or as it was sometimes called "book-keeping by double entry" (Lange, 1950, vol. I, p. 218). What was denied as false by science or philosophy could be deemed true by religion without any apparent contradiction (after all, God ruled the cosmos and anything was possible for God).

Although scientifically minded thinkers such as Descartes and Gassendi were as yet unprepared to deny the existence of the supersensuous, the success of their methodologies combined with the social movement towards more personal freedom to pave the way for the return of materialism. The Enlightenment principles of reason and freedom were fertile soil in which

² Often, analogy was used to try to explain one phenomenon from an entirely unrelated one. A fitting example of this is in Wilber (1996). The following is offered as a 'refutation' of Galileo's discovery of the moons of Jupiter: "There are seven windows given to animals in the domicile of the head, through which the air is admitted to the tabernacle of the body, to enlighten, to warm, and to nourish it. What are these parts of the *microcosm*? Two nostrils, two eyes, two ears, and a mouth. So in the heavens, as in a *macrocosmos*, there are two favorable stars, two unpropitious, two luminaries, and Mercury undecided and indifferent. From this and many other similarities in nature, such as the seven metals . . . we gather that the number of planets is necessarily seven" (p. 124). This use of analogy was an appropriate methodology if one believed in the inner logic of the cosmos.

science as methodology and materialism as worldview could flourish. With the brilliant successes of science from the 17th century forward, there grew an optimism in the eventual understanding of the entire cosmos and the belief that even the complexity of mind and spirit could be explained materialistically.

This optimism in the sufficiency of a materialist philosophy was not to go unchallenged, however. With a simple change in perspective, a 'turn' that he compared to that of Copernicus, Immanuel Kant altered the world's understanding of our relation to objects. The Critique of Pure Reason, first published in 1781, was Kant's entry into the sphere of metaphysics. The dilemma for Kant was that

human reason has this particular fate that in one species of its knowledge it is burdened by questions which, as prescribed by the very nature of reason itself, it is not able to ignore, but which, as transcending all its power, it is also not able to answer. (Kant, 1929, p. 7)

Metaphysics, the search for the solutions to the unavoidable problems of God, freedom and immortality, after almost two millennia of debate, was still not able to provide answers to these problems.

Moreso, Kant believed that metaphysics had "lapsed back into the ancient time-worn dogmatism" (1929, p. 8). The Critique was intended to be Kant's exploration "as to the possibility or impossibility of metaphysics in general" (1929, p. 9).

What Kant clearly saw was that neither side of the metaphysical debate had an option that he could tolerate. On one side, materialism offered a rational explanation of the working of the universe. But, Kant understood that the working out of Newtonian physics had implications for morality. If one assumed that the physical world functioned in accordance to natural law, then humankind, as citizens of the physical world would also be governed by natural

law. Implied in this is a determinism that belied freedom and thus made morality and ethical choice nonsensical.

On the other side, the speculation of the dogmatists offered morality and value but had no rational grounding for their system and often depended on the assumed existence of unverifiable entities for their authority. The systems offered by speculative metaphysics were like castles in the air. Although beautiful to behold as they gently floated in the ether, they lacked a foundation; they lacked connection to experienced reality. Implicit (or sometimes, explicit) in these systems was the denial of the authority of reason and natural law.

To choose one system over the other meant that one either had to close the eyes of the soul or close the eyes of the mind. Kant preferred to keep all his eyes open. With The Critique of Pure Reason, Kant hoped to allow for the authority of science without surrendering the autonomy of morality.

The problem was, however, that when reason ventures beyond experience (which is the realm of metaphysics), it inevitably falls into contradiction. Kant offers examples of this in a section on the antinomies. He offers the proofs for four metaphysical assertions: 1) the world has a beginning in time, and is also limited as regards space, 2) every composite substance in the world is made up of simple parts, and nothing anywhere exists save the simple or what is composed of the simple, 3) causality in accordance with laws of nature is not the only causality from which the appearances of the world can one and all be derived. To explain these appearances it is necessary to assume that there is also another causality, that of freedom, and, 4) there belongs to the world, either as its part or as its cause, a being that is absolutely necessary. Kant offers proofs for each of these assertions then offers proofs for

their opposites.

The proofs offered for both thesis and antithesis are reasonable and compelling, yet nevertheless, contradictory. The problem is that

each of the two types of philosophy says more than it knows. Epicurus encourages and furthers knowledge, though to the prejudice of the practical; Plato supplies excellent practical principles, but permits reason to indulge in ideal explanations of natural appearances, in regard to which a speculative knowledge is alone possible to us--to the neglect of physical investigation. (Kant, 1929, p. 428)

To resolve the apparent contradiction of reason, a new way of thinking is necessary.

When Copernicus thought to understand the motion of celestial bodies from the perspective of the sun rather than considering the Earth to be the centre of the universe, many of the problems that had faced astronomers disappeared. The simple change in perspective from geo-centrism to helio-centrism revolutionized astronomy.

Prior to Kant, the popular conception was that our experience of the external world was a consequence of the qualities of the objects imposing themselves on our senses which were then organized into the concepts that corresponded with the objects. We were passive receptors. Kant proposed a reversal of the direction of this process--his 'Copernican turn'. Rather than our concepts conforming to the objects, Kant asserted that the objects conformed to our concepts.

As a function of our constitution, there are pre-existing forms of sensibility. These forms, common to everyone, determine how we experience the external world.

Our phenomenal world is not merely a product of our conception (Leibniz, Berkeley); . . . it is not an adequate picture of actual things, but is a result of objective influences and of the subjective shaping of them.

(Lange, 1950, vol. II, p. 275)

Knowledge is only possible through experience, therefore, knowledge is limited to the ways in which the forms of sensibility presented the information. Outside of these forms, experience is not possible. Kant did not presume, however, that the forms of sensibility were complete or even accurate in some absolute sense. As Lange (1950) described it,

the whole objective world is . . . not absolute objectivity, but only objectivity for man and any similarly organized beings, while behind the phenomenal world, the absolute nature of things, the 'thing-in-itself,' is veiled in impenetrable darkness. (vol. II, p. 156)

The effect of Kant's Copernican turn is to make any objective knowledge claims regarding the absolute nature of the cosmos nonsensical. The impossibility of experiencing the thing-in-itself makes all our 'objective' assertions conditional. But, this is not a denial of the efficacy of the realistic attitude toward the physical world. Science is possible and desirable. Materialism, as the philosophical grounding of science, is justifiable as long as it remains conditional.³

Although this realistic attitude is effective for objects readily available to our experience, it presents problems, however, when one wishes to determine the reality of an extra-experiential concept such as the existence of God. Attributing the problem of unverifiability as a quality of the object itself is unsatisfactory. Therefore,

the cause of the failure we must seek in our idea itself. For so long as we obstinately persist in assuming that there is an actual object corresponding to the idea, the problem, as thus viewed, allows of no solution. (Kant, 1929, p. 434)

³ cf. Vaihinger's The Philosophy of 'As If' (1924) takes a similar approach in listing 'useful fictions' that facilitate various human activities (including science) that are dependent on unverifiable assumptions.

The resolution of metaphysical problems, such as the existence or non-existence of God, lies in giving up the belief that metaphysical 'objects' are susceptible to empirical methodology. Science is appropriate for the phenomenal world but is ineffective in establishing knowledge in the noumenal realm to which belong the things-in-themselves.

By asserting the subjective aspect of the world of experience, Kant limited the scope of empirical knowledge without denying its efficacy. This left him free to explore the underlying metaphysical realm without resorting to the denial of the authority of science. In this way, he avoided both the scepticism of Hume and the science-denying speculation of the idealistic dogmatics.

Lange's evaluation of the importance of Kant's critique is apparent in that he divides The History of Materialism into two books; the first entitled *History of Materialism Until Kant* and the second *History of Materialism Since Kant*. Although he disagrees with some of Kant's working out of the problem, his *Standpoint of the Ideal* begins at the Kantian 'Copernican turn' of The Critique of Pure Reason.

Kant's friends and colleagues, knowing the intention of the Critique, had eagerly awaited its publication. However, given the difficult writing style of Kant, few of his contemporaries fully appreciated the significance of the Copernican turn (Walsh, 1967) and the Critique had little effect on the philosophy of the time. Although idealism regained some recognition in the philosophy of Hegel, materialism continued to capture the intellectual imagination. Even in Germany, a traditional stronghold for idealism, realism began to gain popularity after 1830 (Lange, 1950).

This rise of realism was not homogeneous, however. It showed itself through various faces. With the positivism of a Comte, for example, the goal of

science is the objective discernment of the laws that regulate phenomena.

Other formulations were more subjective. Feuerbach declared that

while the old philosophy had started from the principle: I am an abstract, merely thinking being; the body is no part of my being; the new philosophy, on the other hand, begins with the principle: I am a real, a sensible being; the body is part of my being; nay, the body is its totality . . . is itself my essence. (Lange, 1950, vol. II, p. 249)

In a reformulation of the Protagorean maxim that 'man is the measure of all things', he makes anthropology the universal science: "The new philosophy makes man, including nature as the basis of man, the one universal and highest object of philosophy" (Lange, 1950, vol. II, p. 248).

A practical consequence that Lange notes as concurrent with the rise of realism in intellectual circles is the inclination towards industry and through this the popularization of materialism. Industry had taken the technological advances of science and put these new-found discoveries to its advantage. This practical materialism generated an interest in the philosophy of materialism--at least in Germany for "Germany is the only country in the world where the apothecary cannot make up a prescription without being conscious of the relation of his activity to the constitution of the universe" (Lange, 1950, vol. II, p. 263).

