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A PHILOSOPHICAL ANALYSIS OF THE CONCEPT OF CONCEPT AND ITS APPLICATION IN THE SOCIAL STUDIES

presented by

Robert D. Aumaugher

has been accepted towards fulfillment of the requirements for

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A PHILOSOPHICAL ANALYSIS OF THE CONCEPT OF CONCEPT AND ITS APPLICATION IN THE SOCIAL STUDIES

By

Robert D. Aumaugher

A DISSERTATION

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Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

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ABSTRACT

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A PHILOSOPHICAL ANALYSIS OF THE CONCEPT OF CONCEPT AND ITS APPLICATION IN THE SOCIAL STUDIES

By

Robert D. Aumaugher

There is in various fields much interest in the teaching of concepts. This is especially so in the social studies. Understanding what is involved in the teaching of concepts is dependent upon there being an understanding of what a concept is. While most social studies theorists see the necessary priority of such understanding, their accounts of what a concept is are limited and relatively superficial. Furthermore, their accounts are often conflicting. Also, social studies theorists usually turn to the work on concepts by psychologists for aid in getting clear what a concept is. Little appeal is made to the thinking of philosophers and in particular to the thinking of Ludwig Wittgenstein.

This dissertation looks afresh at what a concept is and at how a concept should be taught. The particular view delineated stems from the philosophy of Ludwig Wittgenstein, maintaining that concepts do not necessarily mark off essential, common, defining features. It is argued that the view delineated has greater utility in the social studies than the views currently promulgated by social studies theorists. There are three substantive chapters. Chapter II develops, from the work of Wittgenstein, a particular view about what concepts are and some techniques for use in analyzing and teaching concepts. Chapter III illustrates the use of those techniques by applying them to an analysis of the concept of justice. Included in Chapter III is a summary of an analysis of the concept of concept--i.e., an analysis of what a concept is. Chapter IV appraises the views of Barry K. Beyer and of Maurice P. Hunt and Lawrence E. Metcalf, contemporary social studies theorists, regarding what concepts are and how concepts should be taught. Their views are contrasted with that of the dissertation. Particular criticisms are brought to bear on their views. There is also discussion of how the view of the dissertation avoids those criticisms, thus rendering it a more useful view than the others.

The final chapter makes suggestions for further deliberation and investigation.

To Peg, friend and mate, you are for me the heart of the Good Life.

To my mother, father, and sister for all that you have done.

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iii

TABLE OF CONTENTS

		Page
LIST OF	FIGURES	vi
Chapter		
Ι.	INTRODUCTION	۱
II.	WITTGENSTEIN AND CONCEPTS	11
	Wittgenstein and What a Concept Is Wittgenstein and the Concept of Game The Concept of Game and Other Concepts: The	11 11
	"Look and See" Injunction	18
	Concepts and a Term's Use in the Language .	20
	Wittgenstein and the Use of the Term "Use" . Wittgenstein and the Ways of Manning a Concept	21 40
	Mapping a Concept: Two General Consider-	40
	ations	40
	Mapping a Concept: Particular Techniques .	42
III.	THE CONCEPT OF CONCEPT	50
	An Illustration of the Analysis of Concepts Preliminary Comment Regarding the Mapping of the Use of the Terms "Justice" and	51
	"Concept"	51
	"Justice"	55
	The Concept of ConceptA Summary of the Use of the Term Concept	68
IV.	THE CONCEPT OF CONCEPT AND THE SOCIAL STUDIES	73
	Beyer on Concepts	76
	Preliminary Comments on Beyer's View	76
	Beyer's View of What a Concept is and of How	20
	Bever's View of Forming a Concept of	00
		82
	Difficulties with Beyer's View	86

Page	

		Mapp Comp	ing aris	the son	e Us wit	se th	of Bey	"La 'er'	nds s V	cap iew	e" an	d F	urt	her	•	•	89
			Appr	rais	al	•	5	•		•	•			•			94
	Hunt	t and	Met	cal	f(on	Con	cep	ts	•	•	•	•	•			97
		Beye	r ar	nd H	lunt	t a	nd	Met	cal	fC	ont	ras	ted	•	•		97
		Hunt	anc	l Me	etca	alf	• on	Wh	at	a C	onc	ept	Is	•	•	•	98
		Hunt	and	l Me	etca	alf	on *	Ho	wt	οΤ	eac	h C	onc	ept	S	•	100
		Diff	icul	ltie	es v	vit	h H	unt	an	d M	etc	alf	's	Vie	W	•	107
Differences Between Hunt and Metcalf's View and the Map of Use View and Further																	
			Appr	rais	al	•	•	•	•	•	•	•	•	•	•	•	111
۷.	SUMMARY	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	119
SELECTED	BIBLIO	GRAPH	Y	•		•	•	•	•	•	•	•	•	•	•	•	126

