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### THE UNIVERSITY OF ALBERTA

Rational Acceptability and Coherence Theories of Justification

by

Ernest Howe



# A THESIS

# SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

DEPT. OF PHILOSOPHY

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# THE UNIVERSITY OF ALBERTA FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Rational Acceptability and Coherence Theories of Justification submitted by Ernest Howe in partial fulfilment of the requirements for the degree of Master of Arts.

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#### Abstract

The beliefs which an individual holds as true are, if not completely arbitrary, the result of some process of belief evaluation. Two different intuitions underlie acounts of this process. First, it seems that a belief should be held as true only when there exists in objective fact sufficient reasons or evidence to support that belief. The belief must be objectively justical. Second, it seems that the evaluation process serves no purpose unless it is one which the individual is capable of carrying out himself. A belief must be rationally acceptable to the individual.

A complete theory of belief evaluation must be both a theory of objective justification and a theory of rational acceptability. A theory of objective justification must make an objective truth connection between true beliefs and that which makes them true. A theory of rational acceptability must provide for the individual's acceptance of a belief in a manner which is aimed at the epistemic goal of truth, utilizes the evidence available to the individual, provides for reflection on the acceptance process, and allows for the pragmatic acceptance of beliefs in the present.

It is asked if the coherency approach can supply complete theories of belief evaluation. To answer this question, the theories of Sellars, Bonjour, Rescher, Putnam, Lehrer, and Harman are individually examined. It is determined that all these theories supply accounts of rational acceptability. Some do not attempt to supply accounts of objective justification, and those that do fail given the traditional concept. This failure is due to their reliance in demonstrating the truth connection on metaphysical assumptions about the world with which that connection is made. However, it is argued that they do supply accounts of objective justification when a nonstandard but rationally acceptable concept of objective justification is adopted, a concept which includes and takes account of this type of metaphysical assumption.

# Acknowledgement

My supervisor, Dr. Hunter, has given generously of his time in order to provide not only the guidance and criticism which prevented a thesis more defective than this one, but also the inspiration and insight which first brought me to the subject of epistemology and sustained my interest in it.

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#### I. Introduction

At any given time an individual has a certain stock of beliefs. These beliefs do not include every proposition which has ever occurred to him. They exclude many propositions which were at one time entertained as potential beliefs, as well as many former beliefs which have since been rejected. This stock of beliefs, if not completely arbitrary, must be the result of some process of belief evaluation. That process will be the focus of this thesis.

In particular, concern is with belief evaluation for epistemic purposes. A belief may be held for a variety of reasons. It may be more interesting than some other potential belief, it might be alligned with one's metaphysical, ethical, or religious views, or it may simple "make sense". Of interest here are those beliefs which are accepted because they are considered true — that is, knowledge beliefs.

Up until about twenty-five years ago there was relative agreement on the characterization of knowledge as justified true belief. The introduction at that time of the Gettier problem and its subsequent and varied appearances have necessitated a rethinking of this characterization. Some have advocated the addition of further conditions for knowledge, others have called for a radical reworking of the traditional view. Although no consensus has yet been reached concerning the solution of the problem, there seems to be agreement that the standard characterization is, if not complete, at least necessary for knowledge. In what follows knowledge will be viewed as including, at least, those true beliefs which an individual is justified in holding.

This characterization of knowledge, then, sets the epistemic goal of accepting truth and rejecting falsehood. This does not mean that there are not other legitimate cognitive goals — for example, achieving a maximally explanatory or a maximally coherent belief

<sup>&</sup>lt;sup>1</sup>E.g. Nicholas Rescher: "Knowledge, so the traditional — albeit much controverted — formula has it, is true, justified belief ... But whatever the strengths and weaknesses of this formula may be, it at least points out, quite appropriately, that knowledge claims must have some sort of justification" (Rescher, 1977: 69).

<sup>2</sup>Attention here will also be restricted to propositional knowledge — knowledge which can be expressed in the form of propositions or statements. Whether or not such constitutes the entire domain of knowledge, i.e. whether or not non-propositional knowledge is possible, will not be an issue.

system. While these are legitimate goals of inquiry, and may even represent intermediate steps in the pursuit of truth, they will not be of primary concern here. Knowledge will be considered to have as its ultimate aim the traditional epistemic goal of attaining truth.

Belief evaluation thus leads to the selection of presumably true beliefs. One approach to this task of belief evaluation is that of the coherency theorists. While there are many different coherency theories, the common claim is that knowledge consists of a system of propositions related to each other in certain ways, and that evaluation of a potential belief depends on how well it coheres with a system of knowledge. This thesis will examine a selection of these coherency theories with a view both to their individual accomplishments and to the potential of the coherency approach itself.

The first task will be an examination of the concept of belief evaluation. Two types of belief evaluation which are often conflated will be distinguished; rational acceptability and objective justification. This will be followed by a study of individual coherency theories of belief evaluation. Each will be outlined, and examined with respect to its adequacy as both a theory of rational acceptability and a theory of justification. Particular attention will be paid to the role of coherence.

The final task will be an examination of the coherency approach itself. It will be argued that while this approach is well suited to providing theories of rational acceptability, it is not able to provide theories of objective justification, at least as objective justification is traditionally perceived. Finally, it will be suggested that the coherency approach can provide theories of objective justification is taken

## II. Rational Acceptability and Justification

The epistemic task of belief evaulation is commonly refered to as justification.

Justification involves giving reasons for accepting a proposition as true. A theory of justification must, at minimum, set out the criteria by which the truth of a proposition will be judged. It might (and arguably must) also justify these criteria. Such metajustification sets out reasons why the selected criteria of justification allow for the acceptance of true beliefs and the rejection of false beliefs. An account of justification, then, provides criteria for the acceptance or rejection of a belief as true, as well as arguments for why those criteria tend to yield truths instead of falsehoods.

## A. Epistemic Belief Evaluation — Two Concepts

A belief is justified if it is legitimately held. There are different intuitions about how this legitimacy should be determined. On the one hand, if sufficient reasons or evidence exists for the justification of a belief, the belief is justified. This determination of sufficient reasons or evidence is made with respect to that which the belief is about, and constitutes objective justification. On the other hand, there is the intuition that this is not enough. If the believer cannot himself make the determination of legitimacy, then, in another sense, he is not justified. To be justified he must find the belief rationally acceptable. But if rational acceptability is set out as the sole criterion for justification, the intuition which gave rise to the concept of objective justification returns. Might not a belief which is rationally acceptable to a person be based on reasons or evidence which does not, in objective fact, legitimize the belief?

The clash of these two intuitions suggests that the notion of rational acceptability must be separated from the concept of objective justification. The primary difference lies in their aims. Rational acceptability is concerned with determining what beliefs can be legitimately held by a rational individual. Objective justification is concerned with determining what beliefs (or what types of belief) are truth-conducive. Although these aims need not be in competition, and are often complementary, a belief may satisfy one but not

the other.

First, a belief may be objectively justified but not rationally acceptable. For instance, a belief might be theoretically justifiable without that justification ever being accessible to an individual. This might be, for example, because the justification argument is too long to be comprehensible, or because the justifying evidence is not available to the individual. The fact that the belief can be objectively justified is not available to the individual, and cannot be used by that individual to certify the rational acceptability of that belief. If the belief is rationally acceptable, it must be for other reasons.

This leads to the second case, where a proposition is rationally acceptable but not objectively justified. For example, all mathematical theorems are justified by their proofs. But it is arguable that no one, not even the most brilliant mathematician, understands all mathematical proofs. Yet it is rationally acceptable to hold these theorems, based on the authority of mathematicians. They are justified one way (by proofs), and made rationally acceptable by conformance with other standards (deference to authority). (Of course, a theory of justification may be expanded to take deference to authority as one criterion of justification, in spite of the fact that it doesn't provide ultimate justification).

An example of a theory of justification which does not yield a theory of rational acceptability is that of evidentialism, as stated by Richard Feldman and Earl Conee (Feldman and Conee, 1987). "Evidentialism is the view that the epistemic justification of a belief is determined by the quality of the believer's evidence for the belief." (Feldman and Conee, 1987: 334). More precisely, it is what they call thesis EJ: "Doxastic attitude D toward proposition p is epistemically justified for S at t if and only if having D toward p fits the evidence S has at t." (Feldman and Conec, 1987: 334). This thesis, they claim, is sufficient for evaluating an individual's beliefs. "EJ sets an epistemic standard for evaluating doxastic conduct ... We hold the general view that one epistemically ought to have the doxastic

attitudes that fit one's evidence. We think that being episternically obligatory is equivalent to being episternically justified." (Feldman and Conce., 1987, 337)

This cannot provide an account of rational acceptability. EJ holds in spite of the abilities S may have, or the way in which he uses the evidence to arrive at p. "EJ asserts that the epistemic justification of an attitude depends only on evidence" (Feldman and Conee, 1987: 335). Anything else is superfluous to claims of justification. For example, "suppose that there were occurances when forming the attitude that best fits a person's evidence was beyond normal cognitive limits. This would still be the attitude justified by the person's evidence. If the person had normal abilities, then he would be in the unfortunate position of being unable to do what is justified" (Feldman and Conee, 1987: 336). A belief may be justified according to EJ without that justification being accessible to the individual. The belief would be justified, but not rationally acceptable for the person. As Richard Foley notes, "evidentialism implies that in the final analysis i, is rational for an individual to believe just that for which he has adequate evidence. ... This is an extreme position, far too extreme" (Foley, 1987: 212, 213).

One could hold evidentialism as a theory of justification, and deny it as a theory of rational acceptability. A complementary theory of rational acceptability could claim that a proposition is rationally acceptable only if it is properly based on the justificatory evidence, and that a justified proposition is not rationally acceptable if the justificatory evidence is beyond the comprehensive abilities of a rational human being. A theory of justification, then, need not be a theory of rational acceptability, nor need a theory of rational acceptability be a theory of justification.

The distinction between rational acceptability and justification leaves open the objection that what has really been distinguished are two types of justification: objective justification and subjective justification. Objective justification claims that a belief either is or is not justified depending on the evidence that *there is*, while subjective justification claims that a belief either is or is not justified depending on the evidence that *one has*. Before responding to these objections, a closer look must be taken at the notions of objective and subjective justification.

#### B. Justification — Concept

John Pollock identifies three senses of justification on the spectrum from the objective to the subjective. He begins with the most objective and subjective senses. "The subjective sense of 'should believe' concerns what one should believe given what we actually do believe (possibly incorrectly). The objective sense of 'should believe' concerns what one should believe given what is in fact true" (Pollock, 1986: 183). This subjective sense of justification relates to the beliefs already in our possession. The objective sense of justification, notes Pollock, reduces to truth. "What we should believe given what is true is just the truths, so the objective sense of 'should believe' gets identified with truth. The subjective sense, on the other hand, is ordinary epistemic justification" (Pollock, 1986: 183).

Pollock proposes another sense of objective justification which he does not reduce to truth, and which is in fact "very close to being the same thing as knowledge" (Pollock, 1986: 185). According to this sense of objective justification "S is objectively justified in believing P if and only if S instantiates some argument A supporting P which is ultimately undefeated relative to the set of all truths" (Pollock, 1986: 189). To instantiate an argument is to be "in the basic states from which the argument begins and ... [to believe] the conclusion of the argument on the basis of that argument" (Pollock, 1986: 188). In other words, S is objectively justified in believing P if and only if his reasons for believing P would stand up in the face of all the truths, including those of which he is unaware.

Similar distinctions between different senses of objective and subjective justification can be made when justification is phrased in terms of evidence and likelihood. Evidence refers to the facts as they actually exist. A proposition p is justified if, given the facts, correct reasoning processes (i.e. processes of induction and deduction which preserve the truth resident in the facts under consideration) show p to be likely to be true. The most objective

This likelihood must be cashed out non-epistemically. This can be done in different ways, as, for example, frequency (given the facts, conclusions of type p are more often true than false), propensity (given the facts, p will tend to be true rather than false), possible worlds (given the facts, p will be true in more possible worlds than it is false), or some other notion such as community acceptance (given the facts, p will be judged true by more members of the epistemic community than will judge it false). Which course to take is not at issue here. Of more immediate

sense of justification is as follows:

S is justified in believing that p if and only if it is likely that p based on all the evidence.

If "all the evidence" is interpreted broadly enough, it will include all the facts, that is, the set of all truths, and if "likely" is interpreted as meaning that no mistakes were made in the calculation of likelihood, this statement can be rewritten as follows:

S is justified in believing that p if and only if p is true.

This sense of objective justification, which can be called Completely Objective Justification, thus reduces to the notion of truth, simply stating that S is justified in believing true statements. It is justification from an omniscient, "God's eye" perspective.

A genuine sense of justification can be arrived at by restricting evidence to that ascertainable by the individual, i.e. to that which he potentially has access to — those facts which an individual can grasp. This includes evidence someone else already has, for example, something he could find out by reading a magazine or asking Aunt Molly. It also includes evidence which no one currently possesses, but which is readily discoverable. For example, a researcher could find it by doing a few more experiments, or it could be discerned by something so mundane as looking out the window. This sense of justification can be called Fully Objective Justification. It is the fullest justification which S could obtain given his human limitations, both as a conceptually limited knower and as a temporal being. It thus excludes evidence which can never be uncovered by humans, for example, that which exists only from a "God's eye" view. It also excludes that temporally beyond the individual — for example, that which will be uncovered as a result of scientific breakthroughs over the next one hundred years. It does not, however, exclude evidence that the individual cannot discover due to personal limitations. For example, a brain damaged person who has trouble determining distances is not justified in this sense in his perceptual judgements, even though it is impossible for him to ever have the required evidence for making these judgements. This sense of justification thus includes exactly that evidence which is potentially available to a

<sup>&</sup>lt;sup>3</sup>(cont'd) concern is differentiating between objectivity in its various senses and subjectivity.

normal human being.

A third sense of justification comes from limiting the evidence even further, from that potentially available to the individual to that actually available to him, the evidence which he in fact has in his possession — i.e. those facts actually within his grasp. It is objective in that the determination of the likelihood of p relative to the evidence is still assumed to be without error. It is subjective in that the evidence is localized to the individual. This can be called the Personally Objective sense of justification.

The final sense of justification that will be considered is the Fully Subjective. The evidence is now restricted to that which the individual believes to be true. It is not just the evidence which an individual actually has in his possession, that is, those facts which he actually has a grasp of, but that which he believes to be fact. Also, but the calculation of the likelihood of p based on this evidence is the individual's. This allows for idiosyncracies and mistakes in the individual's reasoning, and is the only sense in which justification is directly accessible to the individual. These four senses of justification can be summarized as follows:

Completely Objective: S is justified in believing that p if and only if it is likely that p based on the evidence (i.e. if and only if p is true).

Objective: S is justified in believing that p if and only if it is likely that p based on the available evidence.

<u>Personally Objective</u>: S is justified in believing that p if and only if it is likely that p based on the evidence in his possession.

<u>Fully Subjective</u>: S is justified in believing that p if and only if S finds it likely that p based on what he believes the evidence to be.

Of these four senses of justification, the Fully Objective and Fully Subjective will be of the most use in what follows, and will be what is meant by, respectively, objective and subjective justification.

The question raised earlier was whether rational acceptability involves anything other than subjective justification. Earl Conee, for one, indicates that it does. He states that "it can be rational to go against one's evidence, even in a pure pursuit of knowledge. There are

examples where, for the purpose of aquiring as much knowledge as possible, it is rational not to believe in accordance with one's evidence" (Conee, 1987: 316). For instance, a scientist's belief that he will recover from a usually incurable disease might contribute to his fight against the disease, allow him to further his research, and thus contribute to knowledge. This belief, although not justified by the evidence, is rational both with respect to the long term epistemic goal of furthering knowledge, and to the practical matter of the scientist's health. If rational acceptability dealt only with short term epistemic goals such as the immediate justification of beliefs, the scientist's belief would not be rationally acceptable.

It remains to be determined what, besides subjective justification, constitutes rational acceptability. It must also be asked what criteria a theory of belief evaluation must meet in order to be considered a theory of objective justification or rational acceptability. Attention will first be directed to objective justification.

#### C. Theories of Objective Justification

A theory of objective justification must satisfy the intuition that what legitimizes a belief is the available evidence, whether or not that evidence is held by the belief's holder. A theory of belief evaluation which is to serve as a theory of justification must establish an objective truth connection. It must allow for the acceptance of true beliefs and the rejection of false beliefs to be based on the existent evidence. As Alvin Goldman puts it, "the central epistemological concepts of appraisal ... involve true belief as their ultimate aim. So the evaluation of epistemic procedures, methods, or arrangements must appeal to truth-conduciveness, an objective standard of assessment" (Goldman, 1986: 3).

What constitutes truth conduciveness? Different answers come from metaphysical realists and non-realists. Goldman asks "What makes a proposition have the truth-value it has?" and replies "The natural answer is: the way the world is" (Goldman, 1986: 17). Richard Rorty, on the other hand, claims that "'objective truth' is no more and no less than the best idea we currently have about how to explain what is going on" (Rorty, 1979: 385). He rejects truth as "that which escapes the context within which discourse is conducted and

inquiry pursued, and purports to establish a new context" (Rorty, 1979: 309) — that is, the "accurate fitting of a scheme of representations to something which supplies a context for that scheme" (Rorty, 1979: 310). Rather, the truth is "roughly 'what you can defend against all comers'" (Rorty, 1979: 308).

The characterization of the objective truth connection seems to hinge on a choice between realism and non-realism. Such a metaphysical commitment, however, might not be necessary for a concept of objective justification. Crucial to the notion of objectivity is the idea that a proposition has a particular truth value irrespective of whether any particular individual has, or even can, ascertain it. Goldman speaks of "the principle of verification-transcendent truth: a statement is true or false independently of our knowledge, or verification of it (or even of our ability to verify it)" (Goldman, 1986: 143). While he claims this as a thesis of realism, it holds even under Rorty's concept of truth.

Determination of a belief's truth value might lie beyond the grasp of the belief irrespective of whether that truth value is based on independent reality or on consensually held opinion. All that is required for objectivity is the existence of a state of affairs, be that state of affairs some aspect of a real world, or what Rorty refers to as "general agreement among sane and rational men on what would count as confirming their truth" (Rorty, 1979: 337). In either case, the crucial characterization of the objective is that which obtains independent of whether or not a particular holder of a belief does, or can, ascertain it.

Objective justification, then, can be characterized while remaining neutral on the metaphysical question of realism versus non-realism. A belief is objectively justified when the requisite evidence or reasons exist for its justification, irrespective of the possession of such evidence or reasons by the holder of the belief. This evidence provides the truth connection for the belief.

The claim of a theory of belief evaluation to be a theory of objective justification depends on establishing this truth connection. While characterization of the objective truth connection does not depend on the choice of metaphysics, the method by which the connection is established does. It is perhaps easiest to establish when combined with

metaphysical realism. Alvin Goldman holds such a realist position, stating that "our conception of reality is the conception of something robust, an object or property that is invariant under multiple modes of detection" (Goldman, 1986: 149). Or, as Thomas Nagel puts it, "the world is in a strong sense independent of our possible representations, and may well extend beyond them" (Nagel, 1986: 91).

From this stance objective justification involves confirmation with respect to the real world. This real world is considered by realists to be essential for any meaningful notion of objectivity. Nagel, for example, claims that realism "has implications both for what objectivity achieves when it is successful and for the possible limits of what it can achieve. Its aim and sole rationale is to increase our grasp of reality, but that makes no sense unless the idea of reality is not merely the idea of what can be grasped by these methods" (Nagel, 1986: 91).

In spite of this claim, it might be possible for an objective truth connection to be established from a non-realist position. For example, Richard Rorty argues that we use "'objective' to mean both 'characterizing the view which would be agreed upon as a result of argument undeflected by irrelevent considerations' and 'representing things as they really are'" (Rorty, 1979: 333, 334). He claims that the former is the only legitimate use of the term — that "our only usable notion of 'objectivity' is 'agreement' rather than mirroring" (Rorty, 1979: 337). Thus "objectivity should be seen as conformity to the norms of justification (for as extions and for actions) we find about us. Such conformity becomes dubious and self-deceptive only when seen as something more than this — namely, as a way of obtaining access to something which 'grounds' correct practices of justification in something else" (Rorty, 1979: 361).

Choice of realism or non-realism can be left to the individual theories of justification.

Regardless of which account is presented, a theory of belief evaluation must set out the truth connection between true beliefs and what makes them true in order to be considered as a theory of objective justification.

# D. Rational Acceptability — Concept

A theory of rational acceptability must satisfy the intuition that determination of a belief's legitimacy must be made by the holder of the belief. An individual would consider many, if not most of his beliefs to be true, and to thus constitute knowledge. However, the psychological attitude of holding a belief as true does not always stand up to reasoned consideration. If subject to such examination, many beliefs would be rejected as not being knowledge. A comprehensive examination of these beliefs would leave those which, after reasoned consideration, were still held as true. The individual would consider it rationally acceptable that these beliefs were true. This subset of what he might originally have considered to be knowledge would be those beliefs which were, if not in objective fact legitimate (i.e. some of these beliefs may still be false), would at least be legitimately held.

발전한 1번째 하면 가입 경험이 나가 하는데 하는데 보고 전하는 살이 들어 가려면 하는데 하는데 경험 회사를 <mark>경험했다.</mark>

Before setting out what rational acceptability is, it will be helpful to contrast it with rational inference. A new belief can be rationally added to a belief system in one of two ways. First, it can be rationally inferred from that already in the system by a process of deduction or induction. Second, it can be the direct result of new "input" from outside the system. While inferred beliefs are, of course, accepted, they are not new to the system in that their acceptance does not imply the acceptance of new content. Rather, they are the result of the logical reprocessing of beliefs already in the system. Rational acceptability applies to both those beliefs inferred from other beliefs already in the system, as well as those beliefs which result from the consideration of new evidence.

It can now be asked what rational acceptability entails. Not all theories of rational acceptability expound the identical concept. This is demonstrated by Richard Foley, who gives what is perhaps the most comprehensive theory of rational acceptability to date. His entire approach to epistemology is from the perspective of trying "to describe in some detail what is involved in it being epistemically rational for someone to believe some claim" (Foley, 1987:-1).

Foley claims that "there is no privileged perspective for making judgements of rationality" (Foley, 1987: 136), and presents a "meta-theory" which allows for various

concepts of rationality. He finds that many "claims of rationality ... tend to be elliptical because they fail to make explicit the point of view from which they are made" (Foley, 1987: 140). Thus "it is necessary for any account of rationality to demarcate its subject matter—that is, to identify the kind of rationality that is the concern of the account. The way to do this is by identifying the kind of goal that is being sought and by identifying also the perspective from which the evaluation of how effectively the person is pursuing this goal is to be made" (Foley, 1987: 138). This results in classifying concepts of rationality first, by their goals, and second, by how objective or subjective they are. For example, he distinguishes:

- "1. The Aristotelian (or reflective subjective ...) conception: All else being equal, it is rational for S to bring about Y if he has a goal X and on reflection would believe that Y is an effective means to X.
- "2. The radically subjective conception: All else being equal, it is rational for S to bring about Y if he has a goal X and believes that Y is an effective means to X.
- "3. The radically objective conception: All else being equal, it is rational for S to bring about Y if he has a goal X and Y is an effective means to X" (Foley, 1987: 131). Variations on any of these conceptions would result in still other conceptions.

While one can evaluate his beliefs with respect to other than epistemic goals, and from different perspectives (e.g. different societies, cultures, etc.) and from time frames other than the present (e.g. long term goals), Foley's approach "emphasizes the epistemic priority of both the present and the first person" (Foley, 1987: 206). This he calls the "purely epistemic" perspective. "To describe what it is rational for S to believe from a purely epistemic point of view is to describe what S himself from his own perspective on reflection would believe" (Foley, 1987: 125).

While this approach, with its attendant Aristotelian concept of rationality is compatible with the concept of rational acceptability, there may be other accounts which also suffice. The next step is to examine what a theory of rational acceptability must accomplish.

#### E. Theories of Rational Acceptability

A theory of rational acceptability must account for how a rational individual goes about accepting his beliefs. While no definition of rational acceptability will be given here (this can be left to the individual accounts), certain features of the acceptance process which a theory of rational acceptability must address can be sketched out. First, the acceptance process must be conducted with some goal in mind. For beliefs being accepted for epistemic reasons, this end is the goal of truth. Second, there must be reasons for accepting a particular belief. In the epistemological context, the belief must be subjectively justified. Also, the individual must be at least potentially aware that he has accepted the belief as true, and be able to mull over why he so accepted it. Finally, in order for the process to occur at all, it must yield to the pragmatic concerns of a limited individual operating at a certain point in time.

A theory of rational acceptability, then, must account for certain characteristics of rational acceptability. Rational acceptability is goal directed, embodies subjective justification, requires reflection, and is pragmatic. Before examining coherency theories of belief evaluation, these characteristics of rational acceptability will be examined in more detail.

#### Goal Directed

Rational acceptability is goal directed. That is, a belief is rationally acceptable only with respect to a certain goal or goals of an individual. Epistemic rationality is distinguished by its goal, which Paul Moser expresses as a certain preference. "It should be stressed now that principles [of rationality] ... require that S has a preference whose satisfaction is evidently best provided for by his fulfilling his relevant epistemic, moral, or prudential obligations. For it is a preference of this sort that typically makes such obligations rational obligations for S" (Moser, 1985: 220). Richard Foley also speaks of goals. "Judgements of rationality are judgements about how effectively an individual is pursuing some goal. This is what all judgements of rationality have in common" (Foley, 1987: 137). Thus, "if we are

interested in identifying a distinctly epistemic kind of rationality, it is necessary to identify a distinctly epistemic goal ... I suggest that we take it to be what epistemologists have often said it to be, now to believe those propositions that are true and now not to believe those propositions that are false" (Foley, 1987: 7, 8).