This interest in materialism also generated debate. At the Göttingen Congress of natural scientists in 1854, there was a heated discussion regarding materialism. Although the principles of materialism provide the theoretical grounding for the methodology and authority of natural science, when one of the attending scientists attempted to present scientific results as compatible with church doctrine, a ferocious debate ensued (Schnädelbach, 1984). Lange's characterization of the conflict was that it "almost repeated for us the drama of

the great religious controversies of the Reformation age” (1950, vol. II, pp. 264-265).

The debate was not restricted just to the intellectual community, however. In 1855, Ludwig Büchner published Kraft und Stoff (Force and Matter), which generated great interest if not controversy. Referred to by its detractors as “vulgar materialism” (Schnädelbach, 1984, p. 96), Kraft und Stoff attempted to justify a mechanistic materialism and argued that force and matter are fundamentally the same thing. In deliberate contrast to most philosophical writing of the time, Büchner rejected technical language because of his belief that “expositions *which are not intelligible to an educated man* are scarcely worth the ink they are printed with” (In *Preface* to Kraft und Stoff cited in Lange, 1950, vol. II, p. 265). Perhaps even beyond Büchner’s greatest hopes, Kraft und Stoff was a popular success and “appeared in numerous editions and was widely read, especially in petty bourgeois and proletarian circles” (Schnädelbach, 1984, p. 96), although it was also widely criticized.⁴ The significance of Kraft und Stoff lies not in its content but in its popularity--extending the materialist debate outside of the intellectual community and making it accessible, if not understandable, to the wider population.

Despite the popularity of Büchner’s Kraft und Stoff, the most significant scientific publication of the 19th century was indubitably Darwin’s The Origin of Species published in 1859, only seven years before the first edition of The History of Materialism. Although the theory of evolution was not new, Darwin is significant in that he explained the progressive quality of evolution through natural selection and supported his theory through empirical research. This

⁴ The ten pages that Lange (1950, vol. II, pp. 265-274) devotes to Büchner can hardly contain the contempt that Lange directs at him for lack of precision and self contradiction with hardly a mention of the actual content of Kraft und Stoff.

controversial formulation was revolutionary in that it “dealt a death-blow to any Platonic, Aristotelian or Christian belief in a teleology of nature” (Stack, 1983, p. 156).

A heated controversy erupted after the publication of The Origin of Species (and was further exacerbated with the publication of The Descent of Man in 1871). Natural selection provided a plausible explanation for the development of species--including the human species. Darwin had effectively de-throned humankind from its self-proclaimed dominion over the natural realm. The human species was not the pinnacle of some pre-ordained guiding principle but merely the consequence of fortuitous accident; not qualitatively separate from nature but merely another manifestation of it. Although this had been advocated before, for the first time, the idea was supported through empirical research.

The end of the 18th and the beginning of the 19th centuries saw significant advances in the theory and practice of science--especially in the disciplines of chemistry, physics and physiology. As the technology improved, scientists began to turn their efforts to the resolution of the greatest difficulty that faced materialism--the explanation of consciousness.

Since its introduction in the pre-Socratic era, materialism had been challenged by its detractors for its inability to explain the possibility of consciousness. Though various theories had been offered, “the relation of *external movement* to *sensation* remains inconceivable and the more light is thrown upon it only a more glaring contradiction is revealed” (Lange, 1950, vol. II, p. 157). Since consciousness and its manifestations--purposiveness, aspiration, desire, and the ability to perceive--are not considered to be properties of matter, how is it possible that, by a mere combination of bits of

matter, these qualities can arise?

To this question many scientists of the 18th and 19th centuries turned their attention. Using methodology and technology developed in the various disciplines, great scientific energy was devoted to unraveling the relation between mind and brain thereby initiating another discipline of science-- scientific psychology. This new psychology explored any avenue that might help explain this relation. However, despite great advances and an ever burgeoning body of knowledge, a convincing materialistic explanation of consciousness was not forthcoming.

This inability to explain consciousness is, for Lange, one of materialism's weakest points. He returns to this deficiency a number of times in The History of Materialism. Yet, despite this Achilles' heel, the efficacy of science could not be denied.

Lange echoed Kant in that he too supported the authority of science. Yet, he too objected to the elevation of materialism to a metaphysical principle on practical grounds. With the popularization of materialism and the incontrovertible successes of science came a practical attitude that Lange believed to be socially destructive. Concurrent with the successes of science and the industrialization of European society came social turmoil that Lange attributed directly to the inculcation of an uncritical materialistic attitude within the population. As Lange saw it

nothing more surely economizes our forces for production, nothing so ensures careless enjoyment, nothing so steels the heart against the hateful shocks of sympathy and of doubts of our own perfection, as that entire spiritual passiveness which rejects as useless all reflection upon the connexion of phenomena and upon the contradictions between experience and tradition. (Lange, 1950, vol. II, p. 263)

In Lange's opinion, there was a connection between the passive acceptance of

a materialistic worldview and his social context. A society rife with social conflict and ripe for revolution was what he saw. What was needed was a critical examination of the theoretical grounding of materialism.

Chapter 2

Critique of Social Institutions

In The History of Materialism, Lange focuses on two forces as being the primary causes of the social unrest that he feared threatened his society-- industrialism with its ethic of egoic self-interest and institutional religion with its lust for power and control. It was Lange's contention that both of these forces had been adversely affected by dogmatic materialism. This chapter will examine the connection that Lange makes between these forces and materialism.

The mid-19th century was a hotbed of resistance and revolt in Europe. A primary principle of both the Enlightenment and the Reformation was that everyone ought to think and choose for oneself. With the popularization of this liberal principle, came resistance to those in authority, be it political or religious. The power struggles that were the consequence pitted industrialist against worker, Christian against atheist, aristocrat against commoner. The turmoil of these conflicts were significant enough that Lange feared a full-blown revolution.

Unlike most analysts, however, Lange believed that the cause of this turmoil was deeper than just worker dissatisfaction, intellectual resistance against the clerical hierarchy, or the necessary path of the democratic process. For Lange, the cause of this turmoil was the consequence of the passive acceptance of a materialistic metaphysic, complete with its own ethics. But, unlike the ethical materialism of Epicurus or Aristippus,

in place of Pleasure, modern times have put Egoism; and while the

philosophical Materialists hesitated in their ethic, there was developed together with political economy a special theory of egoism, which more than any other element of modern times bears on it the stamp of Materialism. (Lange, 1950, vol. III, p. 233)

With the rise of industry and world-wide commerce, the study of political economy had taken on the form of a science. Adam Smith, the most notable of this new breed of 'scientists', not only studied the outward workings of political economy but also speculated as to the constitution of human nature that shaped the expression of the economy. The ethical element of his theory cannot be separated from the economic. Although Smith is most noted for Wealth of Nations, he also wrote a companion work called Theory of Morals which spoke to individual motivation within the context of the larger economic interaction.

The Theory of Morals allows every individual in the effort after wealth and honour to exert his powers to the utmost in order to surpass his competitors, so long only as he does no injustice; in the doctrine of the Wealth of Nations, the axiom is completely asserted that every one in pursuing his own advantage at the same time furthers the good of all. (Lange, 1950, vol. III, p. 234)

Lange maintains that Smith applied these principles solely to the working out of the economy. This was not so with those that followed. "His successors . . . confounded the rules of the market with the rules of life; nay, even with the elementary laws of human nature" (Lange, 1950, vol. III, p. 235). With the undeserved authority of a science, political economists were asserting that egoism and self interest were the primary motivations of humankind.

Lange maintains, however, that the unrestrained pursuit of individual self interest inevitably leads to collapse. When individuals are pitted one against the other in competition, whether it be the physical combat of cavemen fighting over hunting territory or the combat of the marketplace where industrialists fight over profits, there must be a winner and a loser. When this form of self interest,

where defeating your competition has a connotation of moral rectitude, is left unrestrained, "it must always be feared that the interests of those individuals who attain the first advantage will gradually become preponderant beyond measure and crush everything else" (Lange, 1950, vol. III, p. 257).

This is not to say that the pursuit of self interest as manifested in the industrialization of Europe had not also improved the living standards of the working class. However, the living standards of the wealthy had improved disproportionately when compared to that of the working class. This was a source of tension and, Lange intimates, a possible cause of collapse.

(S)o long as it is true that with every step of this improvement the *difference* in the position of individuals and in the means for further advancement also grows, so long will each step of this movement lead towards a turning-point where the wealth and power of individuals break down all the barriers of law and morals, where the state sinks to a mere unsubstantial form, and a degraded proletariat serves as a football to the passions of the few, until at last everything ends in a social earthquake which swallows up the artificial edifice of one-sided and selfish interests. (Lange, 1950, vol. III, p. 256)

In Lange's mind, unrestrained self interest in no way furthers the good of all--it only leads to strife and, if left unchecked, social collapse.

This concern for the immanent collapse of socio-political structures due to the negative consequences of egoistic self interest was just one aspect of Lange's critique of egoism. With the technological advances that had been made in industry, machines now did many of the laborious tasks that had once been done by individuals. This left more time for the pursuit of leisure--at least for some. Although from some corners, the cry arose that much of this leisure time was wasted in the pursuit of vacuous pleasure, Lange's critique is that egoism in the industrial context had redefined both work and leisure and had altered the definition of pleasure--making it into just another commodity to be

pursued. The consequence of the “immoderate, galling, and brutalising labour” (Lange, 1950, vol. III, p. 238) of the factory was that the mind “by perpetual hurrying and scurrying in the service of money-making, loses the capacity for a purer, nobler, and calmly devised enjoyment” (p. 238). The result of this was the commoditization of leisure which was due, according to Lange, at least in part to a materialistic worldview that reduced pleasure from intellectual or spiritual fulfillment to the acquisition of amusement.

For Lange, industrialization could have offered the opportunity for the ennoblement of humanity. But, the morality of egoism encouraged the struggle of individuals against one another without anyone necessarily being improved.