LIST OF FIGURES

Figure		Page
1.	The Diagram of Beyer's Image of a Concept of Decision Making	81
2.	The Diagram Representing Beyer's Mental Image of a Concept of Landscape	84

CHAPTER I

INTRODUCTION

Concepts . . . are the basis of all thinking and knowing. (Teachers sometimes say that thinking is impossible without facts. It is more to the point to say that thinking is impossible without concepts.) Maurice P. Hunt and Lawrence E. Metcalf, <u>Teaching High School Social Studies</u>

What we have to mention in order to explain the significance, I mean the importance, of a concept, are often extremely general facts of nature: such facts as are hardly ever mentioned because of their great generality. Ludwig Wittgenstein, Philosophical Investigations

There is a voluminous literature on concepts. A portion of that literature is devoted to the teaching of concepts to and the formation of concepts in children. Interest in the teaching of concepts is in part a result of the belief that it is through our concepts that we order, perceive and understand the world (reality). Such ordering, perceiving and understanding is assuredly necessary for us to function at all. As such, concept learning and formation is critical in the education of anyone. The concepts an individual holds or has affect the kinds of beliefs held, and subsequently the kinds of action taken, and ultimately the kind of life led. With such basic concerns at stake, it is not surprising that there is so much interest in the teaching and forming of concepts.

Indeed, among those concerned with writing about and teaching social studies, there is currently much advocacy of and debate about concept-oriented curricula. According to Glen L. Crane, in an article entitled, "The New Social Studies: Recent Attempts to Implement It" (in the January 1974 issue of The Social Studies),

During the 1960's . . . more than forty projects were begun to get the social studies out of the pre-Sputnik dark ages.(1) The object of the new plans was to bring the concept and inquiry methods into the social studies; hence, the New Social Studies.¹

In 1965, the Syracuse University Social Studies Curriculum Center ". . . identified and described a number of concepts that may be taught in the social studies classroom."² (A report of the Center's project may be found in Roy A. Price et al., Major Concepts for the Social Studies.) In New Approaches to the Teaching of Social Studies: A Report of the Eleventh Yale Conference on the Teaching of Social Studies April 15 and 16, 1966, there is a section entitled "Conceptual Teaching in the Social Studies" by Bertha H. Davis.³ Verna S. Fancett in 1968, in Verna S. Fancett et al., Social Science <u>Concepts in the Classroom</u>, further discussed the Syracuse project.⁴ The staff of the Social Studies Curriculum Center at Carnegie-Mellon University (as reported by Edwin Fenton et al. in A High School Social Studies Curriculum for Able Students: Final Report of USOE Project--HS 041 and H-292, 1969), ". . . has identified six types of concepts involved in the social studies."⁵ In 1971, the National Council for the Social Studies issued Bulletin No. 45 entitled Concepts in the Social Studies, edited by Barry K. Beyer and Anthony N. Penna.⁶ Most recently Fred M. Hechinger in an article entitled

"Waxworks History" (in the May, 1976 issue of <u>Saturday Review</u>), questions the Organization of American Historians' critical stance towards

. . . Nebraska's report that its new approach to history, emphasizing "concepts" rather than "facts" is based on the assumption that this will "better prepare the students to understand and cope with the modern world."⁷

Though certainly not exhaustive, this sample of social studies literature on teaching concepts indicates the extent and currency of discussion about the teaching of concepts in the social studies.

It can be seen from this sample that educators writing about the social studies have two major concerns. One is that of arguing for concept-oriented approaches to teaching the social studies. The other is that of identifying and describing particular social studies concepts. These concerns are certainly laudable. However, arguments for concept-oriented curricula and the identification and description of particular social studies concepts are dependent upon there being an understanding of what a concept is. This understanding is not an arbitrary priority, nor merely a good idea procedurally. It is a logical priority, that is, there must be a concept of concept had before there can be further understanding and discrimination. While most social studies theorists see the necessary priority of understanding what a concept is, their accounts of what a concept is are limited and relatively superficial. Furthermore the accounts they do give are often conflicting.