Rational acceptability, then, must be directed toward some goal in its application. In the present context, this goal is the epistemic goal of truth. A theory of rational acceptability must both elucidate this goal and show how the criteria it sets forth for belief acceptance help move towards that goal. This goal is truth, and that is the common ground between epistemic rational acceptability and objective justification. A theory of rational acceptability aims to determine how to accept true beliefs, while a theory of objective justification aims to establish that these beliefs are indeed true.

#### Subjective Justification

As noted earlier, a theory of rational acceptability is, at least, a theory of subjective justification. As justification, rational acceptability must take into account the evidence. As subjective justification, this refers to the evidence that one has. In order for the judgement to be rational, it must be made on all the evidence one has. As Paul Moser notes, S should believe p if and only if "p is likely to be true on S's total evidence" (Moser, 1985: 219). This sense of subjective justification is that referred to above as the Fully Subjective: S is justified in believing that p if and only if S finds it likely that p based on the evidence in his possession.

#### Reflection

Whether a proposition is rationally acceptable depends on more than just the evidence available to the individual. It also depends on how that evidence is processed. While details depend on and must be left to the individual accounts of rational acceptability, it can be said that this processing must, at least, involve the awareness of a rational individual. In other words, it must not be simply an automatic function, but one which the individual is either

reflectively aware of at the time of processing, or which could be subject to such reflection at some time in the future. Reflection allows the individual to be aware of the reasoning which leads to a judgement regarding p's truth. He can critically examine this reasoning process, looking for flaws in the process itself as well as for gaps in the evidence which might lead either to a suspension of judgement or to a different assessment of p's truth.

Although subjective justification only requires the individual to take into account the evidence which he has, rational acceptability places an onus on him to gather the relevant evidence. While p might at any given time be subjectively justified, failure to pursue evidence relevant to p's justification calls into question the rational acceptability of p. As Ernest Sosa says, "what one is rationally justified in believing obviously depends on the data in one's possession. But what data one has can depend on how much and how well one investigates" (Sosa, 1974: 116). To a large extent, these standards of investigation are set by the community to which we belong. "Our departures from the traditional conception of knowledge put in relief the relativity of knowledge to an epistemic community. This is brought out most prominently by the requirement that inquirers have at least normal cognitive equipment ... [and also] that inquirers not lack or blink generally known relevant information" (Sosa, 1974: 117). Consequently, "we have ... two types of situations where correct, fully warranted belief falls short of knowledge owing to no neglect or faulty reasoning or false belief. Despite commendable thoroughness and impeccable reasoning unspoiled by falsehood, one may still fail to be 'in a position to know', owing either to faulty cognitive equipment or to misused generally known information" (Sosa, 1974: 118). According to Sosa, someone with faulty cognitive equipment, or who consistently misuses information. could be considered irrational. "My conclusion is that to understand knowledge we must enrich our traditional repertoire of epistemic concepts with the notion of being in a position to know (from the point of view of a K, e.g., a human being). Thus a proposition is evident (from the point of view of a K) to a subject only if both he is rationally justified in believing it and he is in a position to know (from the K point of view) whether it is true" (Sosa, 1974: 118).

This does not mean that such a rational person, a person with fully functional cognitive facilities and who generally processes information correctly, is always going to believe that which he should based on the evidence. As Foley notes, a person may not believe all that he is entitled to. "Although it perhaps is possible for people to believe only propositions that are epistemically rational for them to believe, it may very well not be possible for people to believe all propositions that are epistemically rational for them" (Foley, 1987: 230). A person might fail in being comprehensive. But "to say that a person believes something that is not epistemically rational for him or to say that he fails to believe something that is epistemically rational for him is not to say that he has not been as good an epistemic agent as he might have been. To say that a proposition is epistemically rational ... is not to say that he has control over whether he believes it or not.... However, at least with respect to each particular proposition that is epistemically rational for an individual, this usually is a moot point" (Foley, 1987: 13). When made aware of a proposition which he has missed, a rational individual will usually accept it.

Foley explicitly acknowledges this reflection requirement when he states that "according to an Aristotelian concept, rationality is best understood in terms of a person pursuing his goals in a way he would believe to be effective were he to take time to reflect carefully on the question of how best to pursue them" (Foley, 1987: 6). Which means are considered effective depends on the individual. At one extreme is the radical skeptic, for whom "no means is any better than any other means" (Foley, 1987: 9). Such a person holds that nothing is epistemically rational. At the other extreme is the omniscient Gods-eye view. Someone holding this position would feel that "the most effective means to his epistemic goal is to believe precisely what he now believes" (Foley, 1987: 9). Most people can be found somewhere between these two extremes. As to what constitutes sufficient reflection, "strictly speaking there is no limit. We imagine [a person] reflecting until his view stabilizes, until further-reflection-would not-alter his opinion of the argument in question" (Foley, 1987: 35).

The reflectivity requirement can also be stated in terms of doxastic and propositional warrant as set out by Roderick Firth. He "adopt[s] the traditional device for seperating the

'logical content' of a belief from the psychological state of believing. We may distinguish propositional warrant from doxastic warrant" (Firth, 1978: 218). He does this because "there is an important respect in which a belief may be warranted although we are subject to epistemic criticism for having that belief. We may be criticized on the ground that our doxastic state is not psychologically based on or derived from the relevent evidence in a rational way ... [although] our belief might be justifiable by rational inference from our evidence" (Firth, 1978: 217). A proposition p is justified because of certain evidence. If the evidence exists, the proposition has propositional warrant. In order to have doxastic warrant, the person's belief that p must be based on this evidence. It can be said, then, that a belief is rationally acceptable only if a person can be reflectively aware of its propositional warrant. Not only must there be propositional warrant, but belief must be rationally based on the evidence in order to achieve doxastic warrant.

While an individual need not always be aware of how he accepted a belief, or even be aware of consciously holding that belief, he must always be in a position whereby he could reflectively examine the belief, the evidence which supports it, and the reasoning by which the belief is deemed acceptable on that evidence. The individual might accept the majority of his beliefs without reflecting on them, but he must be able to reflectively examine any given belief if questions arise about it.

The reflective characteristic of rational acceptability, then, requires that the individual must attempt to gather relevant evidence, and must be (at least potentially) aware of the processing of that evidence. This does not mean that the introspective processes which constitute reflection are not subject to scrutiny, or that one's knowledge of these processes

<sup>\*</sup>Bertrand Russell makes note of this psychological aspect of justification in The Problems of Philosophy. He defines "derivative knowledge" as that "validly deduced from premises known intuitively" (Russell, 1967: 77). This derivative knowledge is not limited to that logically inferred from intuitive knowledge, but includes "whatever is the result of intuitive knowledge even if by mere association, provided there is the result of intuitive knowledge even if by mere association, provided there is a valid logical connexion, and the person in question could become aware of this connexion by reflection" (Russell, 1967: 78). The results of this "psychological inference" are acceptable "provided that there is a discernable logical inference which runs parallel to the psychological inference" (Russell, 1967: 78). If the logical inference could be discerned by reflection, the psychological inference is itself sufficient to produce knowledge.

does not require justification. It only means that reflective awareness is required for rational acceptability, and this requirement is independent of any claim of or demand for the justification of the processes that constitute this reflection.

#### Pragmatic

Finally, rational acceptability is pragmatic. It involves present action — the acceptance, now, of a belief. This is recognized by Richard Foley, who "emphasises the epistemic priority of ... the present" (Foley, 1987: 206). While a theory of justification can have long-term goals, and argue for those propositions which will lead, in the end, to true beliefs, rational acceptability involves the actual judging of propositions at the time that they arise. This pragmatic nature of rational acceptability thus arises from temporal considerations.

One such consideration is the demand for present action. An individual is in a situation where he must act, and he must reach some immediate conclusion as to what course of action to take. For example, a doctor must decide whether or not to administer a certain drug to an accident victim. There is no medic alert bracelet or wallet card indicating that the victim is allergic to the drug, so the doctor administers the drug based on his immediately formed belief that the victim is not allergic to it.

Another consideration is the impracticality and irrationality of suspending belief indefinitely. If the primary goal was to hold only true beliefs and no false beliefs, belief would have to be suspended until all the evidence was available. This would lead to a suspension of many if not most of the beliefs which we now hold. We are willing to run the risk of holding some errant beliefs in order to expand the number of beliefs we hold, thereby gaining more true beliefs.<sup>5</sup>

It might be argued that what we really are dealing with are not beliefs but working hypotheses. We operate under these hypotheses, but suspend belief in them until we have more evidence. Van Fraassen, for example, argues in *The Scientific Image* (Van Fraassen, 1980) that this is the case in scientific inquiry. While hypothesis formation and belief suspension might well be the case in the scientific process of theory formation and testing, it is not the usual case. Normally, a rationally accepted proposition is one which the individual will believe. As Roderick

Rational acceptability is also pragmatic in that acceptance of a proposition might depend not on whether a proposition is true, but on what other propositions are available which have an epistemic relationship to the proposition under question. For example, Moser holds that a proposition should be believed only if there are no defeaters for that proposition. That is, S should believe p if and only if "S's believing that p is not incompatible with S's believing a proposition q, which is likely to be true on S's evidence, and which is epistemically more important than p" (Moser, 1985: 219). If there are no defeaters available at the time to the individual, they are not a consideration in his judgement of rational acceptability, even though they might exist. This is, of course, another way of stating that rational acceptability embodies subjective justification.

The pragmatic characteristic of rational acceptability, then, requires that the process must lead to an actual and present belief — i.e., that an accepted proposition should be held as true.

#### F. Coherency Theories of Epistemic Belief Evaluation

A system of knowledge must, by any but the most radical standards, be internally coherent. For a coherency theory, coherence is not only a necessary condition for belief acceptance, it is the primary condition — perhaps even a sufficient condition. Of concern here is whether these coherency theories can provide complete accounts of belief evaluation. Any theory which attempts this task must provide accounts of both rational acceptability and objective justification. The coherency theories of Sellars, Bonjour, Rescher, Putnam, Lehrer, and Harman will be individually examined to see if they can supply such accounts. This

<sup>&</sup>quot;To the extent that we are rational, each of us decides at any time t whether a belief is true, in precisely the same way that we would decide at t whether we ourselves are, or would be, warranted at t in having that belief. ... we are irrational if we have at t one way of assessing warrant and another way of assessing truth. If we are rational we must assume, either implicitly or explicitly, a correlation between warrant-confering rules and true beliefs — as, indeed, we all do — in order to identify true beliefs" (Firth, 1981: 19).

\*Richard Foley, for example, cites the following noncoherentists as claiming that coherence is prerequisite for knowledge: R. Chisholm, C. I. Lewis, H. H. Price, R. Firth, and B. Russell (Foley, 1980: 53).

# examination will ask three questions:

- 1) It will first be ascertained whether the characteristics of rational acceptability set out in the previous section are fulfilled by a theory. This will determine whether or not the theory can serve as a theory of rational acceptability that is, whether the criteria it provides can be used by an individual to determine if a belief can be legitimately held. It will not be asked how good the theory is compared to other theories, just whether or not it is adequate as a theory of rational acceptability.
- 2) The next question is whether the theory can serve as a theory of objective justification. Is an objective truth connection set out? Are there any conditions on which the establishment of this truth condition are contingent?
- 3) The final question is the role of coherence in these theories. What, exactly, is the relationship between rational acceptability and coherence, and between objective justification and coherence?

The first group of coherency theories that will be examined are those of Sellars, Bonjour, and Rescher. They attempt to provide complete theories of belief evaluation which can be held together with a concept of a real, external world. As present day coherency theories (as opposed to the older, idealist theories such as those of Blanshard) can be viewed as developments of, or at least related to, the coherency theory of Wilfrid Sellars, Sellar's theory will be examined first, and will be used as a reference point for examination of the other theories.

#### III. Sellars

# A. Sellars' Theory

Wilfrid Sellars' coherency theory directly challenges one of the primary objections to such theories, namely that coherence involves or implies an unacceptable circularity in justification. This is accomplished by claiming that certain propositions are neither inferentially justified (thus avoiding charges of circularity) nor self-justified (thus avoiding foundationalist claims).

For Sellars, there are "two ways in which there can be, and one can have, good reasons for believing that p" (Sellars, 1975: 334). First, "one pattern for justifying a belief in terms of good reasons can be called inferential" (Sellars, 1975: 335). Second, there are "non-inferentially reasonable beliefs" and these "have epistemic authority or correctness, but ... are not reasonable or authoritative by virtue of the fact that they are beliefs in propositions which are implied by other propositions which it is reasonable to believe" (Sellars, 1975: 337).

Justification occurs in epistemic systems which contain different types of propositions, including observation reports and epistemic principles. Observation reports are statements about one's introspections, perceptions, or memories — "IPM judgments" as Sellars calls them. For example, "This is green" is an observation report constituting a perceptual judgement about the color of some object. An epistemic principle is a judgement, or metajudgment on observations of a particular kind. These metajudgments can be very comprehensive, for example "IPM judgements are likely to be true", or more specific, for example "Uttering 'this is green' is a reliable sign of green objects."

A proposition in the system is justified if it coheres with the other propositions in the system. But coherence is not inferential, in that p is justified if it can logically be inferred from other propositions in the system. Rather, p is justified if it is explained by these other propositions, and explanation does not necessarily involve deductive or inductive inference.

The result is a system bonded together by what Sellars calls "explanatory coherence".

In order to be justified a proposition, be it an observation statement or an epistemic principle, must, in Sellars' terminology, have a certain authority accruing to it. It must be "epistemically warranted", that is, have a warrant increasing property (WP) which justifies it. Traditional coherency theories found the epistemic warrant of any particular proposition to be the result of inference from some other propositions. That is, all propositions had inferential warrant increasing properties. Sellars wants to find certain statements which have "an ultimately non-inferential warrant increasing property" (Sellars, 1979: 172). These statements are not self-justified — they are justified because of this particular property which they have. Yet they are not inferentially justified, in that their justification does not depend on inference. Such "non-inferential knowledge [consists of] beliefs ... the reasonableness of which does not rest on the reasonableness of beliefs which logically or probabilistically imply them" (Sellars, 1975: 336). The existence of such principles breaks the circularity inherent in inferential coherence theories.

The suggestion, then, is that a statement is justified by having a warrant increasing property (WP). Sellars states, explicitly, two types of inferential warrant increasing properties, as well as a non-inferential warrant increasing property which can be stated in the same terminology.

- 1) Statement S has inferential WP of the first kind, P<sub>1</sub>, if P<sub>1</sub> "consists in the fact that S is 'validly inferable from certain other statements of a specified kind'" (Sellars, 1979: 173). For example, the statement "Dogs howl at the moon" has WP P<sub>1</sub> as it is ultimately inferable from statements such as "Fido howls as the moon", "Rover howls at the moon", etc.
- 2) Statement S has inferential WP of the second kind, P<sub>2</sub>, "if the meta-statement [or meta-judgement MJ] 'if S has the property P, then S is likely to be true' has an inferential warrant increasing property ... of the first kind" (Sellars, 1979: 173). Note that P<sub>2</sub> need not be inductively inferential, i.e. inductively inferred from certain statements, but as it has a WP P<sub>1</sub> which receives its warrant by being inductively inferred from certain statements, P<sub>2</sub> is ultimately an inferential WP, albeit of a different kind than P<sub>1</sub>. For example, the statement "Neanderthal man stood upright" has WP P<sub>2</sub>, where P<sub>2</sub> is "being believed by certain

scholars." This is because the metajudgment MJ<sub>2</sub>, "S is likely to be true if it is believed by certain scholars" is validly inferable from statements to the effect that those scholars have held correct beliefs about S-type statements, and thus WP P<sub>1</sub> accrues to MJ<sub>2</sub>.

3) Statement S has a non-inferential WP, P<sub>3</sub>, if the metastatement (or metajudgment MJ) "if S has the property P<sub>3</sub> then S is likely to be true" is ultimately non-inferential (i.e. either has no WP or has a non-inferential WP). "I see a red object before me" has WP P<sub>3</sub> if the metajudgement MJ "Judgements about one's own perceptions are likely to be true" is ultimately non-inferential.

Sellars accepts the inferential WPs as essentially non-problematic, and sets out to defend non-inferential WPs. The acceptance of these non-inferential WPs of type P, depends on whether there can be metajudgements, MJs, which are ultimately non-inferential (at least in some required sense of non-inferential). Sellars sets out some examples of what he hopes will be ultimately non-inferential MJs.

MJ<sub>1</sub>: Judgements which are about, and only about, my present experience are likely to be true.

 $MJ_3$ " "If a person ostensibly perceives (without ground for doubt) something to be  $\emptyset$  (for appropriate values of  $\emptyset$ ) then it is likely to be true that he perceives something to be  $\emptyset$ " (Sellars, 1979: 177).

MJ<sub>4</sub>: "If a person ostensibly remembers (without ground for doubt) having ostensibly perceived something to be Ø (for appropriate values of Ø) then it is likely to be true that he remembers ostensibly perceiving something to be Ø" (Sellars, 1979: 177).

These principles can be summarized as:

"MJ<sub>5</sub>: IPM [introspection, perception, memory] judgements are likely to be true" (Sellars, 1979: 180).

Empirical knowledge, for Sellars, is thus a framework which consists of IPM
judgements and certain metajudgements, or epistemic principles. Some of these epistemic
principles (in particular, MJ<sub>1</sub>, MJ<sub>2</sub>, MJ<sub>3</sub>) are considered non-inferentially warranted.
What remains for Sellars is to provide justification for these non-inferentially warranted

components of the framework.

Sellars' initial justification of these components (hereafter referred to simply as MJs) involves an appeal within the framework itself, an approach which Sellars himself seems to have recognized as, if not unsatisfactory, at least incomplete. It involves reference to different "logical dimensions" of justification. That is, MJs are said to justify IPMs in a different logical dimension than IPMs justify MJs. By this Sellars means that the justifications of MJs by IPMs is of a different type from that of the justification of IPMs by MJs, so that the mutual justification is non-circular.

This appeal is set out in section VIII of Sellars' classic paper, Empiricism and the Philosophy of Mind (Sellars, 1956). Sellars begins by suggesting that a token of, for example, "This is green" in the presence of a green item is an observation report "if and only if it is a manifestation of a tendency to produce ... tokens of "This is green" ... if and only if a green object is being looked at in standard conditions" (Sellars, 1956: 297). The problem with this formulation, as he sees it, is that of the authority a statement which constitutes an observation report must have in order to be considered knowledge. First, one must be able to infer the presence of green objects from the fact that such a report is made. In other words, such reports must be reliably considered to be true. Second, this authority must be recognized by the person who is making the report. This condition is necessary to avoid the so-called "thermometer view" of knowledge, according to which the person making the observation report might be providing reliable reports, but would simply be acting as a measuring instrument of some sort and could not be considered to actually have the knowledge others might derive from the reports. In order for these conditions to hold, concludes Sellars, the reporter must know many other things besides "This is green."

This other knowledge is of general facts of the form "X is a reliable symptom of Y".

(These "X ... Y" statments are simply more specific forms of the MJ type principles seen before.) For example, for the statement "This is green" to express knowledge of a particular matter of fact, the reporter would need to already know general "X ... Y" facts such as "utterances of 'This is green' are reliable indicators of the presence of green objects in

standard conditions of perception" (Sellars, 1956: 299). MJ<sub>3</sub>, which was used above to justify perceptual judgements, could be used in place of this more specific "X ... Y" judgement.

It might be objected that this view entails a circular regress, in that observational knowledge is required to generate "X ... Y" knowledge, which in turn is required to generate observational knowledge, and so on. Such an argument, claims Sellars, results from a mistaken notion of knowledge. "The essential point is that in characterizing an episode or a state as that of knowing, we are not giving an empirical description of that episode or state; we are placing it in the logical space of reasons, of justifying and being able to justify what one says" (Sellars, 1956: 298, 299). The epistemic goal at hand is that of justifying observation reports on the one hand and epistemic principles of the MJ or "X ... Y" type on the other, both within the same framework. Explaining how a belief comes to be is a concern which Sellars considers outside this framework of justification. For example, while I might cite particular previous instances of seeing green objects to justify the "X ... Y" statements which I now use to justify "This is green" statements, it does not follow that at those previous times I knew they were green objects. To so claim, and to thus propagate the regress, is to confuse empirical descriptions of how knowledge comes about with what forms the true conditions of knowledge, i.e. supplying justifying conditions, or reasons for acceptability. I can remember having seen green objects, without having known at that time that they were green. Once I have the appropriate "X ...Y" statements I need to justify the application of "green" to green objects, these statements can be applied to the remembered experiences of green objects, enabling propositions such as "I saw a green object at time t" to become part of my knowledge.

Hence, I have MJ<sub>6</sub>: "Tokens of 'This is green' are reliable indicators of the presence of green objects in standard conditions." This statement is used as a good reason for accepting, in one logical dimension in the space of reasons, claims such as "This is green." Now MJ<sub>6</sub> must itself be justified. It is not, for Sellars, justified inferentially from claims of "This is green." Rather, it is justified in another logical dimension by statements such as S:

"In the past, I learned to token 'this is green' in the presence of green objects in standard conditions." This does not mean that in the past I knew these objects were green. MJ<sub>6</sub> is not inferred from statements such as "This is green," rather it is justified in another logical dimension. There are good reasons for accepting MJ<sub>6</sub> such as S, and this justification is in that other logical dimension.

This appeal to logical dimensions is internal to the framework itself. IPMs are inferentially justified by MJs. On the other hand, MJs cohere with IPMs, in that they explain them, or give good reasons for accepting them, and thus these MJs are internally justified in the system.

While it can be argued that IPM judgements and MJ principles are justified in different logical dimensions; that is, IPM judgements are inferentially justified by MJs, while MJs are non-inferentially justified in a different manner, it is not clear that the justification in this latter dimension is satisfactory. That is, no argument has yet been put forth to indicate that such justification leads to true beliefs. Sellars himself sees that this is problematic. He still claims, in *Empiricism and the Philosophy of Mind* that "if there is a logical dimension in which other empirical propositions [i.e. MJs] rest on observation reports, there is another logical dimension in which the latter rest on the former" (Sellars, 1956: 300). But how these observation reports can both depend for justification and supply justification to other propositions, albeit in different "logical dimensions," is recognized by Sellars as a "promissory note" which he hopes to cash up for. In his paper *More on Giveness and Explanatory Coherence* (Sellars, 1979), while still holding that IPMs and MJs justify each other in different logical dimensions, he contends that the justification for this claim must ultimately be attained through an appeal outside the framework itself. Within the framework there are simply not enough "good reasons" for accepting non-inferentially warranted MJs.

In More on Giveness and Explanatory Coherence Sellars claims that these MJs are principles which provide criterea for judging empirical knowledge claims, yet are empirical knowledge claims in their own right. In order to show that they are ultimately non-inferential, in the sense required, he must exorcise the circularity from this claim. The

sense of "non-inferential" he is after is one which will show these MJs to be "epistemically prior" to the empirical claims they provide the warrant for, i.e. to IPM judgements. This "epistemic priority" is Roderick Firth's thesis "'that some statements have some degree of warrant which is independent of (and in this sense 'prior to') the warrant (if any) which they derive from other statements'" (Sellars, 1979: 177). Sellars must now demonstrate the epistemic priority of the MJs to IPM judgements.

He claims that while MJ<sub>1</sub>, MJ<sub>3</sub>, and MJ<sub>4</sub> might be knowledge claims, "they cannot be empirical generalizations which owe their epistemic authority to conformation by instances" (Sellars, 1979: 177). The exact nature of the circularity involved is captured in the following two statements:

- A) "It is reasonable to accept MJ<sub>1</sub>, MJ<sub>3</sub>, and MJ<sub>4</sub> because they are elements in a theory T which coheres [in the sense of explanatory coherence] with our introspections, perceptions, and memories."
- B) "Our ostensible introspections, perceptions and memories are likely to be true because they fall under MJ<sub>1</sub>, MJ<sub>3</sub> and MJ<sub>4</sub>" (Sellars, 1979: 177, 178).

What Sellars requires is a way in which it could be independently reasonable to accept these MJs despite the fact that a reason for accepting them is that they belong to the empirically well-confirmed theory T, i.e. that they are themselves empirically confirmed by IPM judgements. His response is that it is reasonable to accept them because "they are elements in a conceptual framework which defines what it is to be a finite knower in a world one never made" (Sellars, 1979: 179). One finds it reasonable to enter into theory T, or our conceptual framework, for such a framework is necessary in order to be agents in the world. At this point two questions, which are often confused, must be distinguished. First, how does one get into the framework? The answer, claims Sellars, is probably a causal one, and is unrelated to questions of epistemic justification. Second, given that one is already in this framework, how is one justified in accepting it? This is the question which addresses the epistemic merit of the system. Sellars' answer "lies in the necessary connection between being in the framework of epistemic evaluation and being agents" (Sellars, 1979: 180). We are

agents in the world, and our actions involve bringing specific changes to ourselves and to our environment in accordance with specific intentions. In order to accomplish this task, we require conceptual maps of both ourselves and our environment. Such conceptual maps, of which theory T is an example, require that our IPM judgements are likely to be true. If they are not, then we can't be effective agents. That is, we would have no basis on which to make judgements as to how we should act in our environment. Our interactions with the environment would be arbitrary, as we would have no idea whether what we thought to be true of the environment really is or is not so. Thus it is reasonable to accept MJ<sub>s</sub> (the principle which summarizes the other non-inductively warranted MJs), not because of inductive reasons, but because, otherwise, the concept of effective agency fails.