If it can be said that materialism and the egoistic ethic that is thereby derived was, at least in part, responsible for the rise of industrialism, it must also be said that those who benefited from industrialism were also inclined towards the acceptance of a materialistic philosophy. Lange declares that “we can hardly fail to recognize already that the philosophy of those circles which seek above all things to make money, and which favour a practical egoism, more and more incline to Materialism” (1950, vol. III, p. 305). The technology of materialism increased the profits derived from their mills and factories; the morality of materialism justified their actions which might have been otherwise censured.

The self-interested morality of these practical materialists was further reinforced by the anti-Christian inclination of the theoretical materialists. A significant component of the Enlightenment had been the questioning of the authority of the Church. Within intellectual circles, the theoretical materialists had long been opposed to Christian doctrine. As Lange states, they now became “fond of attacking those features of Christianity which form so sharp an

opposition to the spirit of modern industrial acquisition" (1950, vol. III, p. 305) characterizing Christianity as "a religion of the envy and hatred of the poor against the rich" (p. 305).

As Lange reiterates throughout The History of Materialism, materialism has historically functioned most efficiently as a counter to dogmatic orthodoxy. This too was the situation in Lange's time. Although Nietzsche had yet to inscribe the epitaph, the writing was on the wall for those willing to read it. The contradiction between the findings of natural science and the literalist dogmas of orthodoxy could no longer be accounted for with 'book-keeping by double entry'. Whenever orthodoxy begins to treat traditional dogmas as literal reality, materialism is there to challenge these supernatural knowledge claims. Atheism had gained a certain popularity within the intellectual community--although it might be more aptly said that, in many cases, the proponents of atheism were better described as opponents to the superstitions of Christianity.

The history of Christianity is somewhat contradictory. While it was "cunning, treachery, and cruelty (that) helped to found the Christian state--in itself a contradiction--the thought of the equal calling of all men to a higher existence remained the basis of modern popular development" (Lange, 1950, vol. I, p. 172). While the Church had resorted to typical under-handed techniques to establish a power base, yet, it was the idealism and higher morality of its doctrines that appealed to the people. Combined with this was the principle of preaching the gospel to the poor. Wealth and power, acceptable objectives in previous religions, were now to be foregone in order to bring about the kingdom of God. As Lange comments, this combination "unhinged the ancient world" (p. 170). Though the doctrine of equality and ethical treatment for the poor and the enslaved proved popular, theoretical

materialists interpreted this doctrine as 'envy and hatred of the poor against the rich' and this interpretation reinforced the self-serving morality of the practical materialists.

Lange's personal history as social activist and advocate for the working class places him in agreement with the stated ethical aspirations of Christian doctrine. However, this does not mean that he was a defender of the Church. In fact, he reserves his harshest invective for the Church and in particular for the clergy. Despite its claim to a moral high ground, Lange blames the clergy for poverty, violence and the inculcation and maintenance of superstitious beliefs through the control of education—all for the sake of power and done in the name of a higher authority through the use of terror.

(I)t is the doctrine which early forced its way into the circle of Christian dogmas, of the universal damnation of all mankind and of the eternal tortures of hell, which, by the depressing of men's minds and the raising of priestly arrogance, has brought unutterable evils upon modern nations. The right of the Church to bind and to loose became the cornerstone of the hierarchy, and the hierarchy in all its forms and gradations became the curse of modern nations. But even when it was apparently broken up, the love of power remained the most prominent characteristic of the clergy as a special class. (Lange, 1950, vol. III, p. 275)

Though the doctrines of Christianity proscribed the love of power, the Christian hierarchy had become one of the most powerful institutions in European society. Even the "purifying power of truth" (p. 297) had been insufficient to counter the lure of power and control.¹

¹ This ambition for power, however, is not strictly reserved for Christian clergy but is simply a function of human nature. Lange asks, "are not the psychological laws which make every hierarchy, every priesthood, that is elevated above the people, ambitious of power, and that awake in it jealousy of the maintenance of its authority, immutably based in human nature and independent of the content of the creed? In fact, we find this inevitable effect not only in the great typical forms of the Tibetan, the Mediaeval Christian, and the old Egyptian hierarchies, but . . . even amongst the smallest religious groups of the most remote peoples" (1950, vol. III, pp. 296-297). Stack (1983) suggests that Lange may have influenced Nietzsche's idea of 'will to power' through his criticisms of the power-seeking behaviours of both the industrialists and the clergy.

According to Lange, the beneficial essence of Christianity had been lost. The clergy, in its pursuit of power, had literalized the symbolism that had once spoken to the spirit. So long as the clergy remained a closed, esoteric community, doctrine would be dogmatically defended in the face of all contradiction. But, by asserting the literal truth of Christian traditions, the clergy had opened these traditions to the scrutiny of science with catastrophic results.

So long as men sought the core of religion in certain doctrines on God, the Human Soul, the Creation and its Order, it was inevitable that every criticism which began by separating upon logical principles the chaff from the wheat must end in complete negation. The sifting process went on till nothing was left. (Lange, 1950, vol. III, p. 345)

The hierarchy, did not realize that “the essence of (religion) lies in the form of the spiritual process, and not in the logical and historical content of the particular views and doctrines” (p. 348).

Though Lange is critical of both the Church and the clergy, yet, he demonstrates a certain respect for Christianity’s capacity to refresh the soul. Even though, when reason and logic are applied to the myths of religion, its credibility as a source of knowledge is shaken, yet there are “men of keen understanding and solid education (who) still hold fast to religion, because they have led from childhood up a rich emotional life” (p. 354).

This emotional richness was consistent with Lange's conception of the full human life as informed by his humanist inclinations. And, it is for this reason that Lange does not call for the outright abolition of the Church as did many of the atheists of that time. Even though he directly blames the Church and the clergy for many of the ills of his society, yet, Lange is able to see value in

religion.² Thus it is that he suggests two possibilities for the Church. Either it must penetrate through the literalism of its doctrines to find its emotional core and thereby overcome fanaticism and superstition or it must be abolished and its functions transferred to “the State, Science and Art” (1950, vol. III, p. 344). Although this may seem to give those in the religious hierarchy a second chance, Lange is not quite so generous with the political organization of the Church. Although he admits that there are aspects of religion that are beneficial, he states that “only with the dissolution of the political Church is an unconditional freedom of creed possible” (p. 357).

Lange's criticism of religion, and the Christian church in particular, is that it has strayed from its intended purpose--the encouragement and nurturing of the emotional life. In order to acquire and consolidate political power, the Church has ascribed literal reality to what ought to have remained as metaphor. It has ventured beyond the realm of poesy and into the realm of knowledge where it can only answer its challengers--the theoretical materialists--with calls for dogmatic adherence to doctrines that are contradicted by science. As the Church tried to answer those critical of its anti-scientific literalism and its power and wealth, its ethical teachings of the pursuit of a higher calling that is open to all seem contradictory or irrelevant.

The ethical choices seem limited. On the one hand, the egoism of marketplace ethics justifies the exploitation of the working class. On the other hand, the Church, whose doctrine and ethics ought to be the source of succour and enrichment for the hungry soul, has opted to cling to a discredited literalist

² Over a number of years, Lange and Friedrich Ueberweg had corresponded on what the new religion ought to look like. Some of this correspondence is recorded in The History of Materialism (Lange, 1950, vol. III, pp. 305-323). The importance of this is not so much in its content but in the optimism demonstrated that a new humanist religion could be invented--discarding the supernatural doctrines of Christianity yet keeping those traditions that enriched the 'spiritual' life.

orthodoxy which neither refreshes nor enlightens.

The consequences seem dire--or at least they seem so for Lange. The turmoil to which he was a witness was enough for him to fear not only revolution but even the dissolution of civilization. For Lange, the problem was the uncritical acceptance of materialist philosophy as metaphysical principle. The solution, therefore, lay in demonstrating the limitation of materialism and in proposing a new idea--an idea that could change the world.

If the New is to come into existence and the Old is to disappear, two great things must combine--a world-kindling ethical idea and a social influence which is powerful enough to lift the depressed masses a great step forward. Sober reason, artificial systems, cannot do this. The victory over disintegrating egoism and the deadly chilliness of the heart will only be won by a great ideal, which appears amidst the wondering peoples as a 'stranger from another world', and by demanding the impossible unhinges the reality. (Lange, 1950, vol. III, p. 355)

The idea that would accomplish this was the Standpoint of the Ideal.

Chapter 3

Standpoint of the Ideal

Historically, idealism has been used as an argument against materialism and its rationalistic methodology--science.¹ Although Kant questioned the assumptions of materialism and science, his critical philosophy, and the neo-Kantianism that followed, "was a revolt against *scientism*, not against science itself" (Willey, 1978, p. 97). With the 'Copemican turn', Kant denied that knowledge of the noumenal realm--of the 'things-in-themselves'--was possible but asserted, rather, that knowledge is limited to the realm of phenomena.

Lange is rightly considered a neo-Kantian in that his Standpoint of the Ideal begins with Kant's Copemican turn. This chapter will look at Lange's Standpoint of the Ideal--its relationship to Kant's critical philosophy, its theoretical construction and its ethical implications.

Although Lange does not agree entirely with Kant's critical philosophy,² he does agree that knowledge is a function of experience rather than merely the ordering of the data that are imposed upon us through experience. As Kant states in The Critique of Pure Reason, experience is conditional upon and regulated by the *a priori* structures that are a function of the mind. Lange

¹ E.g., Berkeley's idealism. Although Berkeley did not dismiss the activity of science as entirely useless, he did question its realistic assumptions and, therefore, its ultimate value (Acton, 1967).