The following is a sample from the literature of some of these accounts:

- A concept is a mental image of something. The "something" may be anything--a concrete object, a type of behavior, an abstract idea. This image has two basic dimensions--the individual components of the concept as well as the relationships of those components to each other and the whole.⁸
- The concept is not a verbalization but rather an abstract awareness of the general attributes of a class. We . . . find it next to impossible to express the abstract attributes that allow us to consider such different animals (dogs) members of the same class.⁹
- 3. A concept is an abstraction--an idea generalized from particular cases.¹⁰
- 4. The staff of the (Syracuse University Social Studies) Curriculum Center has used as a working definition (of concept) the following composite statement drawn from the literature.
 - A concept is
 - --an individuals (sic) own way of making meaning of things he has experienced.
 - --a mental image which assists a person in classifying his experiences, and which continually changes as his experiences accumulate.
 - --an abstraction or general idea in the mind of a person which represents a class or group of things or actions having certain qualities or characteristics in common.
 - --a synthesis of a number of things an individual has experienced and conclusions he has drawn about his experiences.
 - --represented by a verbal symbol which indicates the real content of the insights and meanings the word evokes in the mind of an individual.¹¹
- 5. A concept is a general idea, usually expressed by a word, which represents a class or group of things or actions having certain characteristics in common. Concepts give order and meaning to experience. For example, the concept "horse" connotes a group of animals with certain readily identifiable common characteristics. Unfortunately social studies concepts are not always so easy to define as this example.¹²

- 6. The verbal expression of a concept is a definition. Some concepts, however, are almost never expressed verbally. Bruner comes closest to our meaning when he defines a concept as a category. He would have us think of a concept as a basket into which we put those objects that belong together because of the attributes they are said to share under a given system of classification. A category includes within it a range of discriminably different items which are treated as if they are the same. For example, many discriminably different wars are placed together in a category called civil war. This is done in accordance with certain criteria. Bruner calls these criteria the defining attributes of a category. A particular war can be classified as a civil war only by first defining civil war according to its attributes, and then showing that the war in question has those attributes. 13
- 7. . . . science invents concepts, which are creative ways of structuring our perception of reality.¹⁴

Such accounts of what a concept is are ordinarily all that is given prior to the giving of arguments for concept-oriented curricula and the identifying and describing of particular social studies concepts. My view, in contrast, is that the question of what a concept is needs to be gone into in greater depth than that indicated by these accounts.

Not only is the work on what a concept is limited and relatively superficial, there is also a lack of consensus on just what a concept is. As can be seen from the sample, concepts are said to be "mental images," "abstractions," "syntheses," "general ideas," "categories," and "inventions." Also there is, in the sample, frequent reference to these "images," "abstractions," "general ideas," etc. being of a class of particulars, each particular having certain qualities or characteristics in common with the others in its class. There are two particular views that seem to be representative of many of the others. One, the view of Barry K. Beyer, is that a concept is an invented individual mental image of a class of particulars having a characteristic (or set of characteristics) in common. The other, the view of Maurice P. Hunt and Lawrence E. Metcalf, is that a concept is an invented category whose particulars are chosen according to some system of classification (one of which being having characteristics in common). My view, in contrast, is that neither of these views is an accurate account of what a concept is.

What then is a concept? Interestingly enough (and part of the reason for undertaking this dissertation) in the social studies literature there seems to be little appeal to the thinking of philosophers and educational philosophers regarding an answer to the question "What is a concept?" Directly pertinent to this question is the philosophy of Ludwig Wittgenstein. Not only does Wittgenstein present cogent criticisms of certain traditional attempts to answer the general question "What is an X?" but he provides the basis for a positive account of what a concept is and, perhaps more importantly, certain techniques for employment in answering the general question "What is an X?"

Why is it important to understand correctly and fully what a concept is? Clearly, as has been said, we cannot argue for concept-oriented curricula or identify and describe particular concepts without doing this prior work. In addition, we cannot answer such questions as: What ought we give students when we teach them a concept? How do we know if a student has attained a concept? What do we look or listen for? What counts as knowing a concept?

What are appropriate instructional activities for teaching concepts in the social studies? Different concepts of concept yield different, and often incompatible, injunctions for teaching concepts. If Wittgenstein's account is defensible, there would seem to be injunctions different from those now urged by social studies theorists for the teaching of concepts. Thus we cannot afford to take lightly the question of what a concept is.

Accordingly, in general terms, it is the intent of this dissertation to delineate a particular view about what concepts are (a view stemming from the thinking of Wittgenstein) and to argue that this view has greater utility in the social studies than the views currently promulgated by social studies theorists. More explicitly the dissertation has three principal objectives.

1. To delineate, following Wittgenstein, a particular view about what concepts are and some techniques, required by that view, for analyzing concepts.

This task is undertaken in Chapter II, in two sections. In section one, I will argue that Wittgenstein's example of the concept of game is a counterexample to the view of concepts as being common properties of their particular instances. I will next describe more fully what the concept of game is and what is required to know the concept of game. Following that I will discuss the extent to which other concepts are analogous to the concept of game. I will then argue, following Wittgenstein, that a concept is a term's use in the language and that knowing a term's use is knowing a concept. In what remains of section one I will describe what "a term's use in the language" means.