Again he distinguishes two questions. The first involves having good reason to accept MJ, (this is the question of epistemic justification), and the second involves having good reason to accept an explanation of why IPM judgements are likely to be true. In answering the first, "MJ<sub>5</sub> is epistemically prior to the reasonableness of particular IPM judgements," and in answering the second, "particular IPM judgements are epistemically prior to explanations of the likely truth of IPM judgements" (Sellars, 1979: 180). The two questions operate in different logical dimensions. Thus "theory T is a complex which includes MJ, and attempts to explain why IPM judgements are likely to be true. This latter enterprise is still unfinished business." (Sellars, 1979: 181). Realizing how MJ<sub>5</sub> fits into theory T provides the non-inductive support required for accepting MJs, and, consequently, accepting individual IPM judgements. Explaining "why IPM judgements are likely to be true" has not yet been completed - however, the completion of this enterprise is not required to justify the acceptance of IPM statements. Such acceptance has already been sanctioned by the acceptance of MJ<sub>5</sub> in the theory T, and it is in this respect that the theory T "constitutes the conceptual framework which spells out the 'explanatory coherence' which is the ultimate criterion of truth" (Sellars, 1979: 181). As observation reports and MJ, sanction each other by pointing out, if not specifying, the explanatory relationship that partains between them, coherence is explanatory. But as they don't inferentially (and circularily) infer each other,

coherence is not inferential. Individual statements are justified because of the system which they are a part of. That system, in turn, must be justified as a whole, and this is what Sellars believes he has accomplished by his appeal to effective agency.

Thus Sellars finds MJ<sub>5</sub> and its components MJ<sub>1</sub>, MJ<sub>3</sub> and MJ<sub>4</sub> justified in that he can provide good reasons for accepting them. If one is to be an effective agent, one must have a reliable cognitive map of oneself and of one's environment. We are in such a framework, and do have such a map, i.e. theory T. MJ<sub>5</sub> is a critical part of this map, and the acceptance of the map provides us with a good reason, which to Sellars is justification, for accepting MJ<sub>5</sub>. MJ<sub>5</sub> is thus non-inferentially warranted — it is not itself inferred from IPM statements. There is an independent good reason for accepting it, and this good reason is so reasonable simply because we are already in (and to that extent have already accepted) theory T. As Sellars notes elsewhere, "it must, indeed, be granted that principles pertaining to the epistemic authority of perceptual and memory beliefs are not the sort of thing which could be arrived at by inductive reasoning from perceptual belief. But the best way to make this point is positive. We have to be in this framework to be thinking and perceiving beings at all ... and, I now add, acting beings at all "(Sellars, 1975: 345, 346).

Sellars, then, views knowledge as a framework which contains propositions including IPM judgements and MJ metajudgements. The IPM judgements and some of the metajudgements are justified inferentially in one logical dimension. The other MJ judgements, summarized by MJ<sub>5</sub>, are justified non-inferentially in another logical dimension. This non-inferential justification is found first of all within the framework (theory T) itself, where MJ<sub>5</sub> is explained by its internal relations in the theory. This internal justification does not provide sufficiently good reasons for accepting MJ<sub>5</sub>, and Sellars consequently invokes an appeal outside theory T to the concept of effective agency.

### B. Rational Acceptability

Sellars' theory demonstrates the necessary characteristics for a theory of rational acceptability. First, it explicitly embodies subjective justification, and is aimed at the epistemic goal of accepting true propositions. Justification occurs within "theory T", which is an individual's framework of beliefs. IPM judgements are justified by those MJ principles which are occurent in the individual's epistemic system, and these MJ principles are themselves justified by appeal to those IPM judgements which the individual has already made.

Justification thus depends only on the evidence which is available to the individual — on those propositions which actually constitute his belief framework. This subjective justification requires reflection on the part of the individual, and is not just a condition the individual happens to be in irrespective of his awareness of it. It takes account of the individual's ability to process evidence — a proposition is not justified simply because the person has possession of the requisite evidence for its justification, but because that proposition can be fitted into the logical framework of the person's belief system. Sellars requires not only that the content but the "authority", that is, the conferred justification or rational acceptability of an observation report, must be recognized by the person making the report. He considers the absence of such awareness to result in the "thermometer view" of knowledge, in which the observation reports made by an individual could be considered as merely the readings of an accurate measuring instrument, but not the content of real knowledge.

Sellars' theory is pragmatic in the sense required for rational acceptability as it deals with the here and now acceptance of both IPM judgements and epistemic principles. A proposition, when accepted into an individual's framework, is granted the authority that what it purportes is indeed so. An observation report so accepted is considered to accurately describe a situation, and an epistemic principle so accepted is considered to accurately reflect on a certain class of observation reports. This authority is such that the proposition is considered by the individual to be true, and to thus constitute one of his beliefs.

### C. Justification

Sellars considers his theory of epistemic belief evaluation to provide an account of objective justification as well as rational acceptability. He makes the objective truth connection through the notion of effective agency. My beliefs are rationally acceptable because they cohere to form a theory T. They are objectively justified because this same theory T enables me to be an effective agent in the real world which exists outside theory T.

This appeal to effective agency is questionable if it is meant to establish Schlars' coherency theory in opposition to other theories of justification. According to Sellars, "achieving a certain end or goal can be (deductively) shown to require a certain integrated system of means ... the end can be characterized as that of being in a general position ... to act" (Seilars, 1979: 179). It seems, though, that such a reason could be given for accepting any epistemological theory. Consider theories which appeal to "the given", that is, to what a foundationalist might call "basic propositions", propositions which are self-justified and require no appeal to any other propositions for justification. These "given" propositions could constitute certain classes of observation reports or certain epistemic principles. It could be claimed that a system based on these propositions is also an "integrated system of means" which puts one in a position to act. One might still deny Sellars his particular theory, yet hold to the idea of effective agency. Hence the appeal to effective agency is somewhat unsatisfactory if one expects an appeal to some concept which maintains a stronger tie between the type of theory Sellars is advocating and the reason he gives for accepting it in his final appeal. However, it must be noted that Sellars doesn't use this appeal as a means to choose between epistemic theories. Rather, the appeal is made from within his theory itself. The question is: "Granted that we are in the [coherent, conceptual] framework, how can we justify accepting it?" (Sellars, 1979: 180). From such a position his appeal to effective agency-does-not-ask-one-to-choose-between-theories, but to-furthur-justify-the-theory-one-hasalready tentatively (at least insofar as one has followed Sellars' argument) accepted.

Sellars does attempt to set out an objective truth connection. The outstanding question is whether he establishes that connection. He speaks of accepting theory T,

appealing "to a more encompassing version of what I have been calling theory T" (Sellars, 1979: 179), and "accepting something like theory T" (Sellars, 1979: 180). It is unclear exactly what this conceptual framework encompasses. It seems reasonable that it should include all of one's knowledge, or at least all of one's empirical knowledge. If indeed this is the case, then one must be justifying the system, as a whole, by the appeal to effective agency within the system itself. Thus a certain subset of beliefs is being used to justify the entire set. This is different from the way the subset of MJ beliefs is used to justify IPM beliefs—in that case it is a matter of individual beliefs being justified one at a time. In the case under consideration the justification is, at one swoop, of the entire set of beliefs. How this is to be accomplished without giving some special status to this subset of beliefs about effective agency, an approach which Sellars does not seem to take and which would seem contrary to his program, is unclear. He does, it seems, have some options.

First, he might argue that justifying an entire set of beliefs by a subset of these beliefs constitutes legitimate justification in some third "logical dimension", when that justification is of the set as a whole. Sellars does not mention any such "dimension", and it is unclear how if at all such an argument could be constructed. Second, he might argue that the set of beliefs included in the conceptual framework being justified is limited to IPM judgements, and that beliefs about effective agency and its workings are somehow external to this set, and can be used to provide external justification of it. This approach does not look promising, as IPM judgements are required to decide questions of effective agency. That is, whether or not I have successfully performed a certain act is an empirical matter which must be decided by IPM judgements. Third, he might appeal to a supposed analyticity of the concept of effective agency. That is, he may claim that it is necessary that to be effective agents we must have the reliable cognitive maps exemplified by theory T, and given that we do have a concept of effective agency, we thus must have such maps. However, certain metaphysical speculations can be dusted off to produce counterexamples. We may, for example, be strictly determined beings, with our conceptual maps determined in parallel to our actions via Leibniz's pre-established harmony. Effective agency as Sellars expounds it is

contingent, not necessary, and belief in it is simply one among many other beliefs in theory T.

Sellars, then, can establish effective agency as a truth connection only if he is willing to make certain metaphysical assumptions about the world ouside theory T. This world exists, and is must allow the individual to interact with it. Its constituent parts must relate to each other in a coherent enough manner that theory T can provide a conceptual map of at least that part of it with which the individual interacts. Granted such assumptions, effective agency does establish a truth connection for theory T. What remains questionable is the legitimacy of making such assumptions.

Thus, while one may accept Sellar's appeal to effective agency, this acceptance must be tempered by the acknowledgement that it takes place within one's own theory T. It does not provide any external, objective validation without the addition of metaphysical assumptions.

# D. Coherence

Sellars claims that knowledge is justified by coherence in that no item of knowledge is self-justified, and is foundational in that not all knowledge is inferentially justified. He is thus a coherency theorist who differs from traditional coherency theorists in denying that all knowledge is inferentially justified. Basically, a coherency theory claims that a belief p is justified if and only if it is a member of a maximally coherent system of beliefs B.

Traditional coherency theorists had claimed that every belief p in B must either be deductively inferred (deductive coherence) or inductively inferred (inductive coherence) from some other belief(s) in B. Sellars denies that this inferential coherence is either necessary or sufficient to provide a cogent coherency theory. He claims that maximal coherence can only be obtained by explanatory coherence, in which every belief p in B is somehow explained by some other belief(s) in B.

Sellars does not offer any detailed analysis of what constitutes explanation. A belief's explanation need not involve how or why that belief came to reside in the belief system. It need only show how that belief fits into the system — what other beliefs in the system

support it. This may or may not involve inference. Statements which form IPM judgements are inferentially justified by MJ statements. MJ statements are justified, through a logical dimension other than inference, by IPM judgements. It is the relationship of inference plus the relationships which constitute this other logical dimension that together constitute explanatory coherence.

Coherence plays two different roles in Sellars' theory. First, it performs a criterial role within the knower's framework of beliefs, or "theory T". Statements which form IPM judgements are justified by MJ statements and vice versa. Propositions of one type provide the criteria for acceptance of propositions of the other kind. But this criterial reciprocity is is itself sanctioned by explanatory coherence. One type of statement serves to justify the other only insofar as this justification promotes explanatory coherence. Coherence is thus a higher level criterion of belief evaluation in Sellar's theory.

Coherence is also a characteristic of rational acceptability. If a belief coheres (in the sense of explanatory coherence) with a person's belief framework, it is acceptable. Sellars holds an inclusive conception of explanatory coherence, in that any justificatory relationship which can occur within a belief system constitutes coherence. A belief framework gives the "logical dimension" in which good reasons are supplied for holding a belief. These good reasons, which constitute the grounds of rational acceptability, also constitute the justificatory explanation for the belief's acceptance, and are thus subsumed under the rubrick of explanatory coherence.

Coherence must also be a metaphysical assumption if Sellars' account of objective justification is to be accepted. The fact that we are agents in the world, and successful agents at that, means that our framework of beliefs must not only be internally coherent, but must also reflect the world in which we act. This is only possible if the world is such that it can be so reflected — that is, if the existent facts are related in a nomologically coherent manner.

Wilfrid Sellars provides a complete theory of belief evaluation. He gives an initial account of rational acceptability which focuses on the internal explanatory coherence of

different types of propositions within a theory T. In order to supply a theory of objective justification, and make the truth connection between theory T and the real world, he advances the pragmatic argument of effective agency, an argument which requires certain metaphysical assumptions. This means of establishing the truth connection is the weakest and least developed part of Sellars' theory.

These inadequacies are recognized by Lawrence Bonjour, who builds on Scllars' general line of approach. Bonjour presents a theory which is similar to Scllars', but which places a greater emphasis on making and justifying the truth connection between a belief system and the real world.

### IV. Bonjour

### A. Bonjour's Theory

Lawrence Bonjour's theory of belief evaluation is thus a descendant of Sellars'. Like Sellars, Bonjour maintains that differentiation must be made between the origin and history of a belief and its justification. "In the first place, there is the question of how the belief was arrived at, of its origin or genesis in the thinking of the person in question ... But, second, there is also the quite distinct issue of how the belief in question is epistemically justified or warranted" (Bonjour, 1985: 112).

For Bonjour, "the distinguishing characteristic of epistemic justification is ... its essential or internal relation to the cognitive goal of truth" (Bonjour, 1985: 8). With respect to truth "... there is no real alternative to the standard and commonsensical conception of truth as, roughly, correspondence or agreement with independent reality" (Bonjour, 1985: 158). A belief is true if it corresponds to reality. A theory of epistemic justification must set standards which ensure that those beliefs accepted as knowledge are true. In Bonjour's theory, this involves two stages. The "first part is to give an account of the standards of epistemic justification; and the second is to provide ... a metajustification for the proposed account by showing the proposed standards to be adequately truth-conductive" (Bonjour, 1985: 9). First the standards for acceptance must be set, then it must be determined that these standards do indeed lead to truth.

The main difference between Bonjour's and Sellars' accounts is that, for Bonjour, justification comes about differently for a priori and empirical beliefs. "A proposition is known a priori if it meets the other conditions for knowledge and is adequately justified in a way which does not depend on experience; it is known a posteriori (or empirically) if its justification does depend on experience ... [experience being] any sort of cognitive factor or element which ... provides or constitutes information, input, concerning the specific character of the actual world as opposed to other possible worlds" (Bonjour, 1985: 192). A priori knowledge receives a priori justification, while empirical knowledge receives what is basically a

coherence account of justification. These two types of justification will be examined separately.

Empirical beliefs are justified if the following can be determined (Bonjour, 1985: 92):

- "(1) The inferability of that particular belief from other particular beliefs and furthur relations among particular empirical beliefs.
  - "(2) The coherence of the overall system of empirical beliefs.
  - "(3) The justification of the overall system of empirical beliefs.
- "(4) The justification of the particular belief in question by virtue of its membership in the system."

These steps can be stated in a simpler fashion as follows:

- (1) Belief B is part of system S of beliefs.
- (2) S is coherent.
- (3) S is justified.
- (4) B is justified by virtue of its membership in S.

The first step depends on what Bonjour calls the Doxastic Presumption. According to this presumption a person has an overall, albeit approximate grasp of his entire system of beliefs. If he has a grasp of his belief system S, he can determine if belief B belongs, in the proper sense of "belong", to it. Thus, on the basis of this presumption, the believer can claim to know that a particular belief is among his system of beliefs. It also allows him to grasp the coherence of that system which is required for the justification of its constituent beliefs. Bonjour considers this presumption to be required if the believer is to exercise epistemic responsibility — that is, if he is to accept "all and only those beliefs which ... [he] has a good reason to think are true" (Bonjour, 1985: 8). The problem lies in determining the status of this presumption. If it is a metabelief about the believer's grasp of his beliefs it stands in need of justification itself. This justification can only take place in a metasystem of beliefs, of which the believer must also have a grasp. The grasp of the metasystem requires meta-metabeliefs and so on. Attempts to justify the Doxastic Presumption within a coherent

system of beliefs thus lead to a regress.

Bonjour's claim is that the Presumption does not actually require justification as it is not a premise for a justificatory argument. That is, it does not itself constitute a step in justifying a belief. "It is rather a characterization of something which is, from the standpoint of a coherence theory, a basic and unavoidable feature of cognitive practice" (Bonjour, 1985: 104). Questions of justification can be meaningfully raised and answered only against the context which is provided by that given by the Doxastic Presumption — namely, a believer holding a set of beliefs. The Doxastic Presumption is not a premise of a justificatory argument, but must be presupposed before questions of justification can be asked. It "does not, strictly speaking, function at all in the normal workings of the cognitive system. Rather it simply describes or formulates, from the outside, something that I unavoidable do" (Bonjour, 1985: 105).

The second step is to establish that the system is coherent. The third step entails two conditions: first, S must satisfy what Bonjour calls the "Observation Requirement", and second, S must be more coherent than any alternative S' satisfying the Observation Requirement. A system which satisfies the Observation Requirement must allow for input and feedback from outside the system. The basic idea is that such a system will allow input from outside the system, and will allow beliefs in the system to be checked against that which is outside the system. This input and checking is done by observation. Observation consists of perception and introspection, and Bonjour offers specific accounts of how beliefs of these types are justified which follow on the general schema discussed above. If there are two systems which satisfy that requirement and contain belief B, then the most coherent is chosen. Bonjour claims that while it might be difficult to chose the most coherent among systems which do not satisfy the Observation Requirement, choice among those which do satisfy it will be relatively easy — in fact, there will often be only one.

The fourth and final step (that B is justified by its membership in S) is determined by the belief holder's reflective grasp that S is more coherent that any admissible (i.e.

Observation Requirement satisfying) alternative S'. If B is a member of S, and S is more

coherent than S', then B is justified by the believer's grasp of its membership in S (rather than in S'). This grasp is provided by the Doxastic Presumption.

While Bonjour's discussion is somewhat obscure, it can be clarified by remembering that the belief system S' is usually just the belief system S, adjusted to accommodate the additional proposition B. The most coherent of S and S' is chosen, with the effect of admitting or rejecting B. What this amounts to is a question of whether or not the addition of B makes S more coherent. If it does, B would only be rejected if it was not an observation—that is, if it was a fanciful, or ad hoc addition concocted solely to promote coherence. Bonjour's theory would be clearer if he would state it this way as a theory of belief justification rather than as a choice of competing systems. It would also make the Observation Requirement more understandable, as it is basically a requirement which must be satisfied by any new belief.

The constitutive elements of Bonjour's theory of justification for empirical beliefs are, then,

- (1) the concept of coherence,
- (2) the Doxastic Presumption, and
- (3) the Observation Requirement.

Now that the standards of justification for an empirical belief have been set, the second stage of the justification task begins. It must be shown that these standards of justification do indeed lead to the selection of true beliefs. To supply such a metajustification "it would be quite enough ... if it could be shown that adhering to coherentist standards over the long run is likely eventually to yield beliefs which correspond to reality" (Bonjour, 1985: 169). Bonjour offers this Metajustification theses, or, as he calls it, thesis MJ: "A system of beliefs which (a) remains coherent (and stable) over the long run and (b) continues to satisfy the Observation Requirement is likely, to a degree which is proportional to the degree of coherence (and stability) and the longness of the run, to correspond closely to independent reality" (Bonjour, 1985: 171). This is justified on a priori grounds as "it is inherently unlikely that a system of beliefs which is constantly receiving the

sort of input that is assured by the Observation Requirement would remain coherent from moment to moment without constant revision which would destroy its stability. Some explanation is therefore needed for why it continues to do so, and the obvious one is that beliefs of the system mate, the independent reality which they purport to describe closely enough to minimize the potential for disruptive input" (Bonjour, 1985: 171). Although Bonjour examines other alternative solutions (i.e. skeptical positions), he considers this one to be a priori the most likely. Correspondence to reality is, on a priori grounds, the most likely explanation for the long-run coherence and stability of the Observation Requirement satisfying system.

Bonjour sets out a different theory of justification for a priori knowledge. He does not provide a complete theory of justification for this type of knowledge, but confines himself, "for the sake of simplicity, to the consideration of what amounts to a purely foundationalist conception of a priori knowledge" (Bonjour, 1985: 193). He limits his account of justification to those intuitively apprehended propositions which provide the foundation for that which can be deduced from them. Bonjour doesn't extend his account of justification to this larger body of a priori knowledge, and is unclear as to exactly what direction such an extension would take. He does, however, offer some suggestions. For example, it would "be possible to have an account of the a priori which relied in part on coherence. For instance, a priori knowledge might be divided into two categories, roughly the more self-evident and the less self-evident, and some notion of coherence based on the more self-evident category might be employed as part of the standard for assessing the less self-evident" (Bonjour, 1985: 193). He also claims that the reasoning process, which would be required for the deduction of the extended body of a priori knowledge, involves the foundational notion of the a priori, as one must "grasp or apprehend at each step that the conclusion reached at that step must be true ... if the premises for that step are true"

(Bonjour, 1985: 194). Despite these suggestions, he restricts himself to the foundational propositions of a priori knowledge — that intuitively apprehended.

Bonjour accepts "the traditional rationalist account of a priori knowledge as the intuitive grasp or apprehension of necessity" (Bonjour, 1985: 207). This intuitive grasp "should not ... be thought of as something sharply distinguishable from the understanding of the proposition, but rather as an essential feature or aspect of a complete understanding ... To understand a proposition is to grasp the web of necessary connections with which it is essentially bound up" (Bonjour, 1985: 207). While this grasp need not be infallible, and one may be mistaken in an a priori intuitive apprehension, that does not mean that these apprehensions require furthur and more basic justification. It simply means that the mistake resulted from incorrect cognitive understanding and could be corrected by more careful reflection.

Thus "once an a priori proposition has been understood, nothing furthur is needed beyond that very understanding ... to "see" or apprehend intuitively (in an optimum case) that the proposition must be true; and hence nothing furthur is needed for belief in it to be justified" (Bonjour, 1985: 210, 211). A proposition is a priori justified when the very process of understanding it supplies the apprehension of its necessity.

A priori knowledge is thus self-justifying. As such there are no criteria for its acceptance. Bonjour claims that "it is a fatal mistake to regard the idea of rational or a priori intuitive apprehension as providing or constituting a general criterion or standard for the justification of a priori beliefs, for if it is construed in such a way, the metajustificatory demand becomes as impossible to avoid as it is impossible to meet " (Bonjour, 1985: 210). Coherence, for example, couldn't serve as a criterion for a priori knowledge for "a priori knowledge is essential to provide the very ingredients of the concept of coherence (one of which is logical consistency) and thus could not without vicious circularity be itself based on coherence" (Bonjour, 1985: 193). To understand an a priori proposition is also, simultaneously, to justify it.

For a priori knowledge, metajustification is inherent in justification itself. The simple understanding of an a priori proposition brings with it the attendant justification. The proposition is selfjustified — justification is not dependent on adherence to standards which

must themselves be defended by some metajustification.

## B. Rational Acceptability

Bonjour's theory, like Sellars', displays the necessary characteristics to serve as a theory of rational acceptability. First of all, it is aimed at the epistemic goal of truth.

Second, it involves subjective justification. Justification occurs in, and is of, an individual's belief system. It thus makes use only of the evidence which is available to a person. It requires reflection, as it takes into account the ability of the individual to process that evidence. This is most explicit in Bonjour's discussion of the Doxastic Presumption, which states that a prerequisite for justification is the individual's grasp of his own belief system. One must have a reflective grasp of one's belief system in order to generate justification for any of its constituent beliefs. For an a priori proposition, acceptance depends on the individual understanding it, a process which itself requires reflection. Mistakes in acceptance are to be corrected by furthur and more complete understanding.

This reflective and subjective nature of justification is brought out by Bonjour's emphasis on epistemic responsibility. One is epistemically responsible to the extent that "one accepts all and only those beliefs which one has good reason to think are true" (Bonjour, 1985: 8). It must be that "the believer in question knows or at least justifiably believes some ... set of [justificatory] premises or reasons and thus be himself in a position to offer the corresponding justification" (Bonjour, 1985: 43). That is, "justification must, in principle at least, be accessible to the believer himself" (Bonjour, 1985: 89). A belief is not justified unless the justification of that belief is available to its holder. It is only then that he can evaluate his belief in an epistemically responsible fashion.

Bonjour's account of belief acceptance is also pragmatic in the sense required for rational acceptability. A proposition is justified if it is part of that belief system which is chosen by the individual as being the most coherent. The proposition is thus justified in the present, at the time of acceptance of the belief system, and is accepted as being true — that is, as a belief.

It seems, however, that Bonjour does not hold one unified account of rational acceptability, but that he holds seperate accounts for a priori and a posteriori knowledge. A priori knowledge is self-justifying. To understand something which is a priori is to accept it, without recourse to any criteria of acceptability. Indeed, the "whole thrust of the idea of a priori knowledge is obviously that there are propositions ... which it is justifiable or rational to accept and also unjustifiable or irrational to give up" (Bonjour, 1985: 197). This does not mean that such acceptance is made in a vacuum. "It is often possible to 'talk around' the claim in question in such a way as to make the intuitive basis for it more perspicuous ... this 'talking around' may involve such things as analogies, more perspicuous reformulations of the claim in question, distinctions between that claim and others with which it might be confused, and so on" (Bonjour, 1985: 209). But once sufficient reflection is given, acceptance of the proposition comes on the sole basis of its understanding, and not with reference to any criteria. When understood, it is simply accepted or rejected along with that understanding.

With respect to the a posteriori, rational acceptability takes on a different character. Beliefs aren't self-warranting, but are accepted if they conform to certain criteria. For a priori propositions, acceptability is simply a matter of understanding with no reference necessary to any criteria. For a posteriori beliefs or propositions, acceptability is achieved by compliance with certain criteria. However, the difference between the accounts might not be as severe as Bonjour seems to imply.

In both cases, for a belief to be rationally acceptable it must be considered true by the individual. With a posteriori knowledge the criteria for acceptance are coherence and compliance with the Observation Requirement. This knowledge is that which is of a particular world rather than of all possible worlds, and the Observation Requirement is needed to "tune" that knowledge to the world under consideration. A priori knowledge is of that true in all possible worlds, hence no Observation Requirement is needed. Although Bonjour claims that no criteria are required for the justification of a priori knowledge, isn't the a priori as he proposes it simply the tightest possible form of coherence? That is, anything accepted a priori is completely rational (integral to the system's coherence) to accept, and is

irrational (would render the system incoherent) to reject. Thus no criteria are needed, for coherence at this level is equivalent to rationality itself.