² Lange agreed with Kant that the structures that make experience possible must be *a priori* yet, he believed that Kant's derivation of the Table of Categories was *a posteriori* thus lacking logical necessity. "Either the *a priori* elements of thought are themselves deduced from an *a priori* valid principle, or they are sought out empirically. Such a principle is not to be found in Kant, and the empirical process can afford no strictly necessary results; and hence the whole transcendental philosophy of Kant is in the most favourable view nothing but a section of empirical psychology" (Lange, 1950, vol. II, p.190).

echoes this when he says, "the world is not only *idea*, but also our *idea*; a product of the organization of the *species* in the universal and necessary characteristics of all experience" (1950, vol. III, p. 336). Thus, even though the compulsion of sense inclines one toward the acceptance of a materialist perspective, with the Copernican turn, the ideal character of reality is asserted. As this already had been established by Kant, Lange states that

no Materialism of any kind is any longer maintainable; for even though our inquiry, when directed to sensible intuition, must with inevitable logic result in showing that for every intellectual excitation there are corresponding phenomena in matter, yet this matter, with everything that is formed from it, is only an abstraction from our representative images. The struggle between Body and Mind is ended in favour of the latter, and only thus is guaranteed the true unity of all existence. For while it always remained an insurmountable difficulty for Materialism to explain how conscious sensation could come about from material motion, yet it is, on the other hand, by no means difficult to conceive that our whole representation of matter and its movements is the result of an organization of purely intellectual dispositions to sensation. (1950, vol. III, p. 228)

That Lange came down firmly on the side of idealism was not, however, a general condemnation of materialism. Lange's quarrel with the materialists was that they had taken an unjustified step into dogmatic metaphysics. The Standpoint of the Ideal was his way of showing the metaphysical limits of materialism without devaluing the efforts and accomplishments of science.

To do this, Lange begins with our experience of phenomena. If our experience is broken down into its most basic elements, there is nothing but a succession of disparate perceptions. To see a leaf is to see a shape whose form is distinguished by its difference from its background, by variations of colour within that form. Other sensations could be added by touching or tasting, if one so desired. To arrive at the concept of 'leaf', however, requires a further synthesis and an abstraction from the simple components of this basic

information. This activity of synthesis is a function of that same ideal constitution that permits sense experience in the first place.

This ideal synthetic function takes the disparate sense experiences and structures them into an understandable unity. However,

the unity which makes the facts into a science and the sciences into a system is a product of free synthesis, and springs therefore from the same source as the creation of the ideal. While . . . this deals quite freely with the materials, synthesis in the province of the sciences has only the freedom of its origin from the speculative mind of man. It is, on the other hand, tied to the task of establishing the utmost possible harmony between the necessary factors of knowledge, which are independent of our will. (Lange, 1950, vol. III, p. 335-336)

Science is only possible because of this ideal function that synthesizes facts into a harmonious unity. And, most importantly, the resulting systems of science are not necessary but are the product of the 'speculative mind of man'. Lange reiterates: "The task of producing harmony among phenomena and of linking the manifold that is given to us into a unity belongs not merely to the synthetic factors of experience, but also to those of speculation" (vol. III, pp. 336-337).

This suggests a certain arbitrariness; that is, the individual is left free to design a purely idiosyncratic system of reality. Lange does not deny this possibility but insists that the relevance of any speculative system is dependent upon the connection of the individual to the rest of society. Although the individual's experience of the world may be unique, it is only useful or understandable to the rest of society to the extent that the expression of this experience is normal or typical. The framework within which the facts of experience are organized may be arbitrary, however, its usefulness is dependent on it also being typical.

Science in its simplest function is the observance of particular events. The process of fitting the facts of these particular events into a systematic body

of knowledge is a process of abstraction. This process of abstraction is a step removed from the empirical act of observation and thus has already entered the realm of the ideal; that is, one cannot 'observe' the relation between facts--one can only assume it and the act of assumption is a function of the ideal. In its purest, materialist form, "natural science is analytical and clings to the particular" (Lange, 1950, vol. III, p. 341). Science as the systematic organization of facts assumes a unifying connection between these facts. The world, as the object of science, is viewed as an inter-related 'whole' rather than merely as a collection of disparate facts. However,

if we embrace the whole as a unity, then in the act of synthesis we bring our own nature into the object, just as we shape the landscape that we gaze at into harmony, however much disharmony in particulars may be concealed by it. All comprehension follows aesthetic principles, and every step towards the whole is a step towards the Ideal. (p. 341)

To illustrate this, Lange uses the example of possible attitudes to viewing a landscape. "(W)hen from some elevated point we regard a landscape our whole nature is attuned to ascribe to it beauty and perfection" (1950, vol. III, p. 338). As a consequence of the ideal inclination to synthetic harmony, one is predisposed to ascribe to a landscape a harmonious unity. Yet, the harmony that comes naturally is not the whole truth. Lange continues:

We must first destroy the powerful unity of this picture by analysis, in order to remember that in those huts, peacefully resting on the mountain slope, there dwell careworn men; that behind that little sheltered window perhaps some sufferer is enduring the most terrible torments; that beneath the murmuring summits of the distant forest birds of prey are rending their quivering prey; that in the silvery waves of the river a thousand tiny creatures, scarcely born to life, are finding a cruel death. To our sweeping glance the withered branches of the trees, the blighted cornfields, the sun-scorched meadows, are only shadows in a picture which delights our eye and cheers our heart. Thus the world appears to the optimistic philosopher. He praises the harmony which he himself has introduced into it. (1950, vol. III, p. 338)

This ideal inclination towards the speculative creation of harmony, which informs and regulates the activity of science, is also, for Lange, the same principle that underlies ethics and aesthetics.

The same principle which rules absolutely in the sphere of the beautiful, in art and poetry, appears in the sphere of conduct as the true ethical norm which underlies all the other principles of morality, and in the sphere of knowledge as the shaping, form-giving factor in our picture of the world. (1950, vol. III, p. 337)

This is the fundamental point to Lange's Standpoint of the Ideal; aesthetics, ethics and knowledge are all derived from the same source--the ideal function that synthesizes disparate parts into a harmonious and comprehensible whole.

Lange calls the noumenal world which this ideal function accesses 'poesy'. Although poesy is related to poetry, it is much more than just artistic expression. For Lange, "the 'intelligible world' is a world of poesy" (1950, vol. II, p. 232). Both the scientist, who abstracts the facts of observed reality into the coherent system of science, and the poet, whose creations may not even resemble anything in experience, are accessing the same ideal function. Though the scientist may make the claim that scientific activity is based in 'reality' whereas the activity of the poet is fantastic, Lange insists that the world of science is grounded in the same way as the world of poetry and is "a necessary offspring of the soul, arising from the deepest life-roots of the race" (1950, vol. II, p. 232).

Materialism, however, insists that the inter-connectivity of individual facts is a quality of the external world. The unity of the factual world is asserted as an objective truth. This assertion is, in Lange's view, a falsification of reality and "every falsification of reality attacks the bases of our spiritual existence" (1950, vol. III, p. 340). The adherence to a materialist metaphysic cuts one off from

one's 'spiritual' and ethical side, thus limiting perspective. Lange believes that the consequences of this limited perspective are significant.

Materialism lacks relations to the highest functions of the free human spirit. It is apart from its theoretical inadequacy, unstimulating, barren for science and art, indifferent or inclined to egoism in the relation of man to man. (1950, vol. III, p. 340)

This is Lange's complaint against the materialism of his day. In its haste to be objective--to reduce reality to its simplest and most obvious components--it denies that part of the human spirit that functions to create from simple elements something more complex and noble. Not only is this 'theoretically inadequate', but, it is Lange's contention that it was exactly this inadequate philosophy that was responsible for the social crisis in Europe.

Lange's chief criticism against the forces that he believes are the root cause of the European crisis is that they are based on a metaphysical philosophy that insists on grounding the authority for truth in the realm of the objective, external world. By emphasizing the ideal functioning in the construction of experience through the Standpoint of the Ideal, Lange both demonstrates the inadequacy of this materialistic perspective and offers the possibility of a new philosophical worldview that will provide an ethic that he hopes will defuse the crisis brought on by scientism and the religious institutions.

Both scientism and religion make dogmatic claims to objective truth. Scientism insists that the physical world imposes its nature upon our consciousness. Reality lies in the realm of the external, and science is merely the technique of discerning and codifying this reality. Truth is understood as the correspondence between our knowledge and the observable facts of reality.

Religion has taken mythical tradition and declared it to be literally true.

Reality is the consequence of an existent absolute that has created the physical world and becomes the source of an externally oriented truth. Typically, that which cannot be discerned through observation has been revealed to special emissaries who then publicly proclaim this divine truth. The religious hierarchy thus becomes the voice and the proxy of the absolute and takes on the task of ensuring obedience to this externally derived truth.

For Lange, the problem did not lie necessarily with these assertions to absolute truth. Rather, the problem was that, implicit to both worldviews, was an ethic derived from and dependent upon the truth claims of either worldview which thus assumed for itself a certain necessity.

By positing the existence of a supernatural being, religion assured for itself a guarantor for its form of morality. God desired moral conduct of his human creations and, through revelation, humanity had come to know what it was that God willed of us.

The materialistic ethicists of Lange's time took a more empirical approach. Taking their cue from Darwin and Adam Smith, nineteenth century materialists abandoned the contemplative and moderate ethics of Epicurus and Zeno of Citium in favour of egoism, self interest, and 'survival of the fittest'. Although the materialists were adamant in their denial of any supernatural guarantor of morality, they too were guilty, at least in the opinion of Lange, of grounding their ethics on a metaphysical stance that was beyond experience.

Lange's Standpoint of the Ideal is ultimately anti-dogmatic--a critique against any metaphysical philosophy that claims absolute objectivity as its foundation. Lange not only does not make any such claims to the externally derived authority of truth but criticizes any claim that does.

If, as Lange has demonstrated, reality is a product of our ideal

constitution which takes the disparate elements of experience and synthesizes from them a harmonious unity, is it not possible to also derive from this same ideal function an ethic that would relieve the tensions that threatened the society? The ethic thus derived would not make any claims to necessity but would be a product of speculation--just as the synthetic unity of our experience of the external world is a product of speculation.