In section two, I will describe two general points relative to beginning an analysis of a concept. I will then briefly describe some ways to go about the analysis of concepts.

2. To illustrate the analysis of concepts by doing an analysis of the concept of justice and to summarize my conclusions regarding what the concept of concept is.

This task is undertaken in Chapter III, in two sections. In section one, I will comment further on what an analysis of the concepts of justice and concept involves. I will then proceed to an analysis of the concept of justice. This analysis will illustrate a way of collecting uses, techniques for determining the features of uses, the "locating" of a concept among its family of concepts, techniques for determining a family of concepts, etc. I conclude section one with an illustration of the "locating" of the concept of justice among its family of concepts. In doing this I "locate" a case of use of the term "justice" among a case of use each of the terms "favoritism" and "arbitrariness." In section two, I list some of my conclusions regarding the map of use of the term "concept." In other words, to some extent, I explain what the concept of concept is.

3. To appraise the views of Beyer and of Hunt and Metcalf regarding what a concept is and how a concept should be taught, and to contrast their views with mine.

This task is undertaken in Chapter IV, in two sections. In section one, I will describe more fully Beyer's view. I will then describe certain difficulties with Beyer's view. Finally, I will contrast Beyer's view with mine, using the social studies concept "landscape." In section two, I will do much the same as in section one, only with the view of Hunt and Metcalf. Here too certain social studies concepts will be used in exemplification.

A final chapter briefly summarizes the main arguments of the dissertation and the conclusions.

FOOTNOTES--CHAPTER I

¹Glen L. Crane, "The New Social Studies: Recent Attempts to Implement It," <u>The Social Studies</u> 65 (January 1974): 22-26. Crane's reference (1) is to Dorothy McClure Fraser's chapter, "The Changing Scene in the Social Studies," in <u>Social Studies Curriculum Develop-</u> <u>ment: Prospects and Problems</u>, ed. Dorothy McClure Fraser (Washington, D.C.: National Council for the Social Studies, 39th Yearbook, 1969).

²Barry K. Beyer and Anthony N. Penna, eds., <u>Concepts in the</u> <u>Social Studies</u> (Washington, D.C.: National Council for the Social Studies, Bulletin No. 45, 1971), p. 17.

³Bertha H. Davis, "Conceptual Teaching in the Social Studies," in <u>New Approaches to the Teaching of Social Studies: A</u> <u>Report of the Eleventh Yale Conference on the Teaching of Social</u> <u>Studies, April 15 and 16, 1966</u> (New Haven: Yale University Office of Teacher Training, 1966).

⁴Verna S. Fancett, et al., <u>Social Science Concepts in the</u> <u>Classroom</u> (Syracuse: Syracuse University, Social Studies Curriculum Center, 1968).

⁵Edwin Fenton, et al, <u>A High School Social Studies Curriculum</u> for Able Students: Final Report of USOE Project--HSO41 and H-292 (Pittsburgh: Social Studies Curriculum Center, Carnegie-Mellon University, 1969), p. 25.

⁶Beyer and Penna.

⁷Fred M. Hechinger, "Waxworks History," <u>Saturday Review</u>, May 1976, pp. 27-29.

⁸Barry K. Beyer, <u>Inquiry in the Social Studies Classroom</u>: <u>A Strategy for Teaching</u> (Columbus: Charles E. Merrill Publishing Co., 1971), p. 111.

⁹Marlin L. Tanck, "Teaching Concepts, Generalizations and Constructs," in <u>Social Studies Curriculum Development: Prospects</u> <u>and Problems</u>, ed. Dorothy McClure Fraser (Washington, D.C.: National Council for the Social Studies, 39th Yearbook, 1969), p. 105. ¹⁰Irving Morrissett, "The New Social Science Curricula," in <u>Concepts and Structure in the New Social Science Curricula</u>, ed. Irving Morrissett (New York: Holt, Rinehart and Winston, Inc., 1967), p. 3.

¹¹Fancett, p. 4.

¹²Isaac J. Quillen and Lavone A. Hanna, <u>Education for Social</u> <u>Competence</u>, rev. ed. (Chicago: Scott Foresman, 1961), p. 187.

¹³Maurice P. Hunt and Lawrence E. Metcalf, <u>Teaching High</u> <u>School Social Studies</u>, 2nd ed. (New York: Harper and Row, Publishers, 1968), pp. 84, 85.

¹⁴Ibid., p. 85.

CHAPTER II

WITTGENSTEIN AND CONCEPTS

The difference between the right word and almost the right word is the difference between lightning and the lightning bug.