An analogy is with inductive and deductive reasoning. As inductive (probable) reasoning compares with deductive (certain) reasoning, so empirical (possible) knowledge compares with a priori (certain) knowledge. The Observation Requirement is needed to choose the actual among the possible, and a weaker form of coherence is needed as empirical knowledge isn't certain. With a priori knowledge coherence is at its highest, and is equable with rational acceptability.

There still is, however, a question about Bonjour's theory. This question arises in connection with the Doxastic Presumption. In spite of Bonjour's attempts to claim otherwise, it still seems as if he is arguing for the unjustified acceptance of something which could reasonably be said to require justification. He admits as much when he states that there is no way to answer a skeptical challenge to that assumed on the basis of the Doxastic Presumption — i.e., any skeptical challenge which questions the accuracy of a believer's representation of his own beliefs cannot be answered. An epistemic theory which depends crucially on such a weak link could be considered in no little jeopardy.

Thus Bonjour's claim that the Doxastic Presumption requires no justification is at worst fatal to his theory, and at best a loose end. Either way the theory could be made tighter if some justification was found for this element. While the Doxastic Presumption is a crucial ingredient of Bonjour's theory, it is not a criterion of justification itself, for it is either accepted as unjustified, or must be accepted with respect to some other criterion. It is not a criterion so much a something which either (following Bonjour) does not require justification, or (contrary to Bonjour) itself requires justification by some criterion.

The claim here will be that even if Bonjour can successfully argue that the Doxastic Presumption does not require justification, such justification can be provided from within his own theory. This justification is not of the Doxastic Presumption itself, but of that justified by appeals to it. The suggestion is that a believer's grasp of his own beliefs is something which, given Bonjour's account of a priori justification, can be successfully a priori justified.

Why doesn't Bonjour apply this concept of a priori justification to that which he justifies by appeal to the Doxastic Presumption? Part of the reason lies in the distinction he makes between a priori and a posteriori propositions. He states that "a proposition is known a priori if it meets the other conditions for knowledge and is adequately justified in a way which does not depend on experience; it is known a posteriori (or empirically) if its justification does depend on experience" (Bonjour, 1985: 192). He considers the a priori / a posteriori distinction an epistemic one, and assumes that each demands a totally distinct account of justification. However, this demand might, by his own standards, be too strong.

Bonjour claims that the grasp of one's beliefs which is justified by the Doxastic Presumption "presumably results from the psychological process of introspection, but cannot be justified — at least not in its entirety — by appeal to introspection so long as such justification is understood along coherentist lines" (Bonjour, 1985: 127, 128). But all justification does not proceed, for Bonjour, along these coherentist lines. Analytic propositions, for example, are justified a priori. Neither does he rule out the a priori justification of synthetic propositions, but claims that instances of the synthetic a priori "must be assessed on their own merits ... there are no compelling grounds for ruling them out as a group" (Bonjour, 1985: 207). He is careful to seperate the analytic/synthetic distinction from the a priori/a posteriori distinction, and there thus seems to be no reason to deny the a priori a role in an account of empirical knowledge. As propositions regarding a believer's grasp of his beliefs are synthetic, it might, then, be possible to provide a priori justification for them.

Consider the proposition "I have a grasp of the contents of my belief system" and two possible lines of argument for the a priori justification of this proposition. First, it might be argued that the very nature of belief is such that in order to have a belief I must grasp that belief. That is, I cannot have any beliefs which I am not aware of, or do not have a grasp of and could not become aware of. Consider some belief B. Is it possible to be unaware of B?

This must certainly be admitted, for at any time one can only be aware of a certain subset of beliefs. But is it possible not only to be unaware of B, but to be unable to become aware of

B? It is hard to see how one could maintain this and still claim possession of the belief. While one might be unaware of a belief at a given time, to deny that one could become aware of that belief at all amounts to denying that one actually has that belief. If "having a grasp of my belief system" is construed as either being aware of or potentially aware of all members of my belief system (which should suffice for Bonjour's purposes as he allows reflection) then it seems a priori that I do have a grasp of my belief system. Any beliefs not included in that grasp are not my beliefs. While Bonjour argues against adopting such an a priori argument, his reasoning is that the establishment of such a claim is a presupposition and not something which requires argumentation (Bonjour, 1985: 81), precisely the claim being challenged here. The synthetic proposition that I have certain particular beliefs is justified by understanding what beliefs are, and that having them entails grasping them.

Second, one could argue that I do not have a complete understanding of the proposition P: "I have a grasp of my belief system" until I actually do have such a grasp. Attempting to understand P will force me to reflect on my beliefs, and by reflecting on them I will come to know them. I cannot fully understand P without this reflection. It might be argued that reflection is not sufficient of itself to yield a grasp of my beliefs, and that some of them are beyond my grasp, a fact which might or might not be made evident by my reflections. But if my belief system is coherent (as Bonjour claims it must be), then its component beliefs are interrelated in such a way that sufficient reflection will yield a complete grasp. It is not possible for any component beliefs of a coherent system to be exempt from the scrutiny of reflection. Understanding P thus forces me to an a priori acknowledgement of

It might be objected that we sometimes act in ways that are at variance with what we think we believe, and that this shows that our actions are actually governed by unconcious beliefs — beliefs which we are not and perhaps cannot become aware of. Two responses can be made to this objection. First, there is a difference between my acting because I believe something, and my acting as if I believe something. I might believe that I shouldn't steal, and yet still steal, acting as if I believed that stealing is right, and perhaps even claiming so. However, sufficient reflection would reveal what I really believe. Second, the process of reflection required to uncover the belief which actually guides my action might be extremely complex, perhaps even extending to psychoanalysis. After undergoing this process I might find that I actually do believe that it is alright to steal in certain circumstances.

its truth.

Bonjour's appeals to the Doxastic Presumption might thus be replaced with accounts of a priori justification for one's grasp of one's beliefs. While the arguments advanced here are intended only as suggestions, they do show the possibility of providing a firmer foundation than appeal to something that can't be justified, namely, the Doxastic Presumption.

The suggestion, then, is to shore up the weak points of Bonjour's theory of rational acceptability for empirical knowledge, even at the expense of providing some elements which are not based on coherence. Such a tradeoff would be beneficial as it would obviate the need for appeals to the Doxastic Presumption, a result which should provide sufficient motivation for the acceptance of a mixed theory of justification for empirical knowledge. This adjustment to Bonjour's theory would tighten it up enough to provide an acceptable theory of rational acceptability.

#### C. Justification

While Sellars makes a pragmatic appeal to effective agency to establish the truth connection, Bonjour offers a more theoretical approach. He gives an a priori argument that a coherent system of beliefs which satisfies the Observation Requirement is most likely to be true. Whether one considers this metajustificatory argument successful depends on two questions: First, whether one accepts the legitimacy of a priori justification, and second, whether one accepts Bonjour's particular a priori argument. It has already been argued that acceptance of a priori justification is necessary for the success of Bonjour's account of rational acceptability. Such acceptance can, at least provisionally, be granted. The crucial test is whether the argument which constitutes Bonjour's metajustification is valid. His MJ thesis states that a coherent, Observation Requirement satisfying system remains stable and coherent over the long run because it matches reality. He claims that this conclusion can be established on a priori grounds. It can be asked if a) this is a valid conclision, and b) can the stronger claim be made — that the conclusion can be established on a priori grounds.

The case can readily be made that this is a valid conclusion. Given what we know, we have sufficient reasons to accept MJ. But such acceptance is within our pre-established coherent system of beliefs, and cannot serve to justify the tie of that system to the outside world. Bonjour realizes this, and thus makes the stronger claim that the basis for MJ is a priori. If this claim is right, and if one is prepared to accept a priori justification, then Bonjour is successful. However, it can be argued that this claim is not right given Bonjour's own account of the a priori. MJ is based on two main premises, each of which, Bonjour claims, is established on a priori grounds. These premises, slightly simplified, are as follows:

P<sub>1</sub>: It is highly likely that there is some explanation for why an Observation Requirement satisfying belief system remains coherent and stable over the long run.

P<sub>2</sub>: The likeliest explanation for an Observation Requirement satisfying belief system remaining coherent and stable over the long run is that the system corresponds with reality.

According to Bonjour, the likelihood mentioned in P<sub>1</sub> increases in direct proportion to the longness of the run over which the belief system remains stable and coherent. It is debatable, however, whether such conclusions of likelihood can be established a priori, as they depend on contingencies. There always remains the possibility that these conclusions are inaccurate. Hence, they do not carry with them the indubitably obvious force Bonjour requires for the a priori. One admits the possibility that they might not be so, a possibility which cannot be admitted for the truly a priori. It can be concluded, then, that while MJ is reasonable, it is not established on a priori grounds. This does not at all serve Bonjour's purpose — it merely shows that our coherent system is self-affirming — a minimum requirement, it would seem, if coherence is not to deteriorate into inconsistency.

A second problem arises with the reliance of this argument, and indeed the reliance of Bonjour's entire theory of justification, on the Observation Requirement. The Observation Requirement is based on the assumption that "any claim in the system which is not justified a priori should in principle be capable of being observationally checked, either directly or indirectly, and thereby either confirmed or refuted" (Bonjour, 1985: 141). The contents of a

system which does not meet the Observation Requirement can "be thought of as analogous to beliefs — or at least belief-like states — which are a product of sheer imagination or which are the mental correlate of literary fiction" (Bonjour, 1985: 143). However, "despite the vagueness of the requirement, many systems of belief, including virtually any which is at all close to our ordinary system of beliefs, will satisfy it without question" (Bonjour, 1985: 153). Our observations constitute a highly coherent subsystem of beliefs, and any system which disallows them will have a low level of coherence as it must "offer some alternative explanation of this internal coherence; and plausible explanations of this sort are very hard to come by" (Bonjour, 1985: 154).

The most plausible explanation, Bonjour has argued, is that this internal coherence derives from the truth of the system of beliefs. But this judgement is made within the coherent system of beliefs itself. What Bonjour requires, and in fact assumes, is a certain metaphysical stance. This stance maintains that the real world is such that it can give input to a conceptual belief system, and that its structure is such that it is accurately reflected in a coherent belief system. Bonjour, like Sellars, must make certain and indeed similar metaphysical assumptions in order to establish the truth connection.

# D. Coherence

Bonjour's concept of coherence derives from his underlying concept of non-linear justification. Certain theorists, in particular the foundationalists, wish to justify a belief inferentially by a linear chain of justification which ultimately derives from certain basic beliefs which are justified on their own merit. Bonjour denies the existence of these basic beliefs and with them the attendant model of linear justification. Hence "inferential justification, despite its linear appearance, is essentially systematic or holistic in character: beliefs are justified by being inferentially related to other beliefs in the overall context of a coherent system" (Bonjour, 1985: 90). Although justification may appear linear at the local level, it is non-linear at the global level "which is in the final analysis decisive for the determination of empirical justification in general" (Bonjour, 1985: 91). At the global level

"the relation between the various particular beliefs is correctly to be conceived, not as one of linear dependence, but rather as one of mutual or reciprocal support" (Bonjour, 1985: 91).

Bonjour does not give a complete account of the coherence which produces this support, nor does he consider such an account crucial to his particular theory, as "something like coherence is indispensible to any nonskeptical epistemological position" (Bonjour, 1985: 94). He does, however, offer a preliminary account. "Intuitively, coherence is a matter of how well a body of beliefs 'hangs together' ... this 'hanging together' depends on the various sorts of inferential, evidential, and explanatory relations which obtain among the various members of a system of beliefs, and especially on the more holistic and systematic of these" (Bonjour, 1985: 93). Certain features of a coherent set of beliefs can be pointed out.

- "(1) A system of beliefs is coherent only if it is logically consistent" (Bonjour, 1985: 95).
- "(2) A system of beliefs is coherent in proportion to its degree of probabilistic consistency" (Bonjour, 1985: 95), i.e. to the degree that it is believed probable that B as opposed to not probable that B.
- "(3) The coherence of a system of beliefs is increased by the presence of inferential connections between its component beliefs and increased in proportion to the number and strength of such connections" (Bonjour, 1985: 98).
- "(4) The coherence of a system of beliefs is diminished to the extent to which it is divided into subsystems of belief which are relatively unconnected to each other by inferential connections" (Bonjour, 1985: 98).
- "(5) The coherence of a system of beliefs is decreased in proportion to the presence of unexplained anamolies in the believed context of the system" (Bonjour, 1985: 99).

Coherence plays a multiple role in Bonjour's theory. First, it acts as a criterion for belief evaluation. Unlike Sellars' account, where coherence is a higher level criterion, Bonjour considers it to be an immediate criterion. Bonjour specifies the Observation Requirement and the Doxastic Presumption along with coherence as criteria for the acceptance of empirical knowledge. It has been argued that the Doxastic Presumption can be replaced with a priori

claims. It has also been pointed out that satisfaction of the Obervation Requirement is decided within a belief system, and is actually a metaphysical claim. This leaves coherence as Bonjour's sole criterion for empirical knowledge. And if a priori justification can be stated in terms of coherence with all possible rationally acceptable belief systems, as has been argued, then Bonjour requires only coherence as a criterion for belief evaluation.

Coherence is not only a criterion for belief evaluation, it is a characteristic of rational acceptability. A belief is rationally acceptable not just because it has passed the test of coherence, rather, the fact of its coherence is what makes it rationally acceptable. Coherence is not an independent test of rational acceptability. A proposition is rationally acceptable to the extent that it coheres not because coherence measures rational acceptability, but because it is constitutive of rational acceptability.

The third role played by coherence is in the metaphysical assumptions necessary for the Observation Requirement. These assumptions require that the world itself be such that it can be truly reflected in a coherent belief system.

Bonjour, like Sellars, provides a complete theory of belief evaluation. His theory of rational acceptability, though in the tradition of Sellars, is different in detail. Rather than focusing on the explanatory coherence of different types of statements within a belief system. Bonjour focuses on the effect a belief will have on the overall coherence of the system. His theory of justification is a pragmatic argument dealing with effective agency, similar to Sellars' but much more developed. While Sellars offers effective agency as a reason for holding that there is a truth connection between a belief system and the real world, Bonjour gives an argument for why this reason should be accepted. However, in the final analysis Bonjour's theory of objective justification relies on the same metaphysical assumptions as does Sellars'.

While neither Sellars nor Bonjour explicitly recognize these assumptions, they are recognized by Nicholas Rescher. Rescher's theory is in the same mold as those of Sellars and Bonjour, however, he attempts to deal directly with the underlying metaphysical assumptions

which this type of theory has so far required.

# V. Rescher

#### A. Rescher's Theory

For Rescher, justification is "the logico-epistemical question of what is reasonably and warranted to be ... thought or taken [as true]" (Rescher, 1973: 3). He differs from other coherency theorists by not only stipulating the criteria for the acceptance of a proposition as knowledge, but by setting out the procedure by which a proposition is accepted according to that criteria. This procedure he calls the "coherence method", or "coherence analysis", and compliance with it will ensure fulfilment of the justification criteria.

According to Rescher, "the coherence theory ... is designed to give (or at any rate is best construed as providing) an answer to the problem of a criterion for truth" (Rescher, 1973: 10). But establishment of such a criterion is not enough. He views "the pursuit of knowledge in methodological terms: as a specific instance of the generic idea of a procedure or process aimed at the development of a result or product" (Rescher, 1977: 1). In order to attain the desired product of a body of true propositions, a method is required which uses the criterion of coherence. The domain of this method is the empirical, not that of mathematics or logic, as "the coherence theory addresses itself to the problem of a criterion for extralogical truths, the traditional truths of fact" (Rescher, 1973: 45). Rescher, like Bonjour, sees justification arrived at differently for empirical and non-empirical beliefs.

This coherence method for empirical beliefs is applied to what Rescher calls "data".

"A datum is a truth-candidate, a proposition to be taken not as true, but as potentially or presumptively true" (Rescher, 1973: 54). The initial attitude towards a datum "is not acceptance at all but a highly provisional and conditional epistemic inclination towards it, an inclination that falls far short of outright commitment" (Rescher, 1973: 55). This "epistemic inclination" is quantified in terms of plausibility ratings, which are "comparative evaluations of our critical assessment (in the context of the issue) of the relative acceptability of the 'data'" (Rescher, 1974: 703).

Rescher does not give any single standard for datahood. What is accepted as data depends on the situation, and the standard used in a particular situation receives "an essentially pragmatic justification: that this standard 'works out best' in a problem situation of the sort at issue" (Rescher, 1973: 63). In other words, data determination is based on that which has proven reliable in past experience. "A datum is a proposition which, given the circumstances of the case, is a real prospect for truth in terms of the availability of reasons to warrant its truth-candidacy" (Rescher, 1973: 56).

Data are accepted in groups, as "datahood is not an isolated feature of a single proposition but a contextual feature of a group of propositions, that is, a family of data....

No imputation of truth ... attaches to an individual datum, but there is a definite implicit claim that the 'logical space' spanned by the data as a whole somewhere embraces the truth of the matter" (Rescher, 1973: 56). It is thus important that the family of data initially considered be large enough, for "the set of data providing the starting point for a coherence-screening of truth must be sufficiently comprehensive in its canvassing of the relevant possibilities for there to be adequate rational warrant for holding that the 'true alternative' lies somewhere within the range covered by that data" (Rescher, 1973: 72).

The coherence method, then, begins with the establishment of a set of data deemed to be possibly true. While this set of data is initially inconsistent, Rescher's method will select a coherent subset which will be presumed true. "That family among the truth candidates which are best attuned to one another is to count ... as best qualified for acceptance as presumably true" (Rescher, 1974: 704). The method proceeds by "subjecting an inconsistent mass of conflicting propositions to a screening process in terms of their 'coherence' with one another" (Rescher, 1973: 41). Rescher goes into considerable detail about how this is done, but in outline the procedure is as follows. The propositions are divided into maximally consistent subsets (m.c.s.) — subsets which are non-empty, consistent, and such that no element of the initial set of data which is not a member of the subset could be added to the subset without making it inconsistent. One of these subsets is then determined to be the most coherent and comprehensive. Hence "those propositions among the totality of relevant data that exhibit the

best fit with the rest — that 'maximally cohere with the data' — are (in the context of these data) to be classed as true" (Rescher, 1973: 74).

There is no single procedure for selecting which among the maximally coherent subsets is considered to embody truth. In fact, "it is more accurate to speak in the plural of the instrumentalities of the coherence analysis of truth, to indicate a family of related procedures rather than one single uniform process" (Rescher, 1973: 99). Rescher does dicuss some specific methods, but they all aim to choose the most coherent of the maximally consistent subsets of the data, and this ultimately relies on one's sense of coherence.

The result of this coherence analysis is a body of true propositions. This truth, however, is not absolute, but is "truth 'relative to' or 'with respect to' the data. If the data are changed, this will affect the propositions they determine as true on a coherence analysis" (Rescher, 1973: 59). If the data were ideally complete, the truth would be absolute. But as "on any contextualistic truth-criteria ... a classical theory of truth will only obtain when 'in the limit'" (Rescher, 1973: 189).

This coherence method is only applicable to empirical knowledge. The other types of knowledge Rescher acknowledges are logic and mathematics. Rescher's discussion of logic is based on his belief that non-classical logics are as valid as classical logics, and that the logic we use is a matter of choice and practice rather than something determined a priori. He notes that "the truths of logic — if such there be — must be judged by a standard other than that of coherence, since they are themselves essential to the implementation of that standard" (Rescher, 1973: 46). Although "from a system-internal perspective, the theses of a system of logic no doubt qualify as 'necessary truths'" (Rescher, 1977: 271) there is more than one system of logic. The logic chosen for a system is that determined best for regulating the formal relations in that system. "The instrumental character of logic as codifying 'the principles of right reasoning' ... must be accepted as primary" (Rescher, 1977: 250). Choice of logic is thus a practical matter, for "in relation to instruments, tools, methods, and procedures, the pragmatic theory is in its native elements ... [hence] as a means for choosing among alternative logics, and so, in effect, determining what is to count as true in logic, the

pragmatic theory [of truth] is in its natural habitat" (Rescher, 1973: 166). Determination of logic "begins with merely descriptive considerations as to how persuasively effective argumentation in fact proceeds. But while it began with the descriptive, logic ends with the normative" (Rescher, 1977: 243). Thus the descriptions of practical reasoning lead to the prescriptions of formal logic. Truths of logic aren't derived from some a priori source, but are formal codifications of effective reasoning procedures.

Mathematical knowledge, by contrast, is a priori. "In so far as an axiomatic basis is required ... to go beyond purely logical considerations ... mathematics is evolved on basic input-truths that are not themselves the product of any mechanism for the warrant of truths, but whose justification is conceived to be somehow immediate" (Rescher, 1973: 166). This notion of a priori justification is conceptually the same as Bonjour's, although not worked out in as much detail.

Rescher also requires a metajustification in much the same manner as does Bonjour. His theory thus "bifurcates the process of justification of our knowledge, envisaging on the one hand a system-internal justification of each maintained thesis in terms of others, and on the other hand a system-external justification of the procedures of cognitive inquiry by which the system as a whole receives its over-all support" (Rescher, 1974: 707). This external justification is twofold, consisting of a pragmatic justification as well as a "metaphysical deduction" which provides the theoretical result that the accepted propositions are indeed true. Rescher states that "a truth-criterion comes to be endowed with a duality of objectives; truth on the one hand is a standard of belief in purely intellectual regards and on the other hand a guide for our practical life" (Rescher, 1973: 240). We hold different objectives for different reasons; on the one hand "for epistemic (theoretical) and [on the other hand, for] action-guiding (practical) reasons. With regard to the former, our interest is systematization, above all in explanation (i.e. rational co-ordination) and prediction ... With respect to the latter, our interest is success proper, in guiding our actions along satisfactory lines" (Rescher, 1973: 233).

As the coherence method operates in the realm of the theoretical, "we cannot apply the conception of success in the theoretical mode as the justificatory standard for our criterion of factual truth. One is accordingly led to the conclusion that the natural and appropriate step is to use success in the practical mode as the justificatory standard proper to a criterion of factual truth" (Rescher, 1973: 241). This is in keeping with the fact that coherence analysis is a method, and "one should interpret the quality-control factors of the 'success' of a cognitive method or criteria in the practical rather than the theoretical mode. Practical or pragmatic efficacy thus comes to be seen as the appropriate standard of instrumental justification for our criteria of factual truth" (Rescher, 1977: 23). Not only is the pragmatic mode that proper for the justification of a method, but it is foundational to the theoretical mode. Rescher claims that "stress upon explanation and prediction can be viewed as derivatively subsidiary to practice" (Rescher, 1977: 21) and that "all rationality — cognitive as well as behavioral — is ultimately pragmatically purpose-oriented and practice-related" (Rescher, 1977: 23).

Rescher's metajustification, then, is pragmatic. He will also turn to the theoretical realm, and attempt to demonstrate that the product of the coherence method is, in the classical sense, true. But this is simply tying up a loose end, for he considers that metajustification in the pragmatic realm is sufficient to justify the coherence analysis and its constituent coherence criterion.

The coherence method will be pragmatically justified if it can be shown that it works. Success here "is confined to consideration of actual practice: action-guidance as assessed in the affective order of leading to physical and emotionally satisfying results" (Rescher, 1973: 245). If the results of the coherence method guide our actions in a manner which allows us to cope physically and be satisfied with our actions, then the method is justified. In essence, "the practical relates to the material interests of man that underlie the guidance of human action: avoidance of pain, suffering, frustration, etc." (Rescher, 1977: 19). But how can we determine whether or not the pragmatically desired results obtain? If we favor a method for some non-epistemic reason, can't we just alter our perspective if the method produces what

seems to be contradictory data? Rescher admits that we can change or alter our world view, our inquiry procedure, and our actions. "But the one thing that we cannot control are the consequences of our actions: those results which determinate actions bring in their wake. In short, while we can change how we think and act, the success or failure attendant upon such changes is something wholly outside the sphere of our control" (Rescher, 1977: 108). If the results of the coherence method did not guide our actions appropriately, the reaction from the world would soon tell us. As this reaction is in the main positive, the method is justified.

While Rescher claims that this pragmatic justification is sufficient, he does turn to the theoretical realm and attempt to demonstrate that the product of the coherence method achieves the theoretical, epistemic goal of truth. Truth, to Rescher, is correspondence.

"Truth is determined by the relation of a proposition to the actual facts. Coherence, on the other hand, is a matter of the relation of propositions to each other" (Rescher, 1973: 54).

The truths provided by the coherence method are relative to the data. "We cannot say that our coherence-guided inductive inquiries provide us with the real (definitive) truth, but just that they provide us with the best estimate of the truth that we can achieve in the circumstances at hand" (Rescher, 1985: 805). But if one were to "consider coherence in an idealized perspective — as optimal coherence with a perfected database, rather than as a matter of apparent coherence with the imperfect data we actually have in hand — then an essential link between truth and coherence emerges" (Rescher, 1985: 796).

Demonstration of this link takes the form of a "Kantian deduction" which begins with the pragmatic success of the method. "Given that our de facto mode of operation in the cognitive sphere works — and works as it actually does — what conditions must reasonably be postulated regarding ourselves and the world to provide a plausible account for this circumstance?" (Rescher, 1977: 94). Assumption of these conditions is justified by the previously demonstrated success of the coherence method.