Lange even goes so far as to deny the necessity of the moral claims of the philosopher from whom he had borrowed the idea that inspired his Standpoint of the Ideal--Kant. As mentioned above, Kant's project was practical in nature. He had hoped to establish the irrefutable legitimacy of a moral principle--Kant's moral imperative. Lange, however, will not accept even Kant's attempt to justify an absolute moral principle. He insists that "Kant's moral principle must, however, at least be brought down from the height of its *a priori* validity, and be established on a purely psychological basis" (1950, vol. III, p. 303).

This is the key to understanding Lange's practical objective. To avoid the difficulties of justification, Lange makes no claims to the necessity of any ethical norms. Lange maintains that it is not possible to find a metaphysical justification for any system of ethics yet, he is unwilling to allow the ethical anarchy of relativism. The basis for the ethical tone of the Standpoint of the Ideal is found in the same place as the basis for experience itself--the ideal principle that synthesizes and harmonizes the disparate facts of experience into a unity.

In effect, what Lange is calling for is a new ethical ideal grounded not in the metaphysical assertions of supernaturalism or even dogmatic materialism but in the ideal human inclination toward harmony. And, just as this inclination toward harmony is entirely speculative and not necessary, the ethics derived

from the Standpoint of the Ideal are also speculative.

Most ethical systems claim absolute truth as the authority from which the system is derived. But, as Lange has demonstrated through his critique of metaphysical dogmatism, “all absolute truths are false” (1950, vol. III, p. 236).³ True to his critique of any system that purports to be grounded by absolute truth, Lange makes no claims to absolute truth for his system either.

(A)ll the results of poesy and revelation purport to our consciousness to be absolute, immediate, since the conditions from which these products of conception proceed do not come with consciousness; it is also true, on the other hand, that *all poesy and revelation are simply false* [italics added], so soon as we test their material contents by the standard of exact knowledge. (vol. III, p. 280)

It is human nature for the individual to believe that one's own experience and worldview are true and carry with them the authority of the absolute. While denying the legitimacy of this inclination to the absolute, Lange does not deny its significance but warns of the danger of its dogmatic avowal.

(T)his Absolute has a value only as an image, as a symbol of that other Absolute, which we cannot know at all, and these errors or intentional deviation from reality only do harm when they are treated as material knowledge. (vol. III, p. 280)

It is clear from this that Lange's Standpoint of the Ideal is not an attempt to destroy other metaphysically-oriented systems of ethics in order to replace them with his own. In fact, The History of Materialism contains no system of prescriptive tenets--only the warning that the existing systems are flawed and

³ To continue this quote: “Relations, on the contrary, may be accurate. And what for the advancement of knowledge is most important; a relative truth, a proposition which is only true on the basis of an arbitrary presupposition, and which deviates from entire reality in a carefully defined sense--just such a proposition is incomparably more capable of permanently advancing our comprehension than a proposition which endeavours at one stroke to come as close as possible to the nature of things, and in doing so carries with it an inevitable and, in their full range, unknown mass of errors” (Lange, 1950, vol. III, p. 236). The idea that truth is relative but that there are fictions that can be useful, which is a significant but relatively unexplored topic in Lange, is more thoroughly explored in Vaihinger's The Philosophy of 'As If' (1924).

responsible for the social tensions of the time.

Lange, however, insists that a new ethical idea must take shape if the impending social crisis is to be avoided. And, he believes that the adoption of the Standpoint of the Ideal will provide the necessary viewpoint such that this new ethical idea can be formed. Once the Standpoint of the Ideal has been adopted--once we understand that there is and cannot be any absolute system of ethics--then, we can begin to build a system with the full recognition that none of the particulars are necessary. The Standpoint of the Ideal acts as a guiding principle by which we decide the shape and direction of our society. Just as "the poet creates in the free play of his spirit a world to his own liking, in order to impress more vividly upon the easily manageable material a form which has its own intrinsic value and its importance independently of the problems of knowledge" (Lange, 1950, vol. III, p. 337), we too can use the ideal principle that, through a speculative process, synthesizes and harmonizes individual elements into a unity, and create for ourselves a world to our liking with its own intrinsic value and importance.

This, then, is Lange's objective--his call to action. The Standpoint of the Ideal is the recognition that we make the world as we wish and that, given the impending social crisis, we can remake the world and thereby avoid the possibility of violence. Rather than accept, as if by default, that humanity is characterized by the base and the ignoble (as exemplified in the egoism of materialism or the power-mongering of the religious institutions), Lange implores us to strive towards that which is higher and nobler.

If the principle is once conceded that we should create for ourselves in imagination a fairer and more perfect world than the world of reality, then we shall be compelled to allow validity to Mythos as Mythos. But it is more important that we shall rise to the recognition that it is the same necessity, the same transcendental root of our human nature, which

supplies us through the senses with the idea of the world of reality, and which leads us in the highest function of nature and creative synthesis to fashion a world of the ideal in which to take refuge from the limitation of the senses, and in which to find again the true Home of our Spirit. (Lange, 1950, vol. III, pp. 364-365)

By the adoption of the Standpoint of the Ideal and through the creation of an ethic of nobility and harmony, Lange believes that the crisis facing European society can be averted.

Returning to the increase in the popularity of materialism and the implications of this, Lange once again voices his concern regarding the future of his society.

Often already has an epoch of Materialism been but the stillness before the storm, which was to burst forth from unknown gulfs and to give a new shape to the world Whether this battle remains a bloodless conflict of minds, or whether, like an earthquake, it throws down the ruins of a past epoch with thunder into the dust and buries millions beneath the wreck, certain it is that the new epoch will not conquer unless it be under the banner of a great idea, which sweeps away egoism and sets human perfection in human fellowship as a new aim in the place of restless toil, which looks only to the personal gain It were indeed the fairest guerdon of exhausted intellectual labour if it might even now contribute, while averting fearful sacrifices, to prepare a smooth path for the inevitable, and to save the treasures of culture uninjured for the new epoch. (1950, vol. III, p. 361)

To 'save the treasures of culture'; to 'surmount Materialism and heal the breach in our popular life'; to 'save civilization and transform the path that leads through desolating revolution into a path of beneficent reforms'; this is Lange's intent--this is the socio-political agenda behind the Standpoint of the Ideal.

In Lange's own words, his purpose is to provide a means whereby revolution can be avoided through the reforms implicit in the Standpoint of the Ideal. If the author calls his idea 'reforming', can it yet be argued that the Standpoint of the Ideal is revolutionary? Can it be argued that the very

worldview of the society that Lange hoped to save would be so altered by the Standpoint of the Ideal such that the change could be called revolutionary? We now turn to the analyses of Kuhn and Collingwood in order to answer these questions.

Chapter 4

Paradigms and Revolution

In 1962, Thomas Kuhn published what has become one of the pillars of the post-modern canon. The Structure of Scientific Revolutions challenged the notion that scientific knowledge was progressive and cumulative. Kuhn argued that when science was examined historically, what one found was not that, as time passed, science came to understand the world in ever increasing detail but that in the history of science, there have been various qualitatively distinct understandings of the world. Scientific knowledge was not the linear, incremental increase of ever-more detailed information of one world but was rather a series of bodies of knowledge that conceptualized and codified information about the world in radically different fashions. Kuhn called the bodies of knowledge 'paradigms' and the shifts between paradigms 'revolutionary'. This chapter sets up Kuhn's theory, with modifications from Collingwood's An Essay on Metaphysics (1972), as the tools of analysis to be used in answering the question "Is Lange's Standpoint of the Ideal revolutionary?"

Kuhn, who started his career as a physicist, came to see science in an untypical fashion after discovering to his surprise that "exposure to out-of-date scientific theory and practice radically undermined some of (his) basic conceptions about the nature of science and the reasons for its special success" (1970, p. v). Through examining various 'scientific discoveries' and the subsequent modifications of hypotheses and theories, Kuhn saw that in some cases, these discoveries represented more than just an incremental

accumulation of facts. A number of times in the history of science, a discovery has occurred that contradicted the contemporary understanding of the functioning of the universe. This anomaly then provoked a crisis within the scientific community. Either the new information must be classified as erroneous and, therefore, discarded, or, if the new information is too compelling to be easily discarded, a new framework within which to place the new facts must be established. This often led to a fundamental change in how the scientific community understood the universe--not just a quantitative change, but a qualitative change.

An example that holds particular relevance for this paper comes from the discipline of astronomy. In The Copernican Revolution (1957), Kuhn explicates the precedents and consequences of Copernicus' challenge to the model of astronomical movement contemporary to his time. Prior to Copernicus, it was believed that celestial objects revolved around the Earth. However, Copernicus found that some astronomical data fit better when one considered that the Earth and the other planets revolved around the sun. Though some of his contemporaries refused to accept this theory, as it became clear that many problems were resolved by a helio-centric conception of celestial movements, the scientific community modified its understanding of the universe. The change from the belief that the Earth is the centre of the universe to the belief that the Earth is just another celestial body is profound. In Kuhn's terminology, such a radical modification of scientific theory is revolutionary. (Kant understood the significance of this radical change in thinking and used the 'Copernican turn' as the metaphor to describe the import of his critical philosophy.)

The central idea to Kuhn's analysis is his conception of a 'scientific

paradigm'. In general terms, a scientific paradigm is the framework within which one can hang the facts of observation. It is the conceptual explanation of why things work the way that they do. Although the scientific community in general holds to an over-arching paradigm, Kuhn states that each scientific discipline has its own paradigm and that there are even various paradigms within disciplines that correspond to the sub-disciplines (e.g., molecular biology, as a sub-discipline of biology, has its own specialized paradigm).