Attributed to Mark Twain

A main source of our failure to understand is that we do not <u>command a clear view</u> of the use of our words. Ludwig Wittgenstein, Philosophical Investigations

Wittgenstein and What a Concept Is

Wittgenstein and the Concept of Game

Early in his work <u>Philosophical Investigations</u> Ludwig Wittgenstein examines the proceedings called "games." We have just seen that one predominant definition of the term "concept" is as follows: ". . . a concept is a general idea, usually expressed by a word, which represents a class or group of things or actions having certain characteristics in common."¹ One of the things I take Wittgenstein to be doing when he examines the proceedings called "games" is testing this definition or one of its sort. He examines the things ordinarily called "games" to see what they, in fact, have in common. He hunts for the set of necessary and sufficient conditions which makes a game a game. He, equivalently, looks

for the essence of a game and thus for the answer to the question "What is a game?" He looks for the concept of game and thus for the definition of the term "game." He looks for that unique feature (e.g., winning) or set of features (e.g., winning, rules, played rather than waged) which can be found in all those things called "games" and which distinguishes those things called "games" from everything else. In conducting his investigation in just this way Wittgenstein is also following the traditional procedure for answering conceptual questions. These questions usually take the form of "What is X?" (e.g., What is revolution?) or the form of "What counts as X?" (e.g., What counts as teaching?).

What Wittgenstein finds is ". . . that you will not see something that is common to <u>all</u>, but similarities, relationships, and a whole series of them at that."² What does this mean? It means that winning, for example, is not a characteristic or an attribute of <u>all</u> games. It is only a feature of some games. There are some things properly called "games" which do not have winning as a feature. For Wittgenstein, "The idea of a general concept being a common property of its particular instances connects up with other, too simple, ideas of the structure of language."³ I take Wittgenstein to be taking exception to this unexamined but often presupposed "characteristics in common" view of what a concept is.⁴

Wittgenstein argues that <u>games</u> and "<u>language-games</u>" do not have "something that is common to all but similarities, relationships, and a whole series of them at that" in the following passages:

65. Here we come up against the great question that lies behind all these considerations.--For someone might object against me: "you take the easy way out! You talk about all sorts of language-games, but have nowhere said what the essence of a language-game, and hence of language, is: what is common to all these activities, and what makes them into language or parts of language. So you let yourself off the very part of the investigation that once gave you yourself most headache, the part about the <u>general</u> form of propositions and of language.

And this is true.--Instead of producing something common to all that we call language, I am saying that these phenomena have no one thing in common which makes us use the same word for all,--but that they are <u>related</u> to one another in many different ways. And it is because of this relationship, or these relationships, that we call them all "language." I will try to explain this.

66. Consider for example the proceedings that we call "games." I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all?--Don't say: "There <u>must</u> be something common, or they would not be called 'games'"--but look and see whether there is anything common to all.--For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that. To repeat: don't think, but look!--Look for example at boardgames, with their multifarious relationships. Now pass to card-games; here you find many correspondences with the first group, but many common features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost.--Are they all 'amusing'? Compare chess with noughts and crosses. 0r is there always winning and losing, or competition between players? Think of patience. In ball-games there is winning and losing; but when a child throws his ball at the wall and catches it again, this feature has disappeared. Look at the parts played by skill and luck; and at the difference between skill in chess and skill in tennis. Think now of games like ring-a-ring-a-roses; here is the element of amusement, but how many other characteristic features have disappeared! And we can go through the many, many other groups of games in the same way; can see how similarities crop up and disappear.

And the result of this examination is: we see a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail.⁵

Wittgenstein's point, again, is that for those things called "games" there is or are no essential feature or features, characteristic or characteristics, attribute or attributes. What is there? There are "similarities, relationships, and a whole series of them at that."⁶ I take Wittgenstein to be saying that we ought not set out looking for a feature or set of features that is common to all games. We ought, instead, to begin by examining the variety of things called "games" to see what features each has, to see how in each game these features are configured (i.e., which features are central aspects of the game and which are not), and most importantly to see whether the features of one game are, in fact, among the configurations of features that constitute other games. In doing this we will begin to "see a network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail."⁷ This "network of similarities" is quite different from "a set of features in common." To see this, consider a group of games A, B, C and D. On the "set of features in common" view, for "game" to include or be applicable to the group of games A, B, C and D, A must have something in common with B, B must have something and the same thing in common with C, C must have something and the same thing in common with D. It is only in virtue of the existence of this single common feature that we can apply the term "game" to all of A, B, C and D. On the "network of similarities" view, A may have something in common with B, B may have something different in common with C, and C with D; however, there may be nothing in common to all of A, B, C and D, yet "game" may sensibly include or be applicable to

the group of games A, B, C and D. Thus the concept of game is not what is common to all games, but instead--at least, in part--is the network of similarities and differences among the various things called games. Also it seems reasonable to suppose that Wittgenstein would agree that having a knowledge of this network is in part what constitutes <u>knowing the concept</u> of game.