The first assumption is that man is a creature of action. He is placed "within a world-environment that presses in upon him from every side. He must constantly act upon his environment to ensue his well-being and indeed survival" (Rescher, 1977: 84). Second,

man is reasonable; that is, "men not only hold beliefs as a kind of exercise in abstraction, but ... their actions are in general guided by accepted beliefs" (Rescher, 1977; 85). Third, there is interaction between man and the world, as "human agency produces a flow of consequences that rebound back upon the agent, ultimately producing satisfaction or frustration" (Rescher, 1977; 87). Finally, the external world exhibits a "uniformity of nature", and is "nonconspiritorial" — that is, evil demon hypotheses and other hypotheses with similar consequences are rejected. These assumptions, combined with the pragmatic success of the method which justifies them, are sufficient to show that conclusions reached via the method correspond to reality. Hence, that "men are rational agents functioning in the environment of a duly responsive nature, and sensitively responsive to its operation, is crucial to the rationale of this methodologically pragmatic validation" (Rescher, 1977; 91). The success of the coherency method provides its justification at the pragmatic level, while the "metaphysical deduction" demonstrates at the theoretical level that the rationale for the method, i.e. the production of truth, has been achieved.

### B. Rational Acceptability

Rescher's theory displays the characteristics necessary for a theory of rational acceptability. It is aimed at the epistemic goal of truth. The justification which it supplies is subjective, being based on the data available to, collected by, and processed by the individual. His account also demands reflective awareness. First, one must pre-screen the data which provide the raw input to the coherence method. These data must be determined possibly true, and one must be reasonably sure that the true facts of the matter lie in the "logical space" spanned by the data. The coherence method itself requires this awareness. While the division of data into maximally coherent subsets could be considered a rote task, the determination of which constitutes the most coherent requires reflective attention.

This coherence method is also pragmatic in the required sense. Rescher in fact believes that "all rationality — cognitive as well as behavioral — is pragmatically purpose-oriented and practice-related" (Rescher, 1977, 23). It is aimed not at attaining only

that which is true — truth in the ideal, but at sifting out that most likely to be true at present from the available data.

Thus the "rationale of justification" is to be found in the pragmatic domain. That is because "the rational legitimation of cognition can properly be accomplished only by reference to the full range of man's purposive concerns, specifically and preeminently including those of the practical sector" (Rescher, 1977: 24). Hence "the rationality of actions of all sorts — acts of 'acceptance as true' not excluded — is governed by pragmatic concerns of presumptive effectiveness" (Rescher, 1973: 22).

While Rescher's theory exhibits the requisite characteristics for a theory of rational acceptability, it might well be asked how effective a theory it is. First of all, it is questionable whether we choose beliefs from a field of data by anything like the coherence method. Our daily epistemic decision making process bears little resemblance to Rescher's method of collecting all the available data, parsing it into a large number of maximally coherent subsets, and then choosing from these the most coherent. The more usual case involves the acceptance or rejection of a single datum, or choice between two or three structured subsets of data (for example, between two or three theories on a given topic). However, Rescher's method can be seen as a logical, if not practical extension of the usual cases to the more extreme and comprehensive case. It may be comprehensive if not realistic, and in simplification resembles the usual case.

A more telling objection to Rescher's account is that the establishment and initial ranking of the data is an epistemic decision made with no regard for coherence, which is claimed to be the criterion of epistemic justification. A response can be made to this specific objection while directing a criticism to Rescher's general approach. His account, unlike those so far examined of Sellars and Bonjour, fails to distinguish between the genesis and the justification of beliefs. If the coherency method restricted itself to belief justification, there would be no need to account for how these beliefs originated. That is, one would not have to set criteria for datahood; it would simply be accepted that certain data are available and require justification or rejection. Rescher's acount of initial data selection is thus extraneous

to his account of belief evaluation proper.

#### C. Justification

Rescher sets the truth connection in the pragmatic domain. This involves, in essence, an appeal to effective agency much the same as that of Sellars, and hence subject to similar objections which won't be repeated here. Although Rescher attempts to demarcate the pragmatic domain from the theoretical, conclusions about pragmatic success must, if they are to have any epistemic merit, be reached theoretically within a certain system of beliefs. While Sellars was unable to escape this conclusion, Resher does, but at a price. He moves the appeal from the epistemic to the affective. He claims that "the ultimate metacriterial standard for weighing a criterion of truth-acceptance (in the factual areas) is not cognitive at all but rather affective, and the reasoning of the test-procedure of truth-determination represents in the final analysis an appeal not to knowledge but to feeling ... In a real sense cognition is ancillary to practice and feeling becomes the arbiter of knowledge" (Rescher, 1973: 255).

Rescher's claim is that events in the world have a direct influence on feelings. If I act in accordance with beliefs which do not correspond with the way the world is I will feel the effects. For example, I will feel pain if I touch a hot object that I had believed was cool. This input via feelings from the world to the cognitive allows the circularity inherent in a self-justifying belief system to be broken. It provides input to the system, and provides the channel for truth conduciveness. Thus, in order to avoid circularity, Rescher has given final arbitration of the reasonable to the affective. But if epistemological endeavours are undertaken with the goal of arriving at true conclusions, then reduction or appeals to feelings can hardly have any epistemic value. To say that we can know truth only through our feelings does not give us much confidence in the accuracy of that which we hold as true. If it is to give us confidence we must take a foundationalist stance, and claim that the feelings we have are in fact epistemic primitives, capable of the error free conveyance of truths about the world. While circularity is avoided, the cost of this avoidance is extreme.

Rejection of the supremacy of the affective would place Rescher squarely in the domain of the theoretical. He there demonstrates the truth connection, but in so doing relies on metaphysical assumptions. This is ultimately where the foundations of his defence must lie unless he is willing to surrender wholeheartedly to the affective.

#### D. Coherence

Coherence is a criterion for truth, and not part of its definition, "not the meaning of truth in the context of factual claims, but its arbiter" (Rescher, 1973: 12). It is a relationship which holds between propositions, not "with reality or with the facts of the matter" (Rescher, 1973: 32).

Application of the coherence method results in a set of coherent propositions.

Coherence is a "criterion of membership ... a measure of the rational claims to truth that can be made on behalf of the theses one may incline to accept" (Rescher, 1974: 708). This set of coherent propositions must exhibit "the features of comprehensiveness, consistency, and cohesiveness" (Rescher, 1973: 169). Consistency ensures that a coherent data set does not include both a thesis and its negation. Comprehensiveness includes the properties of inferential closure, logical inclusiveness (contains all the theses of logic), and restricted completeness (either P or not-P is in the set for all P which constitute the original set of data). Comprehensiveness ensures that the set of coherent propositions is "not only consistent but maximal" (Rescher, 1973: 171).

The third feature of coherence is cohesiveness, or unity. This property ensures that "every truth here stands in a characteristic relationship of interdependence with its fellows in the hypothetical sense that if the truth status of some of these were different ... then its own truth-status might well be affected. It is in this sense — rather than that of deductive interlinkage — that the coherency theory ... [exhibits] the cohesiveness of truth "(Rescher, 1973: 175).

Coherence, then, is used in two ways by Rescher. In his coherence method "we are dealing with a criterion of truth and not a criterion of rational acceptability or acceptance.

The crierion at issue aims to answer the question 'Is P true?' and not the question "Is P rationally acceptable?' Though the issues of rational warrant cannot be expelled from the picture, it applies to the criterion at issue, rather than pertaining in any direct way to the propositions governed by that criterion" (Rescher, 1973: 16). Coherence is used as a criterion for accepting a proposition as true, and questions of the rational acceptability of this criterion are external to the coherence method. Coherence is thus a criterion for the rational acceptability of a given proposition in a derivative sense. Coherence is an immediate criterion for the acceptance of a proposition as true, and it is rationally acceptable that coherence should play this role.

Rescher has offered different criteria for different types of knowledge. His primary criterion for empirical knowledge is coherence. Also explicitly required on Rescher's account are criteria and initial plausibility ratings for data, and preference criteria for choice among maximally coherent subsets. It is arguable that preference criteria for subsets are derivative from the concept of coherence itself, for the object is to choose the most coherent from the available maximally coherent subsets. It has already been noted that the criteria and plausibility ratings for data relate to the genesis rather than the justification of belief. This would leave coherence as Rescher's sole criterion for belief evaluation.

Used as a criterion for truth, coherence refers to a specific relationship between propositions. But coherence is also a constitutive element (and not a criterion of) rational acceptability, manifesting itself there as (in Rescher's terminology) "conceptual systematization". Its role here is to demonstrate the overall coherence between the cognitive, which governs the theoretical (including the epistemic) realm, and the affective, which governs the pragmatic realm, and is the ultimate governor of the theoretical. "The present analysis then envisages an intricate interdependance or symbiosis between man's factual views and his practical objectives and thus between the practical and the theoretical sectors of rationality" (Rescher, 1977: 92). Systematization is an important component of Rescher's theory. "In the case of cognitive systematization, the inherent teleology of order revolves about the factors of intelligibility, and the linkages of interrelationships represent principles of

clarification within a particular explanatory order. A cognitive system provides illumination; their systematic interconnections render the facts at issue amenable to reason by organizing them within a framework or ordering principles that bring their interrelationships to light" (Rescher, 1974: 695, 696). His theory involves coherence between man's cognitive, pragmatic, and affective dimensions. Coherence is thus a characteristic of rational acceptability.

There is a third role which coherence plays in Rescher's theory, and that is its role as a metaphysical assumption. If Rescher does not want to rely exclusively on the affective domain in order to establish the truth connection, he must rely on metaphysical assumptions which include the nature of the real world. This is explicit in his theoretical metajustification, where he assumes that man is a creature of action, that man is reasonable, that there is interaction between man and the world, and that the world itself exhibits a "uniformity of nature". However, his pragmatic justification also depends on similar assumptions. It invokes an appeal to effective agency which resembles Sellars' account, and which depends on the same assumptions — namely, that the world is such that our interactions with it allow its reflection in our coherent belief systems. Even if one grants Rescher's final appeal to the affective, one must still assume that the world is such that the data we accept on the basis of our feelings is representative of what the world in fact is like.

Rescher, unlike Sellars and Bonjour, explicitly recognizes the metaphysical assumptions necessary for a theoretical demonstration of the truth connection. However, he feels that a theory of objective justification does not require this theoretical account, and that a pragmatic defence of the truth connection which does not rely on metaphysical assumptions is sufficient. This pragmatic defence abandons the coherency approach, placing in its stead a foundationalism based on affective premises — a stance which maintains that basic feelings are truth conducive. Acceptance of this foundationalism would disquality Rescher's theory as a coherency theory. While this would be of minor consequence if the foundationalist approach offered did indeed make the truth connection, it is doubtful that it has. Rescher's

affective foundationalism is suspect on its own grounds as it decides epistemic questions of truth by answering affective questions of feelings. It is doubtful that feelings can be accepted as accurate truth indicators, at least not without some theoretical basis to give support.

Rescher must give a theoretical account of the truth connection, and the theoretical account he offers depends on metaphysical assumptions.

Sellars, Bonjour, and Rescher thus present coherency theories which, while different in detail and emphasis, all give satisfactory accounts of rational acceptability based on the internal coherence of belief systems. They all present theories of objective justification which rely on the pragmatic appeal to effective agency — accounts which ultimately rely on metaphysical assumptions.

What can be done about these metaphysical assumptions? Those assumptions examined so far all relate to a real, external world. Sellars, Bonjour, and Rescher all hold realist views of the world, and it is the attempt to make an objective truth connection with this real world that results in these metaphysical assumptions. It was determined earlier, however, that objectivity does not depend on any particular metaphysical stance. The objective truth connection need not be made with a metaphysically real, external world. It might be made instead with respect to some other state of affairs — for example, as Richard Rorty suggests, with respect to "general agreement among sane and rational men on what would count as confirming their truth" (Rorty, 1979: 337). Such an account is given by Hilary Putnam in his theory of belief evaluation.

### VI. Putnam

## A. Putnam's Theory

The main feature which distinguishes Hilary Putnam's theory from those examined so far is his non-traditional theory of truth. Rather than truth being a foundational concept which is constitutive of the derivative concept of knowledge, truth is itself a derivative concept, being based on rational acceptability. "The view which I shall defend holds, to put it very roughly, that there is an extremely close connection between the notions of truth and rationality; that, to put it even more crudely, the only criterion for what is a fact is what it is rational to accept" (Putnam, 1981: x). Truth is idealized rational acceptability. "We speak as if there were such things as epistemically ideal conditions, and we call a statement 'true' if it would be justified under such conditions" (Putnam, 1981: 55). Without our concept of rational acceptability we would have no concept of truth, as "truth, in the only sense in which we have a vital and working notion of it, is rational acceptability (or, rather, rational acceptability under sufficiently good epistemic conditions)" (Putnam, 1983b: 231). In spite of this interdependence of the notions of truth and rational acceptability, they are not equivalent. "The relation between rational acceptability and truth is a relation between two distinct notions. A statement can be rationally acceptable at a time but not true" (Putnam, 1981: x).

This relationship between truth and rational acceptability results from Putnam's internalist perspective. According to this perspective, "'truth', in an internalist view, is some sort of (idealized) rational acceptability — some sort of ideal coherence of our beliefs with each other and with our experiences as those experiences are themselves represented in our belief systems" (Putnam, 1981: 49, 50). This does not mean that truth is whatever we make it out to be. "Internalism is not a facile relativism that says 'Anything goes'. ... Internalism does not deny that there are experiential inputs to knowledge; knowledge is not a story with no constraints except internal coherence; but it does deny that there are any inputs which are not themselves to some extent shaped by our concepts, by the vocabulary we use to report and

describe them, or any inputs which admit of only one description, independent of all conceptual choices" (Putnam, 1981: 54). Knowledge consists of experiential input which is shaped by our human conceptual apparatus. The input cannot be examined apart from this conceptual apparatus—it is intelligible only when it has been so perceived. Putnam is not an anti-realist as he does not deny an external world. Rather, he is a non-realist as he denies not only that we have any direct epistemic link to that world, but that questions of truth are to be decided in relation to that world. For Putnam, questions of truth and knowledge properly reside in the internal, conceptual world of human knowers.

Truth, then, is molded by human limitations, and is found in the theoretical application of rational acceptability under ideal epistemic conditions. "I shall advance a view in which the mind does not simply 'copy' a world which admits of description by One True Theory. But my view is not a view in which the mind makes up the world, either" (Putnam, 1981: xi). This view of the world which is molded by our criteria of rational acceptability and which in its idealized limit is true, is neither objective (in the traditional sense) nor subjective. In fact, Putnam wants to break "the dichotomy between objective and subjective views of truth and reason" (Putnam, 1981: ix). His view is not objective in the traditional sense as "truth and rational acceptability — a claim being right and someone's being in a position to make it — are relative to the sort of language we are using and the sort of context we are in" (Putnam, 1983b: 234). But although this leaves us with a coherency theory of truth, "rejecting the metaphysical 'correspondence' theory of truth is not at all the same thing as regarding truth or rational acceptability as subjective" (Putnam, 1981: 123). What we are left with is a view (or views) of reality molded by the human ability to comprehend, and as long as "our 'objectivity' is objectivity humanly speaking, it is still objectivity enough" (Putnam, 1981: 168).

Putnam's epistemic goal is not truth in the classical sense, but the attainment of this human objectivity. "Our conceptions of coherence and acceptability are ... deeply interwoven with our psychology. They depend upon our biology and our culture; they are by no means 'value free'. But they are our conceptions, and they are conceptions of something real. They

define a kind of objectivity, objectivity for us" (Putnam, 1981: 55). As a result there might be more than one acceptable account of reality. "To an internalist this is not objectionable: why should there not sometimes be equally coherent but incompatible conceptual schemes which fit our experiential beliefs equally well?" (Putnam, 1981: 73).

Justification is a matter of rational acceptability. Putnam speaks of "the notion of a belief's being justified or rationally acceptable" (Putnam, 1983b: 229). A belief can be justified, or acceptable, but not true; however, given the proper epistemic conditions, that belief would loose its justification and be found not true. For "truth is independent of justification here and now, but not independent of all justification" (Putnam, 1981: 56). Thus "truth is expected to be stable or 'convergent'; if both a statement and its negation could be 'justified', even if conditions were as ideal as one could hope to make them, there is no sense in thinking of a statement as having a truth-value" (Putnam, 1981: 56).

Putnam gives a Kantian argument which attempts to establish the objectivity of justified beliefs. "My procedure has a close relation to what Kant called a 'transcendental' investigation; for it is an investigation ... of the preconditions of reference and hence of thought — preconditions built into the nature of our minds themselves, though not (as Kant hoped) wholly independent of empirical assumptions" (Putnam, 1981: 16). Putnam proceeds by "reasoning a priori", a procedure which involves "inquiring into what is reasonably possible assuming certain general premises, or making certain very broad theoretical assumptions. Such a procedure is neither 'empirical' nor quite 'a priori', but has elements of both ways of investigation" (Putnam, 1981: 16). It is a fallible procedure, but it provides justification (in Putnam's terms) for what he does. He begins with what he finds the human condition to be, and goes on to see what the implications of this condition are for knowledge and truth. The conclusions reached are not infallible, but are to be tested against empirical evidence.

## B. Rational Acceptability

Putnam's theory of justification is explicitly a theory of rational acceptability, and it demonstrates all the characteristics of such a theory. Its goal is the standard epistemic goal of truth, even though Putnam's conception of truth is nonstandard. Its internalist perspective explicitly embodies subjective justification. As objective truth is formulated by human comprehension, and is defined in terms of that ideally rationally acceptable, rational acceptability must have the characteristic of reflection in order to give the notion of truth any content. Putnam's concept of rational acceptability is pragmatic, as it involves the here and now acceptance of beliefs. While truth is defined in terms of idealized rational acceptability, rational acceptability itself is a matter of the present time and circumstances.

Putnam sees the concept of rational acceptability, and, derivatively, that which is ideally rationally acceptable and hence true, as being at bottom a matter of human values. He claims that "we must have criteria of rational acceptability to even have an empirical world, that those reveal part of our notion of an optimum speculative intelligence. In short, I am saying that the 'real world' depends upon our values (and, again, vice versa)" (Putnam, 1981: 134, 135). This does not mean that the whole enterprise of knowledge is a trivial one of "mere" values. These values are substantive, and capable of sustaining the edifice errected on them. In fact, "value terms" are actual properties. Given Putnam's internalist perspective, along with its attendant non-realist metaphysics, this is not as absurd an idea as it might seem at first. While "one might attempt to avoid conceding that there are objective values of any kind by choosing to deny that 'coherent', 'simple', 'justified' and the like are value terms ... this line runs into difficulties at once. 'Coherence and 'simple' have too many characteristics in common with the paradigmatic value words" (Putnam, 1981: 136).

These values are the basis of rational acceptability. "Any choice of a conceptual scheme presupposes values, and the choice of a scheme for describing interpersonal relations and social facts, not to mention thinking about one's own life plan, involves, among other things, one's normal values. One cannot choose a scheme which simply 'copies' the facts, because no conceptual scheme is a mere 'copy' of the world' (Putnam, 1981: 215). Thus

"our notion of rationality is, at bottom, just one part of our conception of human flourishing, our idea of the good" (Putnam, 1981: xi). Rational acceptability is dependent on the values which we hold, and hence the "theory of truth presupposes rationality which in turn presupposes our theory of the good" (Putnam, 1981: 215).

Putnam rejects the notion that rational acceptability should be defined by what is scientifically acceptable. It is seductive to make this connection because of the practical benefits of scientific rationality. The success of science leads to the view that rationality can be equated with scientific rationality. But, asks Putnam, "even if science were valued solely for the sake of its applications, why should rationality be valued solely for the sake of its applications?" (Putnam, 1981: 178). There are dimensions to the human cognitive life which are omitted by the scientific paradigm. "If we consider the ideal of rational acceptability which is revealed by looking at what theories scientists and ordinary people consider rational to accept, then we see that what we are trying to do in science is to construct a representation of the world which has the characteristics of being instrumentally efficacious, coherent, comprehensive, and functionally simple" (Putnam, 1981: 134). This does not mean that scientific rationality is superior, or all encompassing, rather, "having this sort of representation system is part of an idea of human cognitive flourishing, and hence part of our idea of total human flourishing" (Putnam, 1981: 134). Thus "to identify rationality with scientific rationality ... would be to beg the question of the cognitive status of value judgements; it would be to say these judgements are not rationally confirmable because they are value judgements, for rationality has been defined as consisting exclusively of raw and neutral observations and the drawing of inferences from value-neutral premisses" (Putnam, 1981: 200).

Not only is rationality multifaceted, but attempts to define it are relative. "The question: 'which is the rational conception of rationality itself' is difficult in exactly the way that the justification of an ethical system is difficult. There is no neutral conception of rationality to which to appeal" (Putnam, 1981: 136). Thus "someone's telling us that they want us to know the truth tells us really nothing as long as we have no idea what standards of

rational acceptability the person adheres to: what they consider a rational way to pursue an inquiry, what their standards of objectivity are, when they consider it rational to terminate an inquiry, what grounds they will regard as providing good reasons for accepting one verdict or another on whatever question they may be interested in " (Putnam, 1981: 129).

Although rationality is relative to a person's interests, culture, and (above all) humanity, that does not mean that rationality is completely relative. "That (total) relativism is inconsistent is a truism among philosophers. After all, is it not obviously contradictory to hold a point of view while at the same time holding that no point of view is more justified or right than any other?" (Putnam, 1981: 119). Even "arguing about the nature of rationality (the task of philosophers par excellence) is an activity that presupposes a notion of rational justification wider than the positivist notion, indeed wider than institutionalized criterial rationality" (Putnam, 1981: 113). In order to debate questions of rational acceptability, the participants in the debate must share a certain common ground as to what is rationally acceptable. In fact, such an assumption is required for any study. For "we are committed by our fundamental conceptions to treating not just our present time-slices, but also our past selves, our ancestors, and members of other cultures past and present, as persons; and that means ... attributing to them shared references and shared concepts, however different the conceptions that we also attribute. Not only do we share objects and concepts with each other, but also conceptions of the reasonable. ... However different our images of knowledge and conceptions of rationality, we share a huge fund of assumptions and beliefs about what is reasonable with even the most bizarre culture that we can succeed in interpreting" (Putnam, 1983a: 196. 197).

Even though the existence of an overriding concept of rationality can be assumed, this does not mean that the nature of rationality can be completely specified. "It is tempting ... to say that what determines whether a belief is rational is not the norms of rationality of this or that culture, but an ideal theory of rationality, a theory which would give necessary and sufficient conditions for a belief to be rational in the relevant circumstances in any possible world. Such a theory would have to account for the paradigmatic examples [of rationality]"

(Putnam, 1981: 104). However, "a general difficulty with the proposal to treat 'rational', 'reasonable', 'justified', etc. as natural kind terms is that the prospects for actually finding powerful generalizations about all rationally acceptable beliefs seem so poor" (Putnam, 1981: 104). We can assume a certain common ground of rationality, but it is impossible to completely specify it.

This does not mean that it is futile to study rationality. On the contrary, such study will lead to a better understanding of human flourishing. We see "our search for better conceptions of rationality as an intentional human activity, which, like every activity that rises above habit and the mere following of inclination or obsession, is guided by our idea of the good" (Putnam, 1981: 136, 137).

Rationality, then, is both an object of study and the regulator of that same study.

"The 'standards' accepted by a culture or a subculture, either explicitly or implicitly, cannot define what reason is, even in context, because they presuppose reason (reasonableness) for their interpretation. On the other hand, there is no notion of reasonableness at all without cultures" (Putnam, 1983b: 234). Although rationality can only be examined in its particular application, it extends beyond any such application. "Reason is ... both immanent (not to be found outside of concrete language games and institutions) and transcendent (a regulative idea that we use to criticize the conduct of all activities and institutions" (Putnam, 1983b: 234).

## C. Justification

Putnam attempts to establish a non-realist objective truth connection. The real world, for him, is the intersubjective world of human knowers. As truth is idealized rational acceptability, a belief which is rationally acceptable to an individual is potentially part of that world. The truth connection, then, lies in the rational acceptability of the belief. Such a belief has the potential to be true.

A problem arises, however, as the truth connection lies not in the rational acceptability of the belief to the individual, but in the rational acceptability of that belief to

the intersubjective community of knowers. While Putnam does not claim that all the beliefs which are rationally acceptable to a given individual will be rationally acceptable to all individuals in that community, he does claim that the community shares a common rationality which, under ideal epistemic conditions, would allow the acceptance of and only of true beliefs. In order to make the truth connection Putnam must assume a common rationality. It arises from what he calls a shared concept of human flourishing, and results in one intersubjective world which, to Putnam, is the humanly objective world.

Putnam does argue that this intersubjective world is not assumed, but is in fact the real world. This is his "brains in a vat" argument, in which he claims that the thesis "we are brains in a vat" cannot be properly formulated if, indeed, we are brains in a vat. Since we can formulate this thesis, we are not brains in a vat. Hence the intersubjective world which we perceive is indeed the real world. Let us grant Putnam this argument without going into its details. While it might negate the possibility of certain forms of radical skepticism, and establish the reality of the intersubjective world, it does not establish any truth connection between that world and an individual's beliefs.

In order for Putnam to make the truth connection for any given individual's belief B, he must argue as follows:

- 1) B is rationally acceptable to the individual.
- 2) In order for B to be a candidate for truth, B must be potentially rationally acceptable to the human community of knowers.
- 3) The concept of rational acceptability held by the human community of knowers is shared by the individual.
- 4) Therefore, B is a candidate for truth.