A key component in Kuhn's explanation is the integral role that communities play in the definition and maintenance of paradigms. The paradigm itself is defined by the commitment of the members of the community to certain laws, definitions, models and values. As part of their training, potential new members to the community are taught through the use of 'exemplars' to see the world in such a way that it is susceptible to the specific problem-solving techniques of the paradigm. An exemplar is a traditional or historical problem that has already been solved. For example, in their training, students of physics are given problems related to inclined planes, pendulums and orbits. The solutions for these problems are already known--some for many centuries. Through practice, the students become familiar with the problems and their solutions and begin to see the world in terms of planes, pendulums and orbits. With enough practice, this form of classification happens at the level of perception. In this sense, the members of this scientific community 'see' the world in a particular way. Thus, it can be said that a paradigm is the way in which a particular scientific community sees or interprets the data of its research.

Kuhn's particular interest is in how one paradigm is discarded in favour of another--the scientific revolution or 'paradigm shift'. But, since scientific

revolutions are the exception rather than the rule, Kuhn's analysis must first describe non-revolutionary science--what he calls 'normal science'. For Kuhn, "normal science, the activity in which most scientists inevitably spend almost all their time, is predicated on the assumption that the scientific community knows what the world is like" (1970, p. 5). That is, the world, though not known fully, else there would be nothing for the scientist to do, is fundamentally understood through the paradigm of that scientific community.

A paradigm, to be successful, must have two essential characteristics. First, the model espoused by the paradigm must explain the data better than competing models and second, the model must be sufficiently open-ended as to leave all sorts of problems unresolved for the practitioners of the paradigm to unravel. Normal science is the mopping up of the details once a paradigm has been established. As such, "normal science does not aim at novelties of fact or theory and, when successful, finds none" (Kuhn, 1970, p. 52). Hypotheses are couched in terms and experiments are performed in a way such that the fundamental understanding as defined by the paradigm is not brought into question.

However, "to be accepted as a paradigm, a theory must seem better than its competitors, but it need not, and in fact never does, explain all the facts with which it can be confronted" (Kuhn, 1970, pp. 17-18). In some cases, in the course of normal science, problems arise that resist resolution and contradict the paradigm itself. The response to these anomalies by the community is usually one of active interest. As inveterate puzzle-solvers, scientists rise to the challenge. And in most cases, they find a way in which to place the anomalous data within the framework of the paradigm.

In some cases, however, the anomaly resists all attempts at resolution by

means of normal science. Thus, “when . . . an anomaly comes to seem more than just another puzzle of normal science, the transition to crisis and to extraordinary science has begun” (Kuhn, 1970, p. 82). Since the practitioners of the community have a commitment and stake in the paradigm that defines their community, in times of crisis, most efforts are directed at finding a traditional solution to the anomaly, and thereby preserving the paradigm. Kuhn found that “a novel theory emerged only after a pronounced failure in the normal problem-solving activity. . . . The novel theory seems a direct response to crisis” (1970 pp. 74-75).

Typically, the emergence of a novel theory that challenges the validity of the paradigm precipitates a debate within the community. Challenges to the paradigm from competing explanations are often met with resistance. For most members of the community, the existing paradigm has successfully served the purposes of normal science, thus prompting a certain allegiance to that paradigm. “Paradigm-testing occurs only after persistent failure to solve a noteworthy puzzle has given rise to crisis. And even then, it occurs only after the sense of crisis has evoked an alternate candidate for paradigm” (Kuhn, 1970, p. 145).

An anomaly does not of itself cause the demise of a paradigm. An anomaly only causes the crisis which inspires new theories to explain the anomaly. However, once a new paradigm theory has been suggested, the comparison between paradigms begins.

A scientific theory is declared invalid only if an alternate candidate is available to take its place. . . . The act of judgment that leads scientists to reject a previously accepted theory is always based upon more than a comparison of that theory with the world. The decision to reject one paradigm is always simultaneously the decision to accept another, and the judgment leading to that decision involves the comparison of both paradigms with nature *and* with each other. (Kuhn, 1970, p. 77)

The promulgation of new theories is not unique to the situation of scientific crisis. In the course of normal science, theories are proposed and accepted once the observed data confirm the theory. The theories of normal science, however, are incremental and build on the theories already accepted within the paradigm. A novel theory of crisis science differs in that it is “seldom or never just an increment to what is already known. Its assimilation requires the reconstruction of prior theory and the re-evaluation of prior fact, an intrinsically revolutionary process” (Kuhn, 1970, p. 7). As well, “the differences between successive paradigms are both necessary and irreconcilable” (1970, p. 103).

Although the popular conception of science and its activities is that its progress is characterized by ever-increasing accuracy and correspondence to the physical world, Kuhn’s contention is that “we may . . . have to relinquish the notion, explicit or implicit, that changes in paradigm carry scientists and those who learn from them closer and closer to the truth” (1970, p. 170). As he points out, “philosophers of science have repeatedly demonstrated that more than one theoretical construction can always be placed upon a given collection of data” (1970, p. 76). Echoing Lange in some respects, Kuhn states that “an apparently arbitrary element, compounded of personal and historical accident, is always a formative ingredient of the beliefs espoused by a given scientific community at a given time” (1970, p. 4).

Given that paradigms have an element of arbitrariness to them and that the differences between competing paradigms are necessary and irreconcilable, by what criterion do scientists decide between paradigms? Again, contrary to the popular conception of the functioning of science, rather

than a logical evaluation of the available data, Kuhn states that the choice between competing paradigms proves to be a choice between incompatible modes of community life. Because it has that character, the choice is not and cannot be determined merely by the evaluative procedures characteristic of normal science, for those depend in part upon a particular paradigm, and that paradigm is at issue. When paradigms enter, as they must, into a debate about paradigm choice, their role is necessarily circular. (1970, p. 94)

In debates about which paradigm will emerge as dominant, arguments based on logic and probability are no longer compelling. Given the incommensurate and circular nature of the paradigmatic system, members of competing paradigms are, in effect, speaking different languages.

The debates themselves are not about the ability of a paradigm to solve the scientific problems to which they refer. The issue is, rather, which paradigm is best able to return the discipline to a state of normalcy complete with the promise of new problems to be resolved in the future. Kuhn describes the cognitive change that an individual must make during a paradigm shift as being like a “conversion” (p. 152) or a “gestalt switch” (p. 150). These are unusual metaphors to use with respect to science but, such is the nature of a paradigm shift.

In a postscript written seven years after the initial publication of The Structure of Scientific Revolutions, Kuhn discusses some of the reactions that he received to the original publication. One response that he addressed was in regards to the applicability of his analysis to other fields. Although he recognizes that many of the general points that he makes are easily translated to other fields, he is reticent about the applicability of his more specific concepts; reserving them solely for the analysis of science.

His notion of ‘paradigm’ is an example of just such a concept. Kuhn’s

formulation of what constitutes a paradigm is too specific to the field of science to be applied appropriately to other fields.

Therefore, in order to incorporate Kuhn and his analysis into this paper, a modification will be made. Kuhn's concept of 'paradigm' with relationship to the community that holds to that paradigm is specific to science and scientists. If one accepts that, generally speaking, a paradigm is the worldview common to the community that defines and is committed to it, one can then use a different definition of a worldview in order to better apply Kuhn's analysis of what qualifies as 'normal' and as 'revolutionary'. To this end, Robin Collingwood's definition of worldview as 'a constellation of absolute presuppositions' as expressed in An Essay on Metaphysics (1972) will be substituted for Kuhn's 'paradigm'.

Collingwood's stated objective in writing An Essay on Metaphysics is similar to Kant's Critique of Pure Reason. As he explains in his *Preface*, his intention "is neither to expound my own metaphysical ideas, nor to criticize the metaphysical ideas of other people; but to explain what metaphysics is, why it is necessary to the well-being and advancement of knowledge, and how it is to be pursued" (1972, p. vii). For Collingwood, "metaphysics is the attempt to find out what absolute presuppositions have been made by this or that person or group of persons, on this or that occasion or group of occasions, in the course of this or that piece of thinking" (1972, p. 47) and as such, "all metaphysical questions are historical questions, and all metaphysical propositions are historical propositions" (1972, p. 49).

To determine what any community's absolute presuppositions are, Collingwood begins by asserting that "every statement that anybody ever makes is made in answer to a question" (1972, p. 23) and that "every question

involves a presupposition" (p. 25). Metaphysics is the process of tracing back the underlying elements of presuppositions until you reach their source--the 'absolute presupposition'. Collingwood defines an absolute presupposition as "one which stands, relatively to all questions to which it is related, as a presupposition, never as an answer" (p. 31).

Absolute presuppositions are the fundamental beliefs of a given community at a given time. Though most members of the community are not even aware of them, they are the suppositions which function as the foundation upon which all of the knowledge of that community is built. As such,

absolute presuppositions are not verifiable. This does not mean that we should like to verify them but are not able to; it means that the idea of verification is an idea which does not apply to them, because . . . to speak of verifying a presupposition involves supposing that it is a relative presupposition. (Collingwood, 1972, p. 32)

As stated above, an absolute presupposition is part of an historical context; that is, it is an historical fact. But, as Collingwood points out, "there is no such thing as an historical fact which is not at the same time a complex of historical facts" (1972, p. 66). An absolute presupposition does not exist in isolation but is a component of this 'complex of historical facts'. Collingwood calls a complex of absolute presuppositions a 'constellation'. It is with this concept of a 'constellation of absolute presuppositions' that Kuhn's concept of 'scientific paradigm' will be replaced for the following analysis of Lange.