To know the concept of game, therefore, one must know the features that each of a variety of games has and must know the arrangement of those features among the games. This knowledge might be exhibited in a collection of propositions such as the following:

> One feature of basketball is team member interaction. One cannot play a game of basketball by himself. One can play the game of golf by himself. To play the game of golf, team member interaction is not necessary. In fact, the concept of team as associated with basketball and with golf has a slightly different meaning in each. The way we discover this fact is by noticing that the term "team" has a different use in basketball talk from that which it has in golf talk. Two golfers may "team up" in golf to play a "bestball"; however they do not act as a team in the same way that basketball players act as a team. The game of checkers can be played with almost no physical prowess. At least the physical prowess required is not the same as that required to play golf and basketball. Yet checkers is similar to basketball in that there must be an opponent in order for the game to be played. The game of golf may have opponents, but they are not necessary to playing the game.

The above set of propositions describes part of the network of similarities and differences that exist between and among games. Again, I take Wittgenstein to be saying that knowing this "network" in part constitutes knowing the concept of game.

Notice that I said that knowing the similarities and differences in features among and between those things called "games" is

only part of what is involved in knowing the concept of game. I take Wittgenstein to be saying that more is required. He is saying that in one sense we could not have or know the concept of game completely unless we know the logic of the connections (the network of similarities and differences) between the concept of game and all concepts. Some of the chief features of some games are also the chief features of other concepts. And some of the chief features of some games are not among the chief features of other concepts. Just as, for example, many games require opponents in order for the games to be played, so too battles require opponents in order for battles to be fought. Having an opponent is a chief feature of both games and battles. Most games, however, have the feature of play about them else they are not games. Battles do not require an element of play for them to be battles. The element of play is a chief feature of games but not of battles. Here we now have a network of similarities and differences among the concepts game, battle, opponent, and play. Some of the chief features of these concepts are the chief features of still other concepts. And some of the chief features of these concepts are not the chief features of still other concepts. For example, just as there must be an encounter for there to be a battle, so too there must be an encounter for there to be a debate. Yet while the use of words is a chief feature of a debate, it is not so of a battle.⁸ Observe that we have expanded our network of similarities and differences. We now have logical connections among the concepts game, battle, opponent, play, encounter, debate and the use of words. We could continue expanding our network indefinitely.

The presence or absence of features presents us with a network of similarities and differences not just among games but also between the concept game and all the other concepts in the language. So to know fully the concept of game we must know its connections in meaning with all the concepts in the language. Of course for most purposes and in most contexts such a complete knowledge of this network of connections in meaning is not necessary for us to be said to know the concept of game. What is necessary for most purposes and in most contexts is that we must know the logical connections between the concept of game and that array of concepts which are naturally involved in the area of discourse with which the concept of game has to do. Talk about the concept of game ordinarily involves talk about the concepts of player, play, sport, leisure, activity, rule, opponent, etc. It also involves talk about concepts which are often contrasted with the concept of game, such as war, battle, serious activity, etc. These concepts which I have just listed in the above two sentences are what I am referring to when I speak of the "array of concepts which are naturally involved in the area of discourse with which the concept of game has to do." In sum, for Wittgenstein the concept of game is connected to all the concepts in the language and knowing or having the concept of game requires not just that we know the network of similarities and differences that exists among various games, but also the network that exists between the concept of game and its family of concepts.

The Concept of Game and Other Concepts: The "Look and See" Injunction

All that has been said so far in this chapter has been said about the concept of <u>game</u>. Recall that Wittgenstein said, "Consider for example the proceedings that we call 'games.'"⁹ What is it that Wittgenstein is trying to show by using the example of games? Surely it is not just that games have no <u>essence</u>, nor just that <u>games</u> have no essence, nor just that <u>games</u> are related in a network of similarities and differences. When Wittgenstein begins passage #66 with "Consider for example . . .,"¹⁰ he is about to present an instance to illustrate the meaning and truth of his immediately preceding claim. Recall that that claim is the following:

And this is true.--Instead of producing something common to all that we call language, I am saying that these phenomena have no one thing in common which makes us use the same word for all,--but that they are <u>related</u> to one another in many different ways. And it is because of this relationship, or these relationships, that we call them all "language." I will try to explain this.¹¹

It should be evident that Wittgenstein is using the counterexample of "games" to show that language does not have an essence--that there is nothing in common to all that we call "language." It seems reasonable to suppose that he also would agree that all concepts are <u>not</u> of such a nature as to have an essence. Clearly the concept of game is one such concept. Are there others? Wittgenstein's answer would be "look and see." Just as we ought not assume that all concepts are of such a nature as to have an essence, so too we ought not assume that all concepts are of such a nature as to have a network of similarities and differences, as the concept of game has. However, for Wittgenstein what is true of the concept of game might be true of other concepts, and he suggests we "look and see."