Premise (1) simply describes the situation. Premise (2) is a statement of Putnam's theory of truth. He defines truth as idealized rational acceptability in the community of human knowers. If a particular belief held by an individual has any chance of being true, it must be at least potentially rationally acceptable to that community. Premise (3) is required to make the truth connection. If the individual shares in the common concept of rationality, then any

belief he finds rationally acceptable is potentially rationally acceptable to the community, and is a candidate for truth. The truth connection has been made.

This argument depends on an assumption of shared rationality between the individual and the community. Premise (3) is an explicit statement of this assumption, and Putnam's theory of truth, as stated in premise (2), depends on this assumption. Putnam would probably claim that common rationality is not so much an assumption as a presupposition necessary for communication and communal discourse, for in order to debate anything at all the participants in the debate must share a common ground of rationality. This presuposition of a common rationality is similar to Lawrence Bonjour's presupposition of the Doxastic Presumption. He claims that it is not something that itself requires justification, but something which provides the very context within which questions of justification can be meaningfully formulated.

However, it is doubtful whether Putnam can claim such status for this assumption of shared rationality. Consider, for example, a psychopath or a Nazi. These people have what Putnam calls a "sick concept of human flourishing" (Putnam, 1981: 141). Their idea of rationality is not that shared by the general community of human knowers, and hence their beliefs, insofar as they are products of their sick concept of human flourishing, need not be considered as truth candidates. Such easily recognizable examples don't cause Putnam any trouble, as they are quickly found out by the broader community of knowers to exemplify deviant concepts of rationality. They do show, however, that Putnam admits that not all individuals need share in the common rationality.

Less extreme examples are what might cause Putnam trouble. It is quite possible that while individuals might agree in practical matters, and even be able to discuss theoretical matters based on a certain common ground, their concepts of human flourishing and resultant rationalities might be just divergent enough to prevent any possible idealization to converge on a notion such as truth. We might be able to successfully negotiate the intersubjective world of human knowers because we interpret these knowers as sharing our concept of rationality,

but it does not follow that we do indeed share such a common concept. In order for Putnam

to make the truth connection, and even to hold the theory of truth that he does, he must assume this common rationality. This does not show that his theory of truth is inadequate, it only points out what assumptions underlie it. Putnam must make these assumptions of common rationality to establish the truth connection and provide objective justification.

While Putnam's account of objective justification does not rely on assumptions about a real external world, it does rely on certain assumptions about humanity and human nature. Objectivity, for Putnam, is an intersubjective notion, and its establishment depends on assuming that a common rationality is shared among all those who constitute the community of knowers.

#### D. Coherence

Rational acceptability, for Putnam, is a matter of coherence. "What makes a statement, or a whole system of statements — a theory or conceptual scheme — rationally acceptable is, in large part, its coherence and fit; coherence of 'theoretical' or less experiential beliefs with one another, and with more experiential beliefs, and also coherence of experiential beliefs with theoretical beliefs" (Putnam, 1981: 54, 55). Coherence cannot be seperated from rational acceptability. To cohere with those concepts which we already have is to be rationally acceptable and vice versa. Coherence is thus the primary characteristic of rational acceptability.

As Putnam equates justification and rational acceptability, coherence is also a criterion of belief acceptance. A belief is accepted if it coheres with other beliefs.

The third role of coherence is as a metaphysical assumption. Understanding of another person or culture is dependent on assuming the rationality, and hence the internal coherence, of the belief system of that person or culture. Without such an assumption understanding and communication would be impossible.

Putnam, like Sellars, Bonjour, and Rescher, offers a satisfactory coherency theory of rational acceptability. His theory of objective justification differs from these other theories

with its attempt to make the truth connection not with a real world, but with a world which is the intersubjective community of human knowers. But, like the others, Putnam must make certain assumptions about this intersubjective world in order to establish the truth connection. Establishing a link between the internal belief system of an individual and a world external to that individual, be it a real world or an intersubjective conceptual world, seems to require that certain assumptions be made about that world.

While Putnam has abandoned external realism, the next step would be to resist making any such assumptions. Two coherency theories which do not make these assumptions, those of Keith Lehrer and Gilbert Harman, will be examined to see what happens when such assumptions are abandoned altogether.

### VII. Lehrer

## A. Lehrer's Theory

Like Sellars and Bonjour, Keith Lehrer considers the justification of a belief to be independent of its genesis. He makes the "distinction between explaining why a man believes something, on the one hand, and explaining how he knows it on the other. When a man knows that his belief is true, the explanation of why he believes what he does may have something to do with his having the evidence he does, but it also may have nothing whatever to do with his having evidence" (Lehrer, 1974: 125). Thus "how a man comes to know something is ... quite a seperate matter from the question of how he knows it to be true once he does know" (Lehrer, 1974: 210). Lehrer is unique, however, in considering justification to occur in a particular subsystem of a person's beliefs. One's beliefs constitute a belief system. But an epistemic discussion can only occur in relation to beliefs about these beliefs. These "metabeliefs" form a believer's doxastic system. "The system a man's beliefs must cohere with, in order to be completely justified, consists of a set of statements articulating what he believes. The system will consist, not of statements believed, but statements saying that the man believes what he does" (Lehrer, 1974: 189).

Such a system will contain some beliefs held for non-epistemic reasons, and these beliefs must be removed from the believer's doxastic system. "It is only those beliefs which he would retain in an impartial and disinterested search for truth that sustain justification aimed at veracity. Hence, for justification with truth as the objective, the doxastic system of a man must be suitably corrected" (Lehrer, 1974: 189). This "corrected doxastic system of S is that subset of the doxastic system resulting when every statement is deleted which describes S as believing something he would cease to believe as an impartial and disinterested truth-seeker" (Lehrer, 1974: 190). This does not mean that all false beliefs are removed, only those which the believer would not hold to as a "veracious inquirer".

The removal of all false beliefs is required to form the "verific alternative to the corrected doxastic system" (Lehrer, 1974: 224). This verific alternative system is not required for justification, but for satisfaction of Lehrer's fourth condition of

Lehrer differs from most coherency theorists in what he wants his theory of justification to accomplish. His account of justification is more or less a schema, and does not supply precise principles of justification. "We reject the assumption ... that some principles of justification are universally valid" (Lehrer, 1974: 226, 227). He proposes to articulate the theory, but not the precise mechanism, of justification. This "allows for a multiplicity of ways in which men, or other creatures, might come to know the universe" (Lehrer, 1974: 212).

Lehrer considers justification to be a subjective matter. "I shall argue that the fact of belief itself, the subjective reality of conviction, provides the basis for a satisfactory coherence theory of justification" (Lehrer, 1974: 184). One consequence of this subjectivity is that justification does not provide a guarantee of truth. "We must, therefore, settle for a fallibilistic theory of justification, if we wish to avoid being forced to deny that we know at least some of the things we clearly do know" (Lehrer, 1983: 192). As a result "we must proceed without a signpost guaranteeing the way to truth. There is nothing other than coherence among our beliefs on which to rely" (Lehrer, 1974: 185).

Justification is achieved by coherence within a person's belief system. "The doxastic system of a man, a set of subjective statements articulating what he believes, is what his beliefs must cohere with in order to be completely justified" (Lehrer, 1974: 189). Lehrer thus proposes the following "schema for a coherence theory of justification: S is completely justified in believing that p if and only if the belief that p coheres with other beliefs belonging to a system of beliefs of kind K" (Lehrer, 1974: 154). The system of beliefs with which p must cohere is the corrected doxastic system of S. What remains to be determined is what coherence is, and how it is that a belief must cohere with other beliefs.

The first step in determining the coherence of a proposition is to set out the epistemic field of the proposition. The epistemic field is that set of statements which a veracious

<sup>&</sup>quot;(cont'd) knowledge, a condition added in response to the Gettier problem. That condition, which stipulates that the justification of a proposition cannot depend on any false statement, is satisfied for believer S and proposition p "if and only if S is completely justified in believing that p is in the verific alternative to the corrected doxast system of S" (Lehrer, 1974: 224). As concern here is limited to justification, further discussion will refer only to the corrected doxastic system.

inquirer considers "germane to the statement in question." In *Knowledge* Lehrer goes into a great deal of technical detail on what to do with the contents of that field. This technical detail boils down to is finding those propositions in the epistemic field which are "negatively relevant", that is, which conflict with the propositions whose justification is in question. Justification can be conferred only if the proposition is acceptable above all those propositions which are negatively relevant to it. "For a man to be completely justified in believing a statement to be true, the statement must be believed to have a better chance of being true than certain others within the corrected doxastic system of the man in question" (Lehrer, 1974: 192).

In order to be justified, then, p must "beat" those other propositions which are negatively relevant to it. These negatively relevant beliefs are called "competitors" of p. Belief q is negatively relevant to p, or "p competes with q for S on the basis of system A if and only if it is more reasonable for S to accept p on the assumption that not q than on the assumption that q on the basis of system A" (Lehrer, 1986: 10). That is, p competes with q if there is less chance of accepting p given q than accepting p given not-q. This determination is made on the basis of the information available in system A, which is the individual's "acceptance system" — that set of beliefs which he already holds. Belief "p beats q for S on the basis of system A if and only if p competes with q on the basis of system A and it is more reasonable for S to accept p than to accept q on the basis of system A" (Lehrer, 1986: 10). That is, p beats q if it is more reasonable to accept p than q. Again, this determination is made on the basis of the information available in the individual's acceptance system A.

There are, however, a large number of beliefs which p could be seen to compete with and would have to beat in order to be justified. All those beliefs do not have to be beaten by p. "Beating all competitors, though sufficient for justification, is not necessary. The reason is that some competitors, though not beaten, may be dispensed with in another manner" (Lehrer, 1986: 10). Competitors may be neutralized rather than beaten. Proposition "n neutralizes q as a competitor of p for S on the basis of system A if and only if q competes

with p for S on the basis of system A, and n is such that the conjunction of q and n does not compete with p for S on the basis of system A when it is as reasonable for S to accept the conjunction of q and n as to accept q alone on the basis of system A" (Lehrer, 1986: 11). This "neutralization" is used primarily to dispose of aceptical alternatives to p, and can best be illustrated by such an example. The proposition p: "I see a book" competes with q: "People hallucinate". But q: "People hallucinate" is neutralized when conjoined with n: "I am not now hallucinating".

Justification of a proposition, then, consists in either beating or neutralizing all its competitors. "S is completely justified in believing that p if and only if, within the corrected doxastic system of S, p is believed to have a better chance of being true than the denial of p or any other statement that competes with p" (Lehrer, 1974: 198).

Lehrer defends the reasonableness of his theory of justification by appealing both to decision theory and to a certain information processing model of human thought. What he hopes to prove with his appeal to decision theory is "that it is reasonable for a man seeking truth to believe a statement if and only if he is completely justified in believing the statement" (Lehrer, 1974: 201).

He states that "in the decision-theoretic model, reasonableness is determined by two factors. One is the value assigned to certain outcomes in terms of how they contribute to the attainment of one's objectives, and the other is the probability of those outcomes ... [Hence], if I believe that p, and have truth as my objective, then there are two relevant outcomes: namely, that I believe that p and am correct, and that I believe that p and am in error" (Lehrer, 1974: 205). Lehrer begins with a quantitative assumption of the chance a person believes a proposition to have of being true. This assumption is later disposed of. He defines the "expected value" of proposition h, e(h), as follows:

$$e(h) = p(h)vt(h) + p(h)vf(h)$$
, where

e(h) = expected value of h

p(h) = probability h is true

p(h) = probability h is false

vt(h) = value of believing h when h is true

vf(h) = value of believing h when h is false

He then argues for the rationality of believing exactly those statements having positive expected value. He finds that  $e(h) = p(h) - p(h^{\bullet})$ , where  $h^{\bullet}$  is the strongest competitor for h. "S is completely justified in believing that h if and only if e(h) is positive, that is, p(h) is greater than  $p(h^{\bullet})$ " (Lehrer, 1974: 207). This relies only on comparison of statements, and not on any quantitative notions. Thus "we may dispense with the assumption of a quantitative measure of subjective probability employed in the argument from expected value. Complete justification presupposes no more than comparisons of the chances we believe statements to have of being true" (Lehrer, 1974: 207).

Hence, "on the principle of obtaining as much expected value as one can, the rational course is to believe every statement when we obtain a gain in expected value by doing so. Seeking truth, it is rational to believe a statement just in case the expected utility of doing so is positive ... [Thus] it is rational, on decision-theoretic grounds, for a person to believe a statement if and only if he is completely justified in believing it in terms of our analysis" (Lehrer, 1974: 208).

Lehrer's second appeal is to an information processing model of human thought. He considers "the most fundamental observation concerning the coherence theory of knowledge and justification [to be] ... that human knowledge and justification involves higher order evaluation and certification of information. One may receive information from various sources, but the mere possession of information does not constitute knowledge" (Lehrer, 1986: 24). This higher order processing of information relies heavily on the notion of probability. Probability considerations do not constitute criteria seperate from coherence, but are rather pre-selection criteria which apply to beliefs and are used to evaluate them before determing whether or not they do cohere with a system.

Beliefs are processed against a background system which is used to evaluate their trustworthiness. This background system assigns a certain probability to incoming

information which is dependent on how reliable that information is deemed to be. These assignments of reliability allow the information to be processed. "The consideration of reliability leads to higher order evaluation and especially to higher order probabilities. Incoming information is evaluated and assigned probabilities depending on what one accepts about the reliability of the information. Those probabilities] are also evaluated and assigned probabilities depending on what one accepts about the reliability of the first level probabilities" (Lehrer, 1986: 15).

Dealing with probabilities and probabilities of probabilities may seem complicated, but Lehrer defends such activity as the way the mind actually works. "There is reason to think that higher level processing mimics or resembles lower level processing. Thus, weighted averaging, and, at the higher level, weighted averaging of weighted averages converging towards integrated values, provides us with a unified model of information processing in the human mind" (Lehrer, 1986: 19). To show how this might work he sketches out Jerry Fodor's two part model of human psychology. The mind consists, first, of the Input System, which "responds automatically to a perceptual situation, to stimulation of the sensory receptors, with a representation. The output of this system ... is, however, subject to critical evaluation as input to another system, what Fodor calls the Central Processing System" (Lehrer, 1986: 197). Thus "the question of the psychological reality of higher order evaluations, such as the probability of reliability, finds an answer within the computational capacity of the Central Processing System" (Lehrer, 1983: 198).

### B. Rational Acceptability

Lehrer's theory exhibits all the characteristics necessary for a theory of rational acceptability. His goal is the determination of true propositions. His account of justification is explicitly subjective. "We now abandon the search for some objective feature to justify our beliefs and frankly appeal to a subjective one instead" (Lehrer, 1974: 187). He states, for example, that "the analysis of knowledge is one thing, and the rules for deciding whether one knows are quite another. The latter are conditions of justification for knowledge claims.

Once these conditions have been satisfied, a man has done all he can to find out that p or to justify his belief that p. He cannot, over and above this, check to see that all the conditions in the analysis are satisfied. There is nothing more he can do or needs to do to determine that the truth condition has been satisfied" (Lehrer, 1974: 48). Thus all a person can appeal to for justification is "the fact of belief itself, the subjective reality of conviction" (Lehrer, 1974: 184). In fact, "there is nothing other than one's belief to which one can appeal in the justification of belief. There is no exit from the circle of one's beliefs" (Lehrer, 1974: 188).

Lehrer's theory also requires reflection. The doxastic system which provides the framework for coherence consists of "statements articulating what he believes", not just the beliefs themselves. It might be objected that creating such a system in the first place involves the assumption of something like Bonjour's Doxastic Presumption, and would be subject to the same objections — namely, that it requires, but cannot be provided with, justification. And, unlike Bonjour, Lehrer does not have a theory of a priori justification which can be appealed to. However, it is not necessary to actually construct this doxastic system. All that is required at any one time are those beliefs which p and its competitor q are compared with during the justification process. That is, a believer's entire doxastic system need not be available to him, only those beliefs relevant to the purpose at hand.

Reflection, then, operates on three levels for Lehrer. First, a person must be able to have beliefs articulating what he believes. Second, he must be able to determine which of these beliefs are relevant to a new belief — i.e., which beliefs these new beliefs are to cohere with. And third, he must be able to determine that these beliefs in fact belong to his corrected doxastic system — that is, that they are indeed held for epistemic reasons.

Lehrer also requires reflection for his solution of the regress problem, which states that belief acceptance leads to a vicious regress in that it requires beliefs about beliefs. He does accept higher order beliefs, in that an individual's doxastic system consists of statements articulating what that individual believes. But establishing the reliability of first order beliefs need not generate a regress. Determination of the probable reliability of a first order belief is made with reference to a person's acceptance system. This system, which includes those

beliefs an individual already holds, is used to judge both the belief and its reliability. For example, if the demon hypotheses is true, my perceptual beliefs would have a low level of probability. But if I determine the demon hypotheses to be improbable, that makes it probable that my perceptual beliefs are reliable. Lehrer thus takes the problem of higher order beliefs and turns it into a problem of higher order probabilities held among first order beliefs. Reflection involves not only examination of the beliefs themselves, but also calculation of the beliefs' reliability.

Justification is a pragmatic matter for Lehrer. It supplies reasons in response to a concrete demand for such reasons. "Justification is ordinarily justification to someone else, and whether a justification given to someone suffices will depend on what that person is willing to grant ... Hence, there is a pragmatic element in justification depending on the epistemic qualification of the person to whom the justification is directed" (Lehrer, 1974: 156, 157). Justification is provided in response to the specific demands made by a situation. Thus "a veracious man, one who seeks truth, must be ready to supply reasoning where it is called for and to defend his affirmations" (Lehrer, 1974: 209). He need not convince his questioner, as "the veracious questioner must be satisfied that the man who offers the reasoning is completely justified in his belief, whether or not the interlocutor is himself convinced" (Lehrer, 1974: 209).

Rational acceptability, for Lehrer, is basically a matter of accepting that deemed to have the highest probability of attaining truth. "Without proposing any analysis of reasonableness, I shall propose some criteriological conditions, sufficient conditions, for the application of the notion. The most obvious criterion is one of probability ... Other things being equal, the more probable a statement is, the more reasonable it is to accept it, and, conversely, the less probable a statement is the less reasonable it is to accept it" (Lehrer, 1986: 12).

This directly addresses a problem which Bonjour attempts to circumvent with his Doxastic Presumption. While Bonjour simply claims that we actually do have a grasp of our beliefs which does not require justification, Lehrer gives an explicit treatment of this grasp.

Determing what has the highest probability, and thus what is reasonable to accept, is a subjective matter. What we accept is dependent on our doxastic system. "Our judgements of reasonableness are implicitly relative to some assumptions and system that we unreflectively take for granted" (Lehrer, 1986: 9). As well as providing the context into which we place our new beliefs, this doxastic system provides us with the necessary tools to evaluate beliefs. "Our knowle. Of the world depends on our capacity to discern when we are trustworthy and when we are not. It is a fundamental feature of human knowledge that we have the capacity to discern when the information we receive by means of our senses is to be trusted, when the probability of veracity is high and the probability of error is small" (Lehrer, 1986: 5).

While Lehrer has delimited the function of rational acceptability, i.e. to admit the most probable of competing statements, he has not defined exactly what should be so admitted. "We have not imposed any restrictions on how a man should be about the search for truth ... Our epistemology, being doxastic, is at the same time pluralistic. It assumes the competence of man in his quest for truth" (Lehrer, 1974: 198). Thus "in principle, there is no limit to what may alter our beliefs, and by so doing change what we are completely justified in believing" (Lehrer, 1974: 200). Although he admits that this "will seem epistemically promiscuous to many" (Lehrer, 1974: 200), it is the unavoidable consequence of his subjectivist approach.

# C. Justification

Lehrer claims that his process of justification provides an objective truth connection. "Justification is the intersection of the subjective, the mental operations of the knower, and the objective, the truth about reality. Justification thus effects ... the truth connection and explains the intersection between the mind and the world" (Lehrer, 1986: 5). For "knowlege does not arise when a belief merely happens to be true. Justification must be connected with truth in an appropriate way. The burden of such a view is to characterize the nature of this connection which we shall herafter refer to as the truth connection" (Lehrer, 1983: 191).

However, he refers to the "rationality" of his theory rather than attempting a demonstration

of how this account leads to truth. This is partly because he does not hold a correspondence theory of truth, which gives him one less reason than Bonjour or Rescher to demand an objective account of belief acceptance. While he uses the terms "true" and "truth" in his account of justification, he holds an elimination theory of truth, claiming that "the reference to truth may be eliminated in the formulation of the truth condition of knowledge" (Lehrer, 1974: 37). While advocating justification as the "truth connection", he does not hold a theory of truth conducive to showing exactly what this connection is. Consequently, any demonstration of this truth connection remains subjective. Although "our justification has truth as an objective ... rather than demanding some external guarantee of success, we construct our theory on the subjective integrity of a veracious inquirer and the internal relations among his beliefs" (Lehrer, 1974: 192).

However, this still doesn't obviate the need for an objective account of belief evaluation. The elimination theory of truth holds that "believing that p" is equivalent to "believing that p is true". It does not hold that "believing that p" is equivalent to "p is true". Neither, for Lehrer, does "believing that p" equate to "p is verified". This leaves him in the awkward situation of claiming an objective truth connection, but both being unable to give an objective account of this connection and being unable to show that it is established by any other than subjective means.

The only arguments which Lehrer gives to defend the truth connection are his appeals to decision theory and to Fodor's information processing model of human thought. These arguments both involve an appeal to a non-epistemological theory in order to defend an

<sup>&</sup>lt;sup>10</sup>Elimination theories of truth can be held for different reasons. For example, A.J. Ayer's elimination theory of truth has a verificationalist motivation. He claims that "the purpose of a 'theory of truth' is simply to describe the criteria by which the validity of the various kinds of propositions is determined" (Ayer, 1952: 87). Lehrer, on the other hand, argues that verificationalist theories are actually theories of justification, and not theories of truth. In fact, he claims that "the thesis that underlies ... [the correspondance] theory of truth is not a theory of truth at all but one of verification. It is: what verifies a sentence is the facts and nothing but the facts" (Lehrer, 1974: 44, 45). This is not a proper motivation for a theory of truth, and "when the correspondance theory of truth is understood as a genuine theory of truth, it reduces to the elimination theory ... [or] it is not a genuine theory of truth at all, but a disguised theory of epistemic justification" (Lehrer, 1974: 45).

epistemological one. The defence is by analogy, and its success depends on the legitimacy of this type of defence, the success of the particular analogies, and the prior regard one has both for decision theory and for the information processing model. Such matters, however, are decided within a person's own belief system. If deemed successful, they serve only to provide reasons for accepting Lehrer's theory of how the process of rational acceptability works. They do not show that theory to be successful in establishing the truth connection, nor are they intended to do so by Lehrer. His theory is explicitly subjective, and as such neither requires, nor is able to receive, an objective validation. For "these beliefs, about how good a chance we shall have of reaching the truth if we follow one method rather than another, are the subjectivity on which all justification depends. They are not an objective guarantee of truth. They are not a foundation. They are a subjective commitment that constantly changes in the uncertain search for truth. They are sifting sand" (Lehrer, 1974: 200, 201).

While Lehrer believes that justification provides an objective truth connection, he does not establish that connection, nor does he claim to. He provides a theory of rational acceptability, and claims that it is reasonable to expect this theory to provide truths. The truth connection is thus presupposed. While his theory may stand as a theory of rational acceptability, it cannot claim to be a theory of objective justification.

## D. Coherence

Coherence, for Lehrer, is not a matter of logical implication. He rejects "coherence as a relation of necessary connection. Thus, a belief that p coheres with other beliefs of a system k if and only if p either necessarily implies or is necessarily implied by every other belief in k ... Such logical coherence is not ... necessary for complete justification" (Lehrer, 1974: 157, 158). Neither is coherence a matter of inference, be it deductive or inductive. "It is ... important not to confuse the explanation of justification in terms of coherence with inferential justification. If I believe that I see something red, this belief may be justified because it coheres with my acceptance system, but that does not mean that it-is-justified because I infer it from my acceptance system ... Coherence does not depend on inference"

(Lehrer, 1986: 21). Lehrer briefly entertains the notion of coherence as explanatory coherence, only to dismiss it. He claims that "explanation, though apparently relevant to justification, is neither necessary nor sufficient. Coherence is not entirely a matter of explanation" (Lehrer, 1974: 187).

A clue to Lehrer's own account of coherence lies in his rejection of explanatory coherence. "An explanation, that has no better chance of being true than some competing explanation, fails to yield complete justification. On the other hand, any belief we show to be true on the basis of what we already know is completely justified whether or not our reasoning is explanatory" (Lehrer, 1974: 187). Lehrer's account of coherence is thus essentially negative. "The relation of coherence is explicated in terms of a statement being believed to have a better chance of truth than its competitors within a system of a specified sort" (Lehrer, 1974: 198). A belief coheres if it is more acceptable than another belief which threatens to displace it. "Something coheres with a system of a person if it is more reasonable to accept it than to accept anything with which it conflicts on the basis of the system" (Lehrer, 1986: 9). More precisely, "p coheres with the system A of S if and only if, for every q that competes with p for S on the basis of system A, q is either beaten or neutralized for S on the basis of system A" (Lehrer, 1986: 11).

Lehrer sets out a general schema rather than specific criteria for belief evaluation.

Determination of belief acceptance in this schema is strictly a matter of coherence. Lehrer's theory is thus similar to Sellars' in that coherence is a higher level criterion of belief evaluation.

Coherence also serves as a characteristic of rational acceptability. Rational acceptability, for Lehrer, is a matter of accepting that which has the highest probability of being true. As determination of this is made by coherence, and coherence consists of determination of highest probability, rational acceptability and coherence are essentially the same notion. To be rationally acceptable is to cohere, and to cohere is to be rationally acceptable.