As an historian, Collingwood noticed that, over time, the constellation of absolute presuppositions of a particular community would undergo modification or would sometimes even collapse. Similar to Kuhn, one of Collingwood's primary interests was in analyzing how and why this process of change occurred. His answer to this was that

the absolute presuppositions of any given society, at any given phase of

its history, form a structure which is subject to 'strains' of greater or less intensity, which are 'taken up' in various ways, but never annihilated. If the strains are too great, the structure collapses and is replaced by another, which will be a modification of the old with the destructive strain removed; a modification not consciously devised but created by a process of unconscious thought. (1972, p. 48)

The parallel with Kuhn is obvious. In the scientific community, an experimental anomaly focuses the attention of the members of that community on the anomaly. Either a way to explain the anomaly within the constraints of the paradigm is found or the 'strain' that the anomaly puts on the paradigm is so great that a new paradigm must be found.

As well, just as a scientific paradigm is never without anomaly, society is never without strains to its constellation of absolute presuppositions.

Where there is no strain there is no history. A civilization does not work out its own details by a kind of static logic in which every detail exemplifies in its own way one and the same formula. It works itself out by a dynamic logic in which different and at first sight incompatible formulae somehow contrive a precarious coexistence; one dominant here, another there; the recessive formula never ceasing to operate, but functioning as a kind of minority report. (1972, pp. 75)

When the tolerance of the constellation can no longer accommodate for the internal strains, a change occurs. Although the change has profound effects on the members of the society, they are not likely to even realize that they are going through a change of absolute presuppositions.

Absolute presuppositions change. . . . People are not ordinarily aware of their absolute presuppositions, and are not, therefore, thus aware of changes in them; such a change, therefore cannot be a matter of choice. Nor is there anything superficial or frivolous about it. It is the most radical change a man can undergo, and entails the abandonment of all his most firmly established habits and standards for thought and action. (1972, p. 48)

This radical change corresponds to the 'conversion experience' that happens to

the members of the community as a consequence of Kuhn's paradigm shift.

With this set of modified tools of analysis, the question will now be asked: would the result of the adoption of Lange's Standpoint of the Ideal be reform or would it be revolutionary?

Conclusion

The answer to this question begins with defining the paradigm or the 'constellation of absolute presuppositions' of the community that Lange is criticizing. The argument that will be offered here is that, though the classifications had not yet been invented when Lange wrote The History of Materialism, the community that he is indicting is 'modernism' and that the Standpoint of the Ideal represents a revolutionary paradigm shift.

Because 'modernism' is used in a wide variety of ways in a variety of contexts, a comprehensive definition is not possible. For the purposes of this paper, modernism will be defined in terms of the Enlightenment philosophers who gave birth to what came to be known as modernism. The general intent of thinkers like Locke, Descartes, Leibniz and eventually Kant, was "to make reason the absolute ruler of human life, and to shed the light of knowledge upon the mind and conscience of any individual" (von Fersen, 1972, p. 92). With the objective of establishing knowledge that is self-evident and secure from skepticism, modernism has been characterized by the belief that reason is humanity's central capacity and that knowledge is incremental and progressive.

From Descartes' 'cogito' through Locke's Essay Concerning Human Understanding and culminating in Kant's Critiques, Enlightenment thinkers stressed individual reason as primary. Every human being is endowed with the capacity to reason--to make sense of one's world and to know the morality of actions.

The community activity that best characterizes modernism is science.

The focus of science is the observed world. The goal of science is to discover the facts of the observed world and to discern the reasonable laws that govern these facts and thereby ever increase our scientific knowledge. Implicit to the activity of science is the promise that, eventually, everything would be known--everything would make sense.

For many, quantum physics is seen as the return of mystery to science. Yet, the most well-known, contemporary physicist, Stephen Hawking, is still of the opinion that science will eventually answer all questions. In A Brief History of Time, he states that

if we do discover a complete theory, it should in time be understandable in broad principle by everyone, not just a few scientists. Then we shall all, philosophers, scientists, and just ordinary people, be able to take part in the discussion of the question of why it is that we and the universe exist. If we find the answer to that, it would be the ultimate triumph of human reason--for then we would know the mind of God. (1988, p. 175)

This kind of optimism is the consequence of the tangible results possible through science and pervades the modern period.

Encouraged by impressive successes, science blossomed at the beginning of the modern period. It was so successful that eventually most aspects of European society took on the presuppositions of science. It was this unreflective acceptance of the materialistic assumptions of science to which Lange objected and to which he ascribed the crisis that he saw facing European society.

For the purposes of this paper, the constellation of absolute presuppositions that will be examined are as follows: 1) truth and knowledge, 2) the experienced world, 3) logic and reason, 4) human action, and 5) progress.

For the modern, truth and knowledge follow the scientific perspective of objectivity. Truth is absolute; it is independent of humanity and is the same for all people, everywhere and at all times. Knowledge is the search for and the approximation of that truth. The world is 'real' in the sense that it is out there independent of human experience. This world makes sense; it is reasonable and humanity, with its capacity for reason, is able to make sense of it.

Beyond the human capacity to understand the material world, reason is also the primary factor in the less tangible sphere of morality. The basic unit for human action is the rational individual. Although context influences the individual, it is still up to each person to make his or her own choices and to make the decisions based on reason and be responsible for the choices that are made.

The cumulative successes of science must have encouraged the modern thinker to believe that progress, both for the individual and for humanity in general, is possible. Just as science seems to progress incrementally and cumulatively, the Enlightenment thinkers believed that both humanity and the individuals that make up the society are capable of incremental and cumulative progress.

To summarize, modernism as informed by Enlightenment thinkers is defined by the absolute presuppositions that truth is absolute and that knowledge progressively approaches that truth; the world is objectively out there independent of human experience; the essential characteristic of this world and the individuals in the world is reason; through the use of reason it is possible for the individual to know the moral course of action, and; progress is possible, incremental and cumulative both for the individual and humanity in general.

As stated earlier in this essay, Lange does not wish to discredit or deny the validity and usefulness of science. His intention and the objective of The History of Materialism is simply to demarcate its limits. As long as science, and the materialism that serves as the philosophical underpinning of science, remain within its limits, science is a worthwhile tool. Lange's concern, however, is that materialism has overstepped its limits and the consequence of this is the social crisis that he sees in Europe.

In a more contemporary reading of this situation, Wilber (1996) describes the embracing of science and its principles as 'the disaster of modernity'. Buoyed by its successes, the attitude began to emerge that "science alone could pronounce on ultimate reality. Science . . . became scientism, which means it didn't just pursue its own truths, it aggressively denied that there were any other truths at all" (p. 265).

In Kuhnian terms, science became the dominant paradigm and as such, determined how the world was to be conceptualized and what constituted 'normal science'; that is, what qualified as a problem and how it was to be solved--including issues not related to empirical observation.

The *moral* decisions of the culture were rapidly being handed over to science and *technical* solutions. And thus science (theoretical and technical) would not only solve all problems, it would decide what was a problem in the first place--it would decide what was real and what was not. (Wilber, 1996, p. 267)

The questions of morality that had bothered the great thinkers throughout history were now turned over to scientists to resolve once and for all. As Lange points out, the economists offered a model of human motivation in the marketplace that was to be taken up, more or less, by the society--individualistic egoism.

The societal implications of the 'disaster of modernity' were dire, in Lange's opinion. Workers felt themselves to be exploited; the industrialists believed that their actions were justified; those in political power were not willing to institute the reforms that might have defused the crisis. Violent revolution was immanent. Within this context, Lange offered the Standpoint of the Ideal as a remedy for the danger that he saw.

In the critical part of his book, Lange takes the Kantian position that it is not that our concepts conform to the objects but that objects conform to our concepts. The Copernican turn challenges the absolute presuppositions of modernism. By pointing out that one cannot logically infer the existence of things-in-themselves from experience, the subject/object dichotomy of modernism is brought into question.¹ The objects of the experienced world are phenomenal not noumenal as the modernists suppose. The consequence of the Copernican turn is that truth cannot be understood as being representational. Knowledge is not gauged by its correspondence to the 'real' world.² Truth and knowledge become concepts related to the mind and take on a pragmatic rather than an absolute aspect.

Although reason is fundamental if one is even to understand Kant's or Lange's argument, logic is not inherent to the external world but is a function of the mind. The organization that one may see in the external world is not an

¹ Collingwood (1972) points out that this presupposition goes back as far as Aristotle. "Aristotle thought . . . that by merely using our senses we learn that a natural world exists. He did not realize that the use of our senses can never inform us that what we perceive by using them is a world of things that happen of themselves and are not subject to control by our own art or any one else's. I have already pointed out that the existence of such a world is a presupposition, the first and fundamental presupposition, on which alone any science of nature can arise" (p. 215).

² Kuhn echoes this perspective in The Structure of Scientific Revolutions (1970). "There is, I think, no theory-independent way to reconstruct phrases like 'really there'; the notion of a match between the ontology of a theory and its 'real' counterpart in nature now seems to me illusive in principle" (p. 206).

aspect of that external world but is a product of that human disposition to impose a synthetic, harmonious unity to the disparate facts of the world. The resulting organization of these facts is arbitrary--a function of the organizing activity of the mind rather than logically necessary.³

This also applies to the sphere of morality. One of the important aspects of Kant's critical philosophy was the derivation of the 'categorical imperative' in which he believed that he had established a reasonable and unimpeachable moral law. Lange, however, did not follow Kant's lead with regard to ethics. Although the theoretical aspect of the Standpoint of the Ideal has important implications for our understanding of the external world, it is the ethical component that most concerns Lange as he believes it is only with the modification of the understanding of ethics that society can be saved. However, as mentioned above, ethics had been influenced by the materialism of the time. But, when one tries to apply the empirical methodology of science to ethics, one has

fallen into what Whitehead called the *fallacy of simple location*. Namely, if something can't be simply located in physical space, then it isn't 'really real'. . . . But you can't *simply locate* consciousness and values and meanings and morals in the same way. You can't point to them with your finger. . . . They become rambling and ridiculed ghosts in the machine, pathetic illusions in the organic system. They are merely personal tastes and subjective fantasies. (Wilber, 1996, pp. 268-269)

In the absence of an empirically verifiable system of ethics, the society of Lange's time had adopted a 'law of the jungle' type of egoism.