Wittgenstein does not rule out the possibility of some terms being essentially defined, that is, of some concepts being that which is common to their instances. The term "triangle" as used in geometry and the term "ohm" as used in physics may be examples of terms which express such concepts. A triangle is ordinarily defined as a three-sided plane figure, the sum of whose angles equals 180 degrees. All and only those figures which satisfy this definition are correctly called "triangles." An ohm is ordinarily defined as the practical unit of resistance which is formulized as the resistance of a circuit in which a potential difference of one volt produces a current of one ampere. All and only those units of resistance which satisfy this formulization are correctly called "ohms." Here we can be reasonably sure that we have two concepts whose instances all have the specified features. Is knowing what these common specified features are sufficient for knowing the concept of triangle, of ohm? Wittgenstein would answer no. For him knowing the definition of the term which expresses a concept is not enough for one to be said to know that concept. Knowing a concept requires knowing the similarities and differences among the family of concepts in which that concept is embedded. This latter condition holds regardless of whether the instances of a concept are related by a single commonality or by a network of commonalities. Knowing what a triangle is requires knowing the relations between it and a whole array of geometric concepts such as figure, plane, solid,

square, rectangle, angle, proof, geometry, etc. Similarly, knowing what an ohm is requires knowing its relationships with volt, ampere, circuit, current, electricity, etc. The point, again, is that knowing any concept requires that the logical relationships among its family of concepts be known.

<u>Concepts and a Term's Use</u> <u>in the Language</u>

We now have an idea, more or less, of what we might see when we "look and see." But what is it at which we are to look? This at first glance may seem an odd question. It is odd in that it suggests that though the result of an investigation into what a concept is will be something about a concept, the thing at which we will look to obtain this result will not be a concept. The thing at which we will look will be the language in which concepts are expressed. This shift of focus is one of the major aspects of Wittgenstein's way of doing philosophy. Consider what he says in the following: "We are not analysing a phenomenon (e.g. thought) but a concept (e.g. that of thinking), and therefore the use of a word."¹² He further states, "You learned the concept 'pain' when you learned language."¹³ Concepts are ordinarily expressed in language by single words or phrases (which function like single words) as opposed to, e.g., sentences. So, according to Wittgenstein, the meaning of a term is its use in the language. Knowing a term's use is knowing a concept. We, therefore, obtain a particular concept by learning how a term functions in the language. I find John Wilson's words to be helpful in clarifying this point. He notes that

As we have noticed, our use and understanding of a word are closely related to our concept of a thing. We form concepts by learning the uses of words, and it can be seen what concepts we have formed by seeing what we understand by words: putting it another way our use and understanding of language act both as guides to forming concepts, and as tests of concepts when formed. Thus we could truly say that the logical limits of a concept may be the same as the limits to the range of meaning of a particular word.¹⁴

Hence, if we are to come to know a concept, regardless of whether that concept is of such a nature as to exhibit an essence or a network of similarities and differences, we must examine and come to know a term's use. In fact it is by examining a term's use that we come to know the nature of the concept the term expresses. In the absence of a better term, this examining and coming to know has been called "mapping."

<u>Wittgenstein and the Use</u> of the Term "Use"

Mapping a term's use as it exists in the language is a complex affair. Clearly prior to mapping any particular term's use, we need to know what is meant by the term "use"--i.e., we need to know the uses of "use." Wittgenstein as might be expected spends a good bit of time showing us what use he is making of "use" when he speaks of the "uses of words." My concern in the remaining pages of this part of this chapter will be to explicate more fully how Wittgenstein uses the term "use." I have suggested in the last two paragraphs the logical priority of undertaking such an explication. Two other reasons are of central importance. First, I am undertaking such an explication to make a further point about knowing a concept. For Wittgenstein, the use of terms is not at all disconnected from human activities, human behavior, etc. Thus, since knowing a term's use in the language is knowing a concept, knowing a concept involves knowing the connections between the use of a term and human activity. The second reason for examining Wittgenstein's use of "use" is to display some of the ways suggested in the work of Wittgenstein to go about the activity of mapping a term's use-i.e., to go about giving the answer to the question "What is a concept?"