Like the other coherency theorists examined so far, Lehrer gives an adequate coherence based theory of rational acceptability. He runs into trouble, however, with his theory of objective justification. In particular, he does not establish a truth connection. Lehrer claims that this truth connection exists, but does not demonstrate it. This is partly due to his elimination theory of truth. But while it might be argued on the basis of this theory that it is redundant to hold that "p is true" when all that is required is to hold that "p", this does not mean that it does not have to be demonstrated that what p describes actually pertains. Another reason for Lehrer's failure to establish the truth connection is the explicit subjectivism of his theory. How a person evaluates his beliefs is a subjective matter which depends on how that person judges beliefs to best be evaulated. This does not mean that Lehrer is an idealist. He does claim that the truth connection exists — he simply fails to demonstrate it. Lehrer does not require metaphysical assumptions for his theory. But rather than pushing him towards idealism, this simply results in his being unable to supply a complete theory of belief evaluation.

The last theorist to be examined is Gilbert Harman. He, like Lehrer, does not make metaphysical assumptions.

### VIII. Harman

## A. Harman's Theory

Gilbert Harman does not hold an ordinary concept of belief evaluation. In fact, he claims to be "not sure of what these philosophical theories of 'justification' are supposed to be concerned with ... So, although I will be using the terms 'justification' ... as well as the terms 'coherence' and 'foundations', I do not claim that my use of any of these terms is the same as its use in these theories of justification" (Harman, 1986: 29). Although Harman claims to not understand what traditional theories of justification are about, he addresses problems similar to those covered by these theories. He is concerned with belief evaluation, which involves the admittance of new beliefs into a system, as well as the status of those beliefs already in the system.

Harman's approach to belief evaluation is characterized by two key concepts: his response to skepticism, and psychologism. Although he considers his theory to fit in with "much of current epistemology ... [which] is best seen as a response to the thesis that we never have the slightest reason to believe anything" (Harman, 1973: 3), his approach to skepticism is to deny it. Unlike many epistemologists, he doesn't attempt to answer the skeptic. Common sense tells us that radical skepticism must be wrong, and "the problem ... [is] not to find an argument against skepticism ... [but] to find out what is wrong with an argument for skepticism" (Harman, 1973: 3).

For Harman, this involves an appeal to psychologism. "What is being suggested here is a kind of psychologism: the valid principles of inference are those principles in accordance with which the mind works" (Harman, 1973: 18). He holds that "the language of thought" consists of "mental states [which] have structure, and logical relations hold among these states by virtue of that structure" (Harman, 1973: 55).

Harman's stated concern is "with reasoned change in view" (Harman, 1986: 10), that is, with belief revision. Belief revision is accomplished by reasoning. "We can begin by considering how people actually do reason ... or we can begin with our 'intuitions' as critics

of reasoning" (Harman, 1986: 9). He favors the former, psychologistic approach, as "the appeal to intuition tends toward a greater degree of idealization. In particular, it tends to overlook or minimize practical limitations, such as limitations on memory or calculative capacity. What seems wrong when these limitations are not taken into account may be quite reasonable when they are taken into account" (Harman, 1986: 9).

The reasoning process which results in belief revision is not one of deduction or argument. "Argument or proof is not at all the same sort of thing as reasoning in the sense of reasoned change in view" (Harman, 1986: 3). He reserves the technical terms "rules of inference" and "induction" for reasoning involving belief revision, and the term "rules of implication" for logic. There is inductive belief revision but no inductive argumentation; deductive argumentation but no deductive belief revision. That is, "there is deductive argument, but it is not similarly obvious that there is deductive reasoning. Again, it is not clear that there is such a thing as inductive argument, although we might say that there is inductive reasoning ... [although] it might be safer ... to speak of theoretical reasoning instead of inductive reasoning" (Harman, 1986: 6). His project is to examine the process of induction, which is not as straightforward as an examination of deductive logic would be. "Principles of deduction can be clearly stated, and they are probably more certain than any generalizations we might discover about the working of the mind ... But the princples of induction are not even known ... [hence] there cannot be the same objection to identifying inductive principles with principles about the idealized working of the mind" (Harman, 1973: 19).

Inductive reasoning does not result only in the justification of beliefs, for the acceptance of new beliefs might also result in the rejection of previously held beliefs. This process of belief revision attempts to increase the overall coherence of one's beliefs. There are practical limitations to belief revision, so the object cannot be an ideal set of beliefs. Rather, "belief revision is like a game in which one tries to make minimal changes that improve one's position. One loses points for every change and gains points for every increase in coherence. One tries to get a 'satisfactory' [rather than ideal] improvement in one's score"

(Harman, 1986: 68). Basically, Harman's theory of belief revision involves just two elements: the coherence of the beliefs, and the amount of change which is to be made to the beliefs. These elements are set against each other, and "coherence competes with conservatism. It is as if there were two aims or tendancies of reasoned revision, to maximize coherence and to minimize change" (Harman, 1986: 32).

This process of belief revision is examined closely in *Change in View* (Harman, 1986), and sumarized in various principles. The Principle of Clutter Avoidance, for example, states that "one should not clutter one's mind with trivialities" (Harman, 1986: 12). This is not really a principle of belief revision so much as "a metaprinciple that constrains the actual principles of revision ... [These] must be such that they discourage a person from cluttering up either long-term memory or short-term processing capacities with trivialities" (Harman, 1986: 15). Other principles are the "Recognized Implication Principle: One has a reason to believe P if one recognizes that P is implied by one's view" and the "Recognized Inconsistency Principle: One has a reason to avoid believing things one recognizes to be inconsistent" (Harman, 1986: 18). These principles are not normative rules that should be kept in mind during belief revision. "I don't want to suggest that one ever makes conscious use of principles of revision in changing one's view" (Harman, 1986: 2). Rather, they are observations on how this revision would ideally take place. arman identifies these "inductive principles with principles about the idealized working of the mind" (Harman, 1973: 19).

The process of belief revision involves the giving of reasons. "First, in fully believing P one is committed to the claim that one has or had sufficient reasons for believing P that did not rely on false assumptions. Second, when one infers that something is so, one is committed to a claim that there is no significant chance that one's conclusion is false, given one's reasons for it ... Third, in ending inquiry into P, one is committed to the claim that furthur inquiry into P [i.e. uncovering other reasons] should not affect one's conclusions.

Finally, in accepting P as a member of a particular group, one is committed to the claim that evidence [or reasons] that should affect one's conclusions is not possessed by others in one's group" (Harman, 1986: 52).

In practice, however, the relevant reasons can't always be made explicit. For "after the work of Freud and Wittgenstein, it is no longer plausible to equate mental processes with conscious processes. If reasoning is in some sense a mental process, it is rarely a conscious process" (Harman, 1973: 31). While the steps in deductive reasoning can be set out with relative ease, it is induction rather than deduction that is involved in belief revision. And "it is doubtful that anyone has ever fully specified an actual piece of inductive reasoning, since it is unlikely that anyone could specify the relevant total evidence in any actual case ... One cannot always be sure what has influenced one's conclusion" (Harman, 1973: 28, 29).

Reasons, then, are given for the revision that takes place to one's beliefs, be it the acceptance of new beliefs or the rejection of old beliefs, and these reasons combine to form explanations. "To the extent that thought is a matter of inference and reasoning, it is a matter of trying to increase the coherence of our total view. Coherence is a matter of explanation" (Harman, 1973: vii). During revision "a person is to infer the most coherent explanatory account that makes the least change in his antecedant beliefs" (Harman, 1973: 22). This revision is accomplished by induction, and "induction is taken to be inference to the best total explanatory account" (Harman, 1973: 172). "We are led to construe induction as inference to the best explanation, or more precisely as inference to the best of competing explanatory statements. The conclusion of any single step of such inference is always of the form Y because X (or X explains Y), from which we may deduce either X or Y. Inductive reasoning is seen to consist in a sequence of such explanatory conclusions" (Harman, 1973: 140).

Contrary to the claims of foundations theories, the explanation of a belief does not rest on certain specific reasons. Rather, "inductive inference must be assessed with respect to everything one believes" (Harman, 1973: 159), not just to a few selected premises.

"According to the coherence theory, the assessment of a challenged belief is always holistic.

Whether such a belief is justified depends on how well it fits together with everything else one believes" (Harman, 1986: 32, 33).

Another main feature of Harman's account of justification is that a belief once accepted remains justified irrespective of our ability to provide or demand justification. One is entitled to maintain any particular belief that one has unless there are reasons to reject that belief. For "it is unclear when we are justified in believing something. We can know something without being able to produce a justification for it. For sometimes knowledge is not based on any reasons as all, as when one knows that one has a headache; and even when knowledge is based on reason, one may not be able to produce those reasons in any detail." (Harman, 1973: 115). We cannot always justify a belief because "there is a practical reason to avoid too much clutter in one's beliefs. There is a limit to what one can remember." (Harman, 1986: 41). Consequently "it is enough to recall the most important of one's conclusions. This means one should not be disposed to try to keep track of the local justification of one's beliefs." (Harman, 1986: 42). As a result "we are justified in continuing to believe something unless we have a special reason to change our minds." (Harman, 1973: 22).

Harman thus grants the generation/justification distinction, holding that the justification of a belief does not depend on its origin, but rather on the place it currently holds in one's belief system. "When a person first comes to believe something, why he believes it appears to be a function of how he comes to believe it ... But [this] is not in general true ... When the reasons why one believes something change, the reasons for which one believes as one does also change. In that case, the explanation of why one believes as one does has changed and is no longer simply a matter of how one came to believe as one does. (Harman, 1973: 30). Thus "reasons for believing something must not be confused with reasons for which one believes. Reasons for which one believes are relevant to whether one is justified in believing as one does. Reasons for believing something are not relevant unless they are also reasons for which one believes" (Harman, 1973: 26). In other words, "the reasons that give one knowledge need not be reasons for which one believes as one does." (Harman, 1973: 115).

Examples of this process of belief evaluation are judgements of perception and memory which are both justified, at the time of acceptance, by inference. Perceptual "knowledge is based on inference ... your belief must be a reasonable one, and it is reasonable only if it is part of a reasonable conclusion, given your background beliefs along with information about how things look to you" (Harman, 1973: 173). Thus Harman reaches "the conclusion that direct perceptual knowledge involves inference" (Harman, 1973: 176). A similar conclusion is reached regarding memory. "Knowledge of the past is based on reasoning concerning the best explanation of present memories. The best explanation of its seeming to you that certain things occurred in the past is that they did occur and you remember them" (Harman, 1973: 189).

## B. Rational Acceptability

Like the other coherency theorists so far examined, Harman's theory exhibits the characteristics necessary for a theory of rational acceptability. His theory is goal directed.

"Reasoning is a mental process. Since mental states and processes are functionally defined, to say what reasoning is is to say how it functions psychologically" (Harman, 1973: 46). And "to understand a type of mental state or process is to see what function such states or pagesesses can have in a person's 'program". For reasoning, an important function is its role in giving him knowledge" (Harman, 1973: 53). Reasoning aims "to increase the coherence of our total view" (Harman, 1973: vii) and to thereby aquire knowledge. As "knowledge is acquired by inference that does not essentially involve anything false" (Harman, 1973: vii), it aims for truth. Rational acceptability thus has as its goal increasing the coherence of belief systems in ways that provide true beliefs.

His theory is also one of subjective justification. Beliefs are evaluated with respect to a person's internal belief system. Those beliefs which can be made to cohere with that system while causing a minimum of change to the system are accepted.

Since Harman claims that a person need not be able to provide justificatory reasons for any given belief, but is still entitled to hold that belief, it might be objected that his

account lacks the requisite reflective quality for rational acceptability. However, his only claim is that a belief need not be justified in order to sustain it. It should be rejected only if this lack of sustaining reasons is countered by an argument for the belief's rejection. But in order to accept a belief previously not part of one's belief set, an argument in favor of the belief's acceptance must be reflectively advanced. "That a man accepts certain premises does not determine that he will accept the conclusions" (Harman, 1973; 32). Such acceptance involves the psychological process of reasoning. "To specify a man's reasons is always to specify reasoning that leads to his conclusions. It is never enough simply to specify premises from which the conclusions may be inferred. We must also indicate how the conclusion is obtained from these premises" (Harman, 1973; 30).

The major components of Harman's theory are coherence and conservativism. The theory's pragmatic characteristics are illustrated by the conservative component. There are pragmatic limitations on our mental processes, and this causes us to be conservative in belief revision. Rational acceptability, then, is a practical matter. "Reasoning is subject to constraints of feasibility and practicality. So the principles of reasoning are principles for revising all-or-nothing yes/no beliefs and plans; it is far too complicated to try to operate generally with degrees of belief or probabilities" (Harman, 1986: 115).

Harman seperates reasoning "into distinct segments of practical and theoretical reasoning" (Harman, 1986; 1). What has been considered up to this point is theoretical reasoning. Practical reasoning includes other factors, and involves choice of action rather than choice of belief. "In practical reasoning we begin with a set of beliefs and grisls and end with a new set, where we try to maximize coherence and minimize change. In this case coherence is not just a matter of explanators coherence in our beliefs but also involves coherence in our plans." (Harman, 1973–168). The rational acceptance of a belief is acceptance into a view of the world which involves both types of coherence. "A person's beliefs form his representation of the world, his desires represent his ends, goals, plant, and intentions. Perception yields new information about the world, natural needs for food, water, sleep, etc. put constraints on goals and intentions. Theoretical reasoning is a processe that

functions to improve his representation of the way things are. Practical reasoning is a way of modifying plans and intentions, in the light of the way things are represented to be, so as to insure the chances of success at reaching goals and ends" (Harman, 1973: 45).

Rational acceptability is a psychological process. What Harman calls the "Interest Condition on theoretical reasoning" says that "one is to add a new proposition P to one's beliefs only if one is interested in whether P is true (and it is otherwise reasonable for one to believe P)" (Harman, 1986: 55). And "one can have a reason to be interested in whether a belief is true if that might facilitate practical or theoretical reasoning in which one is (or has a reason to be) interested" (Harman, 1986: 63).

Thus there are no independent standards by which to judge reasoning. For "the test of good inference is not whether it corresponds with rules that have been discovered a priori" (Harman, 1973: 18). Reasoning must be judged by its own standards. Consequently Harman "den[ies] that there is any way to discover ... irrationality except by way of intuitive judgements about when people come to know things" (Harman, 1973: 116, 117).

## C. Justification

Harman does not attempt to establish the truth connection for his theory. This is to a large extent a consequence of the approach he takes to epistemology. Most theorists attempt to formulate an ideal theory of knowledge which will be water-tight against the attack of the skeptic. While Harman explicitly rejects foundation theories on this account, he would also reject many coherency theories. This is probably why he claims to not understand what most epistemologists speak of when they talk about justification. Harman does not begin with an intuitively ideal account of what knowledge should be, and work out justification conditions with respect to that account. Rather, he holds to the psychologistic approach and bases his theory on what, in practice, human knowers actually do. This suggests a distinction in epistemology similar to that in metaphysics drawn by P. F. Strawson between "descriptive metaphysics", which "is content to describe the actual structure of our thought about the world", and "revisionary metaphysics" which is "concerned to produce a better structure"

(Strawson, 1964: 9). Harman might be considered to have produced an account of "descriptive epistemology" rather than "revisionary epistemology". And, as a description of how we do know, and how we do justify our beliefs, it does not require the postulation of a truth connection; it is, by itself, either an accurate or an inaccurate description.

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While Harman's project is thus complete, it might be stressed that his terminology should be retained — he has produced an account of belief revision rather than one of objective justification. The absence, intentional or not, of any indication of how this account achieves its epistemic goal disqualifies it for contention as anything but a theory of rational acceptability. This approach of Harman's is open to the objection that our practice might sustain itself with no connection to the way the world is. Harman, however, would dismiss such an objection as a skeptical position against which, as noted earlier, he is not interested in fighting. He is interested in how the mind works, and according to the principles of coherence and conservation that describe the way the mind works, there are no reasons to entertain such objections.

### D. Coherence

Harman states that "coherence in a view consists in connections of intelligibility among the elements of the view. Among other things these include explanators connections, which hold when part of one's view makes it intelligible to one why some other part should be true. In such a case one believes not only P, Q and R but also R because P and Q\* (Harman, 1986: 65). Coherence, then, involves explanation. "Explanatory coherence is an important sort of coherence, perhaps the only sort. It allows one to infer something that best explains the evidence and also something that will be best explained by things one already believes." (Harman, 1986: 75). Harman "use(s) the term "explanation"—to refer to something one understands that makes one's view more coherent and intelligible—to refer to explanations.

illt is Harman's choice of subject matter rather than his descriptive approach which prevents him from providing a theory of justification. Harman is interested conly in thought, and not in how we interact with our environment. Given this latter subject matter, there is nothing in the descriptive approach to preclude an account of justification. In fact, such an account is given by Afrin Goldman (Goldman 1966)

of why or how it is that something is the case" (Harman, 1986: 67). There are different types of explanation. "Explanations can be deductive or nondeductive. They can be statistical ... Nondeductive explanations can be statistical or nondeterministic and nonstatistical as in linguistics or in commonsense psychology" (Harman, 1986: 75). But no matter what the type of explanation, the goal is the same — to account for the evidence. "'Inference to the best explanation' occurs when one infers something that might explain the evidence. One starts by believing e and comes to believe e because h" (Harman, 1986: 67).

Coherence is the major criterion for belief evaluation. In order for a belief to be accepted, it must either help explain or be explained by the beliefs in a person's belief system. Providing such explanation increases the coherence of the belief system, and this gives sufficient reason for accepting the belief into the system. The only other criterion is the Principle of Conservatism, which is not a criterion so much as a statement of the practical limitations of the mind.

Coherence is also a characteristic of rational acceptability. The rational acceptance of a belief involves a psychological reasoning process. As coherence involves explanation, and explanation involves reasoning, rational acceptability and coherence are inseparable concepts. Furthur indication that Harman considers coherence constituitive of rational acceptability itself is given by his views on logical implication. He notes that "implication and explanation are both coherence giving. Both immediate implication and immediate explanation are 'immediately intelligible'"(Harman, 1986: 72). This leads him to feel that implication might itself be a form of explanation. It may not be that "the relevance to reasoning of implication is ... a special case of the relevance of explanatory coherence, but ... this may be so" (Harman, 1986: 75). In any case, "coherence is reflected in one's disposition to avoid inconsistency and a tendancy to promote explanatory and implicational connections among one's beliefs. (Perhaps the relevant implications are explanatory, so that all coherence is explanatory)" (Harman, 1986: 116).

Although explanatory coherence involves relations between propositions, logic is not a criterion for belief acceptance except in certain cases of immediate implication. And those

cases might even be subsumed by explanation. In any case, logic is primarily concerned with matters other than belief revision. "We have been concerned with the principles of reasoning, where reasoning is conceived as reasoned revision. Reasoning in this sense must not be confused with proof or argument and the theory of reasoning must not be confused with logic. Psychological relations of immediate implication and immediate inconsistency are important in reasoning, but this is not to say that logical implication and logical inconsistency are of any special relevance" (Harman, 1986: 115). Hence, "I suggest it is enough to be able to make reasoned changes in one's view in a way that is sensitive to implication and inconsistency" (Harman, 1986: 18).

Harman, like Lehrer, makes no metaphysical assumptions. But, unlike Lehrer, he does not claim anything like objective justification. Harman's account is strictly a theory of rational acceptability. He is interested only in describing the workings of the mind, and is not interested in what the exact connection is between the world and a belief system. This does not mean that he is an idealist — on the contrary, he claims that it makes sense for us to accept that what we belief about reality is in fact so. To worry about how the connection is made would be to attempt to answer the skeptic, and since there is no good reason to extertain the skeptic's position, there is no need to worry about that connection. Harman does not attempt to provide a theory of objective justification, and thus does not supply a complete account of belief evaluation. He is not, however, bothered by this — unlike Lehrer, the omission is deliberate.

#### IX. Conclusion

## A. Coherency Theories and Rational Acceptability

Each of the coherency theories examined has been found to provide an adequate theory of rational acceptability. No further attempt has been made to determine how good each theory is, or which one (if any) should be the accepted theory of rational acceptability. All that has been asked is whether or not a theory has the essential ingredients necessary for a theory of rational acceptability, and each of the examined theories exhibit the requisite properties — they supply subjective justification, call for the necessary reflection, are pragmatic in that they relate to the here and now acceptance of a belief, and have as their aim the achievement of the epistemic goal of truth.

Coherency theories of belief evaluation are by their very nature well equipped for such a task. As the forum of evaluation is the belief system of an individual, the resultant justification must be subjective. Since the principle (if not the only) criterion of evaluation is coherence, the individual must have a reflective awareness of part if not all of his belief system at any given time in order to establish the effect on that system's coherence of the belief of which he is sitting in judgement. Finally, because the belief system is that of an

<sup>12</sup>It might be claimed that the coherency approach offers nothing that other approaches to belief evaluation do not, as everyone would agree that acceptance of a belief depends on its coherence with other beliefs which one takes to be directly related to it in a belief system. But this is not necessarily so. Negative coherency theories, for example, do not require the coherence of a belief with other beliefs, rather, "a negative coherence theory tells us that we are automatically justified in holding any belief we do hold unless we have some positive reason for thinking we should not hold it" (Pollock, 1986:83). One could also hold a foundationalist theory which maintains that a belief is rationally acceptable if it is a certain type of belief - for example, a perceptual belief. Another type of theory might hold that beliefs are rationally acceptable nct only with respect to their relationships with other beliefs, but also with respect to certain internal states — "those states that are directly accessible to the mechanisms in our central nervous systems that direct our reasoning" (Pollock, 1986: 134). One might even hold with Chisholm that while coherence (or, as he calls it, "concurrence") with other beliefs can increase the credibility of an already credible belief, it cannot establish that initial credibility (Chisholm, 1966: 54). However, the major difference between the coherency approach and other approaches to belief evaluation is the coherentists' claim that the ultimate justification for our beliefs is provided by the overall coherence of our belief systems. Coherence provides not only a criterion for rational acceptability, but also allows the truth connection necessary for objective justification.

individual, evaluation does not appeal to external factors, nor to the ideal case, and there is no need to postpone evaluation past the point where the individual has had time to sufficiently reflect on the new belief and its effect on the coherence of his belief system. It is thus pragmatic.

## B. Coherency Theories and Justification

With respect to objective justification, there are three options which have been chosen by the examined coherency theories. The first option is to establish the truth connection with respect to the real world. The second option is to establish this truth connection on a non-realist basis, and the third option is to not establish it at all.

The first option is chosen by Sellars, Rescher, and Bonjour. They find the truth convection to be in some relationship with the real world. They each have a different approach, but the end results are similar. Sellars sees the truth connection residing in the cognitive maps which enable us to get around in the world. He launches a practical appeal to effective agency, an appeal which was found successful only if based on certain metaphysical assumptions. Rescher and Bonjour see a more direct truth connection — what we know is the way the world is. Rescher's approach is much the same as Sellars', except that he grounds his practical appeal in the affective and emotional, a domain which would be rejected by most as unsuitable to serve as the final court of epistemic arbitration. He does make a separate theoretical demonstration of the truth connection, but this demonstration is conducted under metaphysical assumptions. Bonjour also makes a theoretical defence of the pragmatic appeal to effective agency. He relies on an a priori argument, an argument which was ultimately found to depend on the metaphysical assumptions underlying the Observation Requirement.

The second option is chosen by Hilary Putnam. He attempts to establish an objective truth connection which is nonrealist in nature, with truth as ideal rational acceptability. This truth connection is objective insofar as it is intersubjective. What is rationally acceptable (and ultimately true) is not so just for me but for the entire community of knowers. This approach depends on assumptions about the coherence of this world of human knowers, in

particular, that they hold certain epistemic values in common about what constitutes inquiry, belief, and rationality.

The third option is taken by Lehrer and Harman, who do not attempt to establish an objective truth connection. Lehrer explicitly claims that the truth connection exists, but he places its final arbitration in the subjective confines of the individual knower where, as he freely admits, it is subject to constant change. Harman simply assumes that the truth connection exists — we have an epistemic practice that works, and all he is interested in is investigating this practice. To question this truth connection is to indulge in the skeptical argumentation which he rejects.

The coherency theories which attempted to establish the truth connection succeed only under the auspices of certain metaphysical assumptions. If these assumptions are not granted, the accounts fail. Failure as a theory of objective justification is in each case failure to escape from the subjective bounds of a coherent system and so find the requisite objectivity. As coherency theories place the locus of justification within a belief system, not in relation to the world, such failure is not surprising. Those qualities which make them good theories of rational acceptability are the same ones which account for their failure to provide objective justification without making metaphysical assumptions.

#### C. Role of Coherence

All the examined theories use coherence as a criterion of belief evaluation. This in itself is unsurprising, as failure to do so would mean that the theory was not actually a coherency theory. However, it was found that other criteria which might be proposed for rational acceptability were in fact either components of, or based on, coherence. Acceptance of a belief in any of these theories ultimately depends on coherence — if the belief coheres with the system (in the manner in which coherence is to occur according to the theory), then the belief is accepted. Lack of coherence cannot be compensated for by any other criterion, nor can the absence of any other criterion defeat the proposition if it adequately coheres.

The second role of coherence in these theories is that of a characteristic of rational acceptability. It is more than just an independent test of rational acceptability — it describes, at least in part, what rational acceptability is. In fact, it might be argued that coherence is coexistent with rational acceptability for the coherency theorists. Rational acceptability involves an intuitive awareness of what is acceptable, which is to a large part awareness of coherence.