³ "Any system of classification or division, whether the things classified or divided are colours or things that happen of themselves, is a system not 'discovered' but 'devised' by thought. The act of thought by which it is laid down is not proposition but supposition" (Collingwood, 1972, p. 196). A corollary of this is that as paradigms change, the classification of some of the facts may be rearranged. "One central aspect of any revolution is, then, that some of the similarity relations change. Objects that were grouped in the same set before are grouped in different ones afterward and vice versa" (Kuhn, 1970, p. 200).

Lange, however, believed that the Standpoint of the Ideal offered a more noble ethical alternative. Although he did not develop specific tenets, Lange believed that the same inclination that took disparate empirical facts and through a synthetic process, devised an harmonious unity was also functioning in the ethical realm. The resulting ethical synthesis would provide the antidote to the reductionistic morality of materialism that had made itself manifest in egoism and that would shape the ethical path that Lange believed necessary if his society was to survive the crisis.

Lange does not speak directly to the concept of progress--either individual or social. As an historian, Lange traced the paths of ideas and the societies that were animated by them. In The History of Materialism, he offers analogies between his own society and other civilizations. His concern, however, is with the similarities between these societies rather than the possibility of progress from one to the other. Although he never speaks to the issue of progress, perhaps his attitude can be inferred from the Standpoint of the Ideal.

As has already been noted, the Standpoint of the Ideal asserts that an essential function of the human mind takes disparate facts and synthesizes from them an harmonious unity. An important element of this constructive process, however, is its arbitrariness. The resulting knowledge structure is not logically necessary but depends for its shape on the principle of harmony. When applied to ethics, this principle has the same consequence. The resulting ethical structure is also arbitrary but not logically necessary. Although it is possible to think that Lange believed that subsequent ethical structures would follow some teleological, progressive path, he nowhere hints that this is what he thinks. It is obvious that he believed that some ethical

structures were better than others, else he would not have written The History of Materialism, however, it is more likely that, given the arbitrary nature of his formulation, he did not believe that progress followed an incremental, temporally-linear path.

With regard to the constellation of absolute presuppositions that define the paradigm of modernism, it can be seen that the absolute presuppositions of Lange's Standpoint of the Ideal challenges and is incommensurate with each of them. In this sense, though Lange directly refers to his hope that the Standpoint of the Ideal would result in 'beneficent reforms', it is, in Kuhnian terms, not reform--it is revolutionary. The Standpoint of the Ideal offers a qualitatively different paradigm.

References and Bibliography

- Acton, H.B. (1967). Berkeley. In P. Edwards (Ed.), The encyclopedia of philosophy (Vol. 1, pp. 295-304). New York: Macmillan Publishing Co. & The Free Press.
- Breazeale, D. (1989). Lange, Nietzsche, and Stack: The question of 'Influence'. International Studies in Philosophy, 21(2), 91-103.
- Brumbaugh, R.S. (1981). The philosophers of Greece. Albany: State University of New York Press.
- Cassirer, E. (1981). Kant's life and thought. (J. Haden, Trans.; Intro. by S. Körner). New Haven: Yale University Press.
- Collingwood, R.G. (1972). An essay on metaphysics. New York: University Press of America.
- Hawking, S.W. (1988). A brief history of time. New York: Bantam Books.
- Kant, I. (1929). Critique of pure reason (N.K. Smith, Trans.). London: MacMillan. (Original work [2nd ed.] published 1787)
- Kant, I. (1950). Prolegomena to any future metaphysics. (Intro by L.W. Beck). Indianapolis: Bobbs-Merrill. (Original work published 1783)
- Köhnke, K.C. (1991). The rise of neo-Kantianism (R.J. Hollingdale, Trans.). Cambridge: Cambridge University Press. (original work published 1991)
- Kuhn, T.S. (1957). The Copernican revolution. Cambridge: Harvard University Press.
- Kuhn, T.S. (1970). The structure of scientific revolutions (2nd ed., enlarged). Chicago: University of Chicago Press.

- Lange, F.A. (1950). The history of materialism (E.C. Thomas, Trans.; Intro. by B. Russell). New York: The Humanities Press. (Original work [2nd ed.] published 1873)
- Russell, B. (1950). Introduction: Materialism, past and present. In F.A. Lange, The history of materialism (E.C. Thomas, Trans.). New York: The Humanities Press. (Original work [2nd ed.] published 1873)
- Schnädelbach, H. (1984). Philosophy in Germany 1831-1933 (E. Matthews, Trans.). Cambridge: Cambridge University Press.
- Seigfried, H. (1989). Opposing science with art, again?: Nietzsche's project according to Stack. International Studies in Philosophy, 21(2), 105-111.
- Stack, G.J. (1983). Lange and Nietzsche. New York: Walter de Gruyter.
- Stack, G.J. (1989). From Lange to Nietzsche: A response to a troika of critics. International Studies in Philosophy, 21(2), 113-123.
- Vaihinger, H. (1924). The philosophy of 'As If' (C.K. Ogden, Trans.). London: Routledge & Kegan Paul Ltd. (Original work published 1911)
- Van der Linden, H. (1988). Kantian ethics and socialism. Indianapolis: Hackett Publishing Company.
- von Fersen, S. (1972). Enlightenment. In D.D. Runes (Ed.), Dictionary of philosophy (p. 92). Totowa, NJ: Littlefield, Adams and Co.
- Walsh, W.H. (1967). Kant. In P. Edwards (Ed.), The encyclopedia of philosophy (Vol. 4, pp. 305-324). New York: Macmillan Publishing Co. & The Free Press.
- Wilber, K. (1996). A brief history of everything. Shambhala Publications: Boston.
- Wilcox, J.T. (1989). Out of the spirit of Lange. International Studies in Philosophy, 21(2), 81-89.

Willey, T.E. (1978). Back to Kant. Detroit: Wayne State University Press.

Zweig, A. (1967). Lange. In P. Edwards (Ed.), The encyclopedia of philosophy (Vol. 4, pp. 383-384). New York: Macmillan Publishing Co. & The Free Press.

Note: as the author of this thesis has a limited ability to read German, please note that the following sources which do not have English translations were consulted indirectly.

Bösch, J.M. (1890). F.A. Lange und sein Standpunkt des Ideals. Frauenfeld.

Braun, H. (1881). F.A. Lange als Socialökonom. Halle.

Ellissen, O.A. (1891). F.A. Lange. Leipzig.

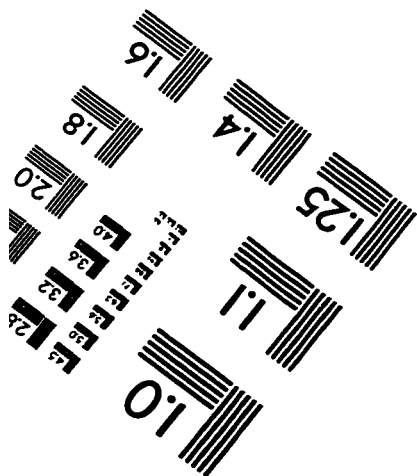
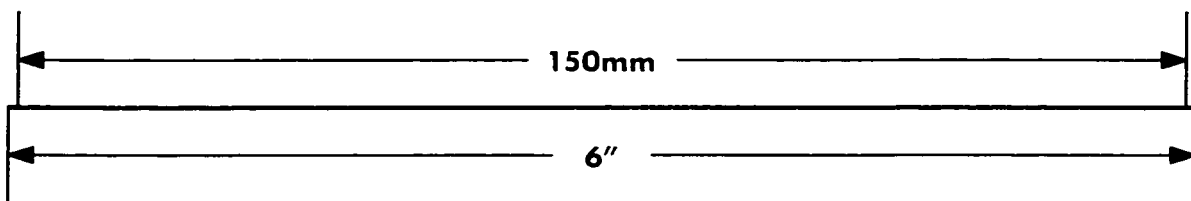
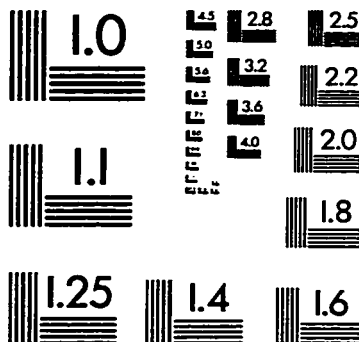
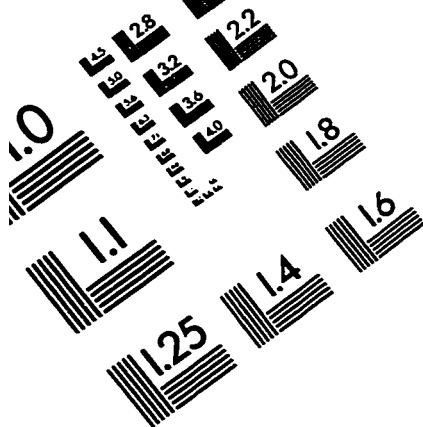
Lange, F.A. (1865). Die Arbeiterfrage. Winterthur.

Mill, J.S. (1866). Ansichten über die Social Frage. Duisburg.

Salaquarda, Jörg. (1978). Nietzsche und Lange. Nietzsche-Studien, 7, 237.

Salaquarda, Jörg. (1979). Der Standpunkt des Ideals bei Lange und Nietzsche. Studi Tedschi, XXII, 1, 27-28.

Vaihinger, H. (1876). Hartmann, Dühring, und Lange. Iserlohn.



APPLIED IMAGE . Inc
1653 East Main Street
Rochester, NY 14609 USA
Phone: 716/482-0300
Fax: 716/288-5989

© 1993, Applied Image, Inc., All Rights Reserved