The third role coherence plays is that of a metaphysical assumption. The coherency theories which attempt to determine an objective truth connection were all found to operate under similar metaphysical assumptions. First, they assume an objective world (either an objective external world or, in Putnam's case, an objective world of knowers) with which the individual knower can interact. Second, they assume that this world is such that an individual can come to know it, and to have this knowledge reflected in a coherent belief system. If the world cannot be so reflected, then these theorists cannot claim to have theories of objective justification. The metaphysical stance of coherence is necessary to make the truth connection. This does not imply that they hold coherence theories of truth, rather, it means that they maintain particular stances about the way things actually are.

## D. Coherency Theories of Belief Evaluation

Earlier in this thesis two intuitions regarding belief evaluation were delineated. On the one hand, a belief is legitimate if there exists sufficient evidence to support it, where the determination of sufficient evidence is made with respect to that which the belief is about. This is the intuition that underlies the call for objective justification. On the other hand, if the determination of legitimacy is not made by the holder of the belief, then that individual cannot be justified in holding that belief, even if the belief is in objective fact justified. This is the intuition that gives rise to the concept of rational acceptability. As an individual might accept a belief based on reasons which do not in fact obtain, rational acceptability is not of itself sufficient to serve as a theory of belief evaluation. A complete theory of belief

evaluation must be both a theory of rational acceptability and a theory of objective

justification. It must satisfy both the intuition which asks how individuals do justify their beliefs, and the intuition which asks how beliefs are justified in objective fact.

Coherency theories of belief evaluation do offer adequate theories of rational acceptability. Some of them do not attempt to provide theories of objective justification, and these fall short of providing complete theories of belief evaluation. Those that do provide theories of objective justification do so only with the addition of certain metaphysical assumptions. Rejection of these assumptions would imply failure of the coherency approach to provide a complete theory of belief evaluation. But before rendering this verdict final, it should be asked if there are other avenues open to the coherency approach which could yet yield theories of objective justification. The reliance of this approach on these metaphysical assumptions results from locating the arena of belief evaluation in the subjective confines of an individual's belief system. Success as a theory of objective justification would involve extending beyond these confines, and thus attaining objectivity.

## E. Subjective/Objective Tie

The problem, then, is that of attaining objectivity from the subjective standpoint of the coherency theories. First of all, an objection must be answered concerning the possibility of such an attempt. A theory of objective justification will set out the criteria by which beliefs are objectively justified. These criteria are determined by subjective human cognitive processes. That is, these criteria are determined by the same processes which they are then used to judge. Is there not a circularity involved when the criteria which evaluate a process are determined by that very process?

This problem is not unique to standards of objectivity. As Alvin Goldman notes, "truth-linked standards may seem useless, because of circularity or vacuousness. To decide whether such a standard is satisfied, we have to employ our present beliefs about the truth.

... But the same point holds for any standard, truth-linked or not" (Goldman, 1986: 3). In general terms, standards for cognitive processes must be established by these same cognitive processes. The argument is that these standards are illegitimate as they are established by

those same processes which they judge.

This objection is easily answered once it is noted that the circularity involved is not vicious. To adopt Van Cleve's definition, an argument is viciously circular only if "a necessary condition of using it to gain knowledge of (or justified belief in) its conclusion is that one already have knowledge of (or justified belief in) its conclusion" (Van Cleve, 1984: 558). A cognitive process need not assume, or have knowledge of, those standards under which it in fact operates in order to determine what they are. The critical consideration is whether the process was used to set the standards under which it would run, or to determine the standards under which it did in fact run. If the latter, then charges of circularity can be dismissed. For example, consider the cognitive process that enables a person to differentiate between the calls of two similar sounding birds. While the person is at first unable to tell the difference between the calls, he becomes able to make the distinction with practice. If he wonders how he does it, he may analyze the different nuances and qualities of the bird calls, determining the variations in them which tell him that he is listening to one bird rather than another. These are the standards under which the cognitive process of sound differentiation operate. These standards were determined by the application of the process itself. However, knowledge of these standards was not necessary in order for the process to operate. In fact, the person might be quite happy to simply apply the process, and identify various birds by their calls, without ever knowing the standards under which the process operates. According to Van Cleve's definition, then, these standards were not obtained by circular means.

With this objection out of the way, return can be made to the problem of attaining the objective from the subjective. Thomas Nagel states that objectivity rests on the "idea that there is a real world in which we are contained, and that appearances result from our interaction with the rest of it. We cannot accept those appearances uncritically, but must try to understand what our own constitution contributes to them. To do this we try to develop an idea of the world with ourselves in it, an account of both ourselves and the world that includes an explanation of why it initially appears to us as it does" (Nagel, 1986: 68). The problem is to link the internal, subjective perspective of rational acceptability with the

external, objective perspective of justification. "If one could say how the internal and external standpoints are related, how each of them can be developed and modified in order to take the other into acount, and how in conjunction they are to govern the thought and action of each person, it would amount to a world view" (Nagel, 1986: 3).

This move toward the objective has been attempted by Sellars, Bonjour, and Rescher. They first set up a self enclosed, subjective system, and then try to break out of it to the objective. Better success might be gained from a more transitional approach, one which leads gradually from the subjective to the objective, and does not treat them as two completely different domains where boundries must be crossed with one giant leap. This sort of approach is taken by Nagel. He attempts to desubjectivise the subjective perspective, and in this way reach toward the objective. "The thing we can do which comes closest to getting outside of ourselves is to form a detached idea of the world that includes us, and includes our possession of that conception as part of what it enables us to understand about ourselves. We are then outside ourselves in the sense that we appear inside a conception of the world that we ourselves possess, but that is not tied to our particular point of view. The pursuit of this goal is the essential task of the objective self" (Nagel, 1986: 69, 70).

This task cannot be achieved all at once, but must be attempted in stages. "To aquire a move objective understanding of some aspect of life or the world, we step back from our initial view of it and form a new conception which has that view and its relation to the world as its object. ... The process can be repeated, yielding a still more objective conception" (Nagel, 1986: 4). An example of this process occurs during a child's development. A young baby is unable to differentiate himself from his environment — his subjective world and objective world are the same. As he gets older, he takes the first step towards objectivity, learning to see his mother, his bottle, and his toys as distinct from himself. He now has an objective world, separate from his subjective world. A further step towards objectivity occurs when the child learns that other people have legitimate needs and desires, and that he is not the center of the universe. He has placed his first version of an objective world within a still more objective one.

Nagel himself admits that no matter how much success is found by this approach, objectivity still proves elusive. "We can t get outside of ourselves completely. Whatever we do, we remain subparts of the world with limited access to the real nature of the rest of it and of ourselves. There is no way of telling how much of reality lies beyond the reach of present or future objectivity, or any other conceivable form of human understanding" (Nagel, 1986: 6). Hence, "however often we may try to step outside of ourselves, something will have to stay behind the lens, something in us will determine the resulting picture, and this will give grounds for doubt that we are really getting any closer to reality. The idea of objectivity thus seems to undermine itself" (Nagel, 1986: 68). Nagel's desubjectivising approach may meet with some success, but by his own admission such success will always be limited.

Although Nagel's program does not result in objectivity, it does allow one to examine from a broader perspective that which previously formed the entire perspective. In other words, one can "desubjectivise" the earlier perspective and view it from another perspective which, to that earlier perspective, seems objective. But, as Nagel finds, that objectivity is only relative. No matter how far the individual proceeds in the process of desubjectivisation, he can never get beyond his own circle of beliefs.

This process of desubjectivisation is in fact what Sellars, Bonjour, Rescher, and Putnam accomplish with their theories of objective justification. These theories desubjectivise the perspective from which one justifies beliefs, yielding a better understanding of what transpires in the process of belief justification by observing and analyzing that process from a broader perspective. That broader perspective, however, is still within the subjective confines of an individual's belief system.

It might be argued that desubjectivization allows Putnam, who is a nonrealist, to obtain objectivity in the sense that he defines it. Putnam, however, views objective truth as ideal rational acceptability within the community of knowers. Objectivity, even in these terms, still involves that beyond an individual's circle of beliefs.

Both Nagel and the coherentists attempt to move from the subjective to the objective, and meet with limited success. Another approach might be to attempt to determine an

objective perspective, and then move toward the subjective. This approach does not naturally suit the coherency theories, as they begin with the subjective. However, it might be possible to set out a theory of objective justification which can then be linked to a coherency account of rational acceptability.

One such theory of objective justification is given by Alvin Goldman. He states that such a theory consists of having "standards that specify, in general, when an evaluative epistemic term does apply, whether or not it provides a way of telling that it applies" (Goldman, 1986: 24). This results in "a nonregulative system of evaluation ... [which] formulates principles for appraising a performance or trait, or assigning a normative status, but without providing instructions for the agent to follow or apply. They are only principles for an appraiser to utilize in judging" (Goldman, 1986: 25). His particular theory of objective justification utilizes the standard of reliability. According to this standard, "an object (a process, method, system, or what have you) is reliable if and only if (1) it is a sort of thing that tends to produce beliefs, and (2) the proportion of true beliefs among the beliefs it produces meets some threshold, or criterion value. Reliability, then, consists in a tendancy to produce a high truth ratio of beliefs" (Goldman, 1986: 26). He concludes that "the attainment of both knowledge and justified belief depends critically on the use of sufficiently reliable cognitive processes" (Goldman, 1986: 39). Beliefs produced by a reliable process are objectively justified.

At first glance, this theory seems to provide a complete objective perspective. On closer inspection, however, it can be seen to depend on certain metaphysical assumptions, the absence of which would make it incomplete. To argue that the success of a process implies that its results are justified, and thus truth conducive, involves certain assumptions about the way the world is. The world must be so structured that the results of these cognitive processes which are judged successful do indeed mirror it. This is a similar situation to that of those coherency theorists who attempted objective justification. While all theories of objective justification can't be judged on the basis of this one theory of Goldman's, it does

show that beginning from an objective perspective does not necessarily solve the problem of

completeness.

# F. Possibility of Objectivity

The attempts so far examined to make a subjective/objective tie have either failed or been incomplete, relying on metaphysical assumptions. Is this a failure of just these particular attempts, or might there be a problem with the entire project? There are indications that the latter is the case — that an approach which is subjectively based must be incomplete with respect to the objective.

Consider again the process used to determine criteria for justification. It was found earlier that even though those criteria were determined by the same process that they were later used to evaluate, this did not create an objectionable circularity. There is, however, another problem with this approach. Determination of the standards for a process is only as good as the cognitive process is. If the process is sound, the determined standards are accurate. If the process is faulty, these standards may not be accurate. Judgement of the quality of the process is an objective judgement, and this gives rise to a new problem—whether subjective cognitive processes can be used to determine objective standards. That is, can such a process be used to determine standards for that which is defined with respect to something other than itself? A process can determine itself to be good whether or not it is in fact good or bad. The problem here isn't circularity, but that of being subjectively bounded. In epistemological terms, the problem is not that of knowing the epistemic standards by which other propositions are judged, but of being able to objectively justify these standards.

This problem can be better stated with reference to a distinction which William Alston and James Van Cleve make between "being justified" and "providing justification". Alston distinguishes "between the activity of justifying a belief that p by producing some argument for p, and the state of being justified in believing that p" (Alston, 1986a: 16). He claims that we can be justified in believing that p without being able to justify p. Van Cleve phrases epistemic principles in the form "'If ... then P is justified for S'", and claims that "the obtaining of whatever condition is specified in its antecedent is sufficient for P's being

justified for S" (Van Cleve, 1979: 77). In other words, "we can say in general that a subject need not know that an epistemic principle is true in order for the circumstances in its antecedent to give him knowledge" (Van Cleve, 1979: 77).

The problem, then, is that while a process can determine its own standards, and then continue under these standards with full knowledge of them, a process aiming at objectivity can only reach conclusions which are objectively justified at the expense of being unable to provide complete justification for them. In Alston's words, "in the enterprise of seeking to answer critical questions whenever they arise one is driven to convert that practical acceptance into theoretical justification. And that is where we run into logical circularity. All is well so long as we rely on justification that obtains in fact and do not insist on demonstrating it" (Alston, 1986a: 24).

What are the consequences of this problem? First of all, there is no implication that objective justification is not possible. This problem can be phrased in the terminology used earlier on to distinguish various senses of objective and subjective justification. According to the Fully Subjective sense of justification, S is justified in believing that p if and only if S finds it likely that p based on the what he believes the evidence to be. S is both in possession of this evidence and has made the calculation of likelihood. Justification becomes objective when the evidence constitutes actual facts, and the calculation of p's likelihood based on this evidence is in fact accurate. Different senses of objective justification can then be distinguished by the extent to which the evidence is extended beyond that in the individual's possession. While the individual might not be able to make this calculation, or extend his evidence and thereby justify a belief, this belief might still be justified from an objective perspective.

Alston claims that the major consequence is that we can never achieve what he refers to as fully reflective justification (FRJ). "The quest of FRJ is undertaken when we ignore, or lose interest in, merely being justified. To demand FRJ is to demand that any premise we use in justifying a belief itself be justified by argument. Hence it is not at all surprising that

an enterprise that depends on ignoring our basic distinction should be scuttled by epistemic

circularity" (Alston, 1986a: 24). This does not mean that we cannot justify any given belief.

"It is only the total explicit rationalization of belief that is ruled out. It is the finishing of the job once and for all that is beyond our powers. This does not imply that we cannot make fully explicit what justifies a particular belief. For any belief we are justified in holding it is possible, in principle, to show that we are justified" (Alston, 1986a: 28). We can justify any belief we choose using other justifying beliefs, but we cannot continue and justify these justifying beliefs, and their justifiers, and so on. To be able to do so would be to attain FRI, and this, says Alston, is impossible.

It might be argued that this point has serious implications for rational acceptability, as rational acceptability requires at least the possibility of reflecting on the justification process. But all that is required for rational acceptability is subjective justification. What is denied by Alston is fully reflective justification in relation to objective justification.

The upshot of this is that the move toward full objective justification, which is made by both coherentists and noncoherentists, is problematic. Objective justification is possible, but only in a limited form. This limitation is caused by our subjective perspective. While we can be justified in holding beliefs, we can't always justify them.

Where, then, does this leave the overall project of belief evaluation? Alston claims that there is really no problem — that the move toward objective justification does not need to be made in the first place, as having justified beliefs does not require having objective justification for them. While he admits that "if I am to carry out the activity of justifying a belief I must provide an argument for it; I must say something as to why one should suppose it to be true" (Alston, 1986b: 190), there is still no need to actively justify every belief we have. This incompleteness only has to do "with the activity of justifying a belief, showing it to be justified. From the fact that I can justify a belief only be relating it to other beliefs that constitute a support, it does not follow that a belief can be justified only by its relation to other beliefs" (Alston, 1986b: 190). In other words, "one might be justified in a belief by something other than one's other beliefs" (Alston, 1986b: 191).

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This response of Alston's is not completely satisfactory. It partially satisfies one of the intuitions that motivates theories of belief evaluation, namely, the intuition that beliefs should be based on the existent evidence. Alston does show that beliefs might be objectively justified even though it is not possible to justify them. But while Alston considers this result to be unproblematic, it does not satisfy the second intuition of belief evaluation — namely, that it must be possible for the holder of a belief to justify that belief. Alston's claim that a person's belief might be justified "by something other than one's other beliefs" is a form of externalism. Lawrence Bonjour shows the inadequacy of externalism to satisfy this second intuition when he states "that for a belief to be justified for a particular person it is necessary not only that there be true premises or reasons somehow available in the situation that could in principle provide a basis for a justification, but also that the believer in question know or at least justifiably believe some such set of premises or reasons and thus be himself in a position to offer the corresponding justification. The externalist position seems to amount to merely waiving this general requirement in a certain class of cases ... Thus externalism looks like a purely ad hoc solution to the epistemic regress problem" (Bonjour, 1985: 43).

It appears, then, that there is a serious problem with the attempt to achieve an overall theory of belief evaluation incorporating both objective justification and rational acceptability. Although coherency theories provide adequate theories of rational acceptability, attempts to obtain complete accounts of objective justification from their subjective perspectives have failed. This problem is not unique to the particular attempts examined, but is a problem with the whole approach. While objective justification might exist for a belief, that justification will always remain to some extent unavailable to the subjective perspective of the believer.

It might seem that this also presents a problem for subjective justification, and that, as a result, we can never attain fully reflective rational acceptability. However, a theory of rational acceptability attempts to show when a belief can be legitimately held. Determination

Descartes, for example, held that a belief could not be justified until all doubt about it was removed, and that this removal required full cognizance of that which provided its justification.

of legitimacy is made within the subjective confines of an individual's belief system. The reasons why a given belief was accepted (including the local subjective justification for the belief) can be fully reflected on within this system. It is only when the attempt is made to do more than give reasons for the acceptance of a given belief, and to go beyond the subjective confines of a belief system and make the truth connection for all beliefs in the system that the problem of fully reflective justification arises. The pragmatic constraints of rational acceptability ensure that this latter enterprise is not required for the rational acceptability of individual beliefs.

It seems that the intuition which asks for objective justification must remain unsatisfied. This does not mean, however, that the intuition is ill-founded. As Alston has shown, just because we cannot objectively justify a belief from our perspective does not mean that the belief cannot be justified from an objective perspective. There is nothing to rule out a belief's being completely objectively justified, even though we can never give it complete objective justification. The problem is that we cannot attain an objective perspective. Thus, while the intuition which asks for objective justification is not ill-founded, neither does it seem possible to completely satisfy it.

### G. Conclusion

Some of the coherentists, however, did attempt to develop theories of objective justification that were not incomplete. Although they did this at the expense of of making metaphysical assumptions, the failure of approaches which don't make these assumptions makes it worthwhile to reexamine this position. Do these assumptions destroy the completeness of a theory of belief evaluation? Not necessarily, as long as it is recognized that any conclusions reached on the basis of this theory (i.e. any propositions justified by its

it will always face the problems of incomplete evidence and the possibility of human error. Rather, the problem is whether or not objective justification is even possible. We might never be able to provide objective justification for our beliefs simply because that which justified these beliefs lies outside our belief systems, and, as we are subjectively bounded, we can never get beyond these systems.

standards) were reached under these assumptions. Due to the incompleteness of any objective perspective we postulate without metaphysical assumptions, these assumptions cannot be discharged at some future time. A completely objective perspective can be set out only from an objective viewpoint. As subjective creatures, we are not privy to such a viewpoint, and can only reach an incomplete objectivity. It might be argued that even though we do not have a "God's-eye" view, we can still be objective, albeit from our limited perspective. But to know this requires a perspective larger than our own. To operate as if we know it requires that we operate under certain metaphysical assumptions, namely, that there is an objective world with which the individual knower can interact, and that this world is such that the individual can come to know it. These assumptions can be stated together as: the world is such that it can be mirrored by the results of our conceptual processes.

This assumption has two major consequences for the coherentists. First, it implies that the world actually is a certain way. Second, it implies that the criterion of coherence which is used for belief evaluation is actually truth conducive.

First of all, what does this assumption imply about the nature of the world? According to the coherentists, the conceptual processes that are used to gain knowledge of the world result in coherent belief systems. In order to be reflected in these systems, the objects in the world must constitute facts that are in genuine nomological relations to each other, and these relations must sufficiently connect the facts so that belief systems which maintain coherence as their principle organizational characteristic can reflect these facts and relations. This does not mean that the most likely world is the most interconnected world, it simply means that the world must be connected in such a way that it can be reflected in coherent belief systems.

What if, contrary to this assumption, the world was not so constructed? We might still formulate beliefs about the world, but any reflection of the world in our belief systems would be accidental. It might be that we could still function as agents in such a world, and that by the accidents of evolution our belief systems would direct our actions in such a way that we could survive. However, these belief systems might only allow us to pursue that

necessary for and avoid that detrimental to survival without reflecting the real nature of what we are pursuing or avoiding or, for that matter, anything else about how the world really is.

Secondly, the metaphysical assumption implies that coherence is a truth conducive criterion for belief evaluation. This assumption states that the world is such that it can be reflected by the results of our conceptual processes. As these conceptual processes rely on coherence as the primary criterion of belief acceptance, coherence must be a truth conducive criterion. This does not imply, however, that we should consider the most interconnected belief system we can come up with to be that which evidences the most truth. This system would not necessarily reflect the real world for, as noted above, the metaphysical assumption does not claim that the real world is maximally connected — it simply claims that the world is sufficiently connected to be reflected in coherent belief systems. What the metaphysical assumption does imply is that the most coherent system which accounts for the facts is the most likely to be true. A maximally connected belief system might claim connections which are not borne out by the facts. This would decrease rather than increase that system's coherence.

For example, a belief system might claim connections between ethics and physics. It might hold that every human action is either predetermined (caused by some sequence of physical events) or arbitrary (a random physical event). The facts, however, might be better explained by postulating the will of the individual as the cause for his moral actions, and this will might not yield to physical definition. A belief system which accounts for the facts might then gain in coherence by refraining to make connections between the domains of ethics and physics, as these connections create problems which detract from the overall coherence of the belief system. These connections should, of course, be made if they add to the system's overall coherence — in this example, it the will can indeed be physically defined.

However, given two systems which equally account for the facts, the most coherent should be chosen. This is how our conceptual processes work, and as the metaphysical assumption states that the world can be reflected in that produced by these processes, it is reasonable to follow them.

Four senses of justification spanning the range from the subjective to the objective were set out earlier. They were:

Completely Objective: S is justified in believing that p if and only if p is true.

Fully Objective: S is justified in believing that p if and only if it is likely that p based on the available evidence.

<u>Personally Objective</u>: S is justified in believing that p if and only if it is likely that p based on the evidence in his possession.

<u>Fully Subjective</u>: S is justified in believing that p if and only if S finds it likely that p based on what he believes the evidence to be.

A fifth sense of justification can now be set out which acknowledges the role of the metaphysical assumptions required by the coherentists.

<u>Limited Objective</u>: S is justified in believing that p if and only if: i) S is subjectively justified in believing that p, and ii) the world is such that it can be mirrored by the results of our conceptual processes.

As this sense of justification embodies the Fully Subjective, it allows for errors in the cognitive processes used to calculate p's likelihood. It also allows for evidence gaps — for the possibility that S does not have all the evidence relevant to this calculation. It is a fallibilist sense of justification. The addition of the metaphysical assumption, however, allows for more than just subjective justification. It implies that S can gather the relevant available evidence, and that if he has gathered this evidence, and has made no mistakes in the calculation of p's likelihood, the result mirrors the way the world is. This result is valid not only in relation to S's internal conceptual system, but also in relation to the external world. This sense of justification thus gives the possibility, though not the guarantee, of attaining Fully Objective justification — the highest level of justification we can attain without transcending our human limitations to the point where we know all and only truths.

What is the status of that accepted under the metaphysical assumption required by

Limited Objective justification? At the very least what results is a true description of a

possible world which allows the possibility of knowledge. If the assumption is false, and the

world is such that it cannot be mirrored by the results of our conceptual processes, then knowledge is not possible. In other words, to reject this assumption is to embrace an extreme form of skepticism. Knowledge attained under this assumption is simply that which can be attained in a world in which knowledge is possible.

What, then, is the status of the assumption itself? First of all, a theory of objective justification must itself be rationally acceptable. The metaphysical assumption is needed to make the objective perspective complete, and this completeness is required for the theory to be rationally acceptable. If the assumption was not made there would be no indication of a truth connection, and the theory would not be rationally acceptable as a theory of objective justification. It might be objected that this assumption is ad hoc, and is accepted simply because it fills a gap and makes objective justification possible. However, it is rationally acceptable in its own right. As pointed out above, to not accept it is to deny the possibility of knowledge, and to maintain that no belief we have can possibly be linked to the objective world. This does not mean that the metaphysical assumption requires objective justification—it asks not that it be justified, only that it be assumed.

Where does all this leave the coherency approach to belief evaluation? Given that the theories of objective justification which it produces are objective in the Limited Objective sense, this approach can provide a complete theory of belief evaluation. Hence, when we accept a belief on the grounds that it coheres with our belief system, that belief is both rationally accepted and justified in the Limited Objective sense. That is, given that the metaphysical assumption holds, and that all the relevant evidence that it is possible to gather has been brought to light, and that no mistakes were made in evaluating the belief on this evidence, the belief is justified in the Fully Objective sense.

We are, then, justified in the Limited Objective sense in accepting that our processes of belief evaluation do lead to true beliefs. Given the metaphysical assumption, our cognitive processes can yield true beliefs and we are Fully Objectively justified in thinking that they do.

We are not Completely Objectively justified in this conclusion as we are limited insofar as we

cannot grasp all the facts — we can only grasp those available, both temporally and

cognitively, to us as human beings. However, this is not the same as being subjectively bounded. To be subjectively bounded is to be unable to get outside of one's belief system to the facts. To be objectively justified in the Limited Objective sense is to be able to grasp those facts which are humanly possible to grasp. The metaphysical assumption thus allows us to act as though we were not subjectively bounded.

This Limited Objective sense of justification is that which the coherency theories of Bonjour, Sellars, Rescher, and Putnam ultimately rest on in their account of objective justification. This sense of justification allows satisfaction of the two intuitions regarding belief evaluation which were deliniated at the beginning of this thesis. On the one hand, belief evaluation depends on the rational acceptability of that belief to the individual. The components of Limited Objective justification, subjective justification and the metaphysical assumption, are both accessible to the individual. Subjective justification is a component of rational acceptability, and the metaphysical assumption is itself rationally acceptable. On the other hand, the metaphysical assumption provides a basis for holding that the belief evaluation performed by the individual is in accordance with the evidence that actually exists in the objective world.

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