George Pitcher has written an excellent chapter entitled "Uses of Words" (from his book, <u>The Philosophy of Wittgenstein</u>) in which he details the variety of ways that Wittgenstein uses the term "use." Four of those ways are non-trivial and will concern us here. They are respectively "the grammatical aspect of the use of words," "the speech act aspect of the use of words," "the semantic aspect of the use of words," and the use of words in what Pitcher calls "speech activities." I will discuss each of these aspects in turn.

Regarding the grammatical aspect of the use of words Pitcher notes the following:

Knowing how to use a word, in this aspect of its use, includes knowing in what sort of linguistic contexts or frames the word can and cannot occur without grammatical oddity; or, to put it more actively, knowing how to construct grammatically correct word-groups (e.g., sentences) which contain that word and being able to recognize grammatically incorrect word-groups which contain it.¹⁵

Linguistic contexts are here to be constrasted with "passage," social, and environmental contexts. Pitcher gives as an example of a linguistic context or frame the following: "I slept in a _____ bed last night."¹⁶ Referring to this frame, he notes that

"the blanks can be filled with certain words without linguistic oddity, whereas if they are filled with other words or even the same words in reverse order, the result is linguistically odd."¹⁷ In support of this claim, he points out that "big comfortable" or "very short" can be used to fill the blanks, but that "drink rum" and "short very" cannot. At this point we want to ask what the connection is between knowing the grammatical aspect of the use of a word and knowing the concept expressed by that word. There are at least two things of note. First, by attending to the grammatical aspect of the use of words we come to know what, in part, are the limits of use of a word and thus what, in part, are the limits of the concept expressed by that word. I suggest that Wilson's dictum that "we form concepts by learning the uses of words" means in part that we form concepts by learning the grammatical aspect of a word's use.¹⁸ The second thing of note is that using a word in a gramatically odd way indicates the possibility that one does not understand the limits of a word's use and hence does not understand the concept expressed by that word. Consider another example of grammatical misuse. A child might utter the following: "I stood walking for ten minutes," or perhaps "I stood still to the store." If we had no reason to believe that the child was trying to do otherwise than to communicate in a straightforward manner, we would conclude that he did not know the use, or at least the limits of use, of the terms "walking" and "stood still." We would suspect that the child did not know the difference between walking and standing still, or at the very least had quite a limited concept of each activity. Our

ability to wield words in a correctly grammatical way is indicative of whether or not we understand the concepts expressed by those words.

In the foregoing paragraph I have been suggesting that knowing how to use words grammatically is related to knowing what a concept is. However, though we may know how to wield a word in its grammatical use--i.e., construct or recognize grammatically correct linguistic frames, it does not follow that we then know what the concept is that the word expresses. Indeed Wittgenstein continually cautions us not to be misled by the grammatical form of an expression--what he calls the "surface grammar." What he means by this is that though we may have a grammatically correct word-group, the use that is suggested by the word-group's form may not be among its uses, or at the least not be its principal use, what he calls the "depth grammar." For example, the grammar of the utterance "I am afraid" is analogous to the grammar of the utterance "I am Scottish." Yet the use made of the former is quite different from that made of the latter. The use that is made of "I am afraid" is more nearly akin to that made of "ouch" than that made of "I am Scottish," though grammatically "ouch" and "I am afraid" are quite different. So the "surface grammar" of "I am afraid" suggests that this utterance is a report in the way that "I am Scottish" is. However the "depth grammar" of "I am afraid" is more that of an ejaculation in the way that "ouch" is. Garth Hallett is even more precise about such first person expressions when he notes the following:
Thus it will not do to call these first-person expressions simply <u>Ausserungen</u> and leave it at that; they have their own unique status, to be reduced neither to that of reports nor to that of natural expressions. . . . The term <u>avowal</u> serves as well as any to suggest this status.¹⁹

Thus the "surface grammar" of an expression can draw us into making certain analogies which are misleading. Wittgenstein was concerned to correct the effects of such analogies. As such, Wittgenstein was concerned to clarify the "depth grammar" of a word or expression.

Just now in examining the utterance "I am afraid," I pointed out that certain first person expressions are not chiefly used as their grammatical form might suggest. In this case, something that looked to be a description was more nearly an avowal or ejaculation. This is a case of one expression looking like another but performing a different function. Now consider the expression "That is orange." Used in one way it can be the act of <u>describing</u> the color of something. Used in another way it can be part of the act of <u>questioning</u>--<u>doubting</u> someone's assertion that something is orange. This is a case of an expression that can be used to perform a variety of functions. These two cases illustrate the fact that words are used to do more than just to state things. Regarding the speech act aspect of the use of words, Pitcher writes:

Words are . . . used to <u>do</u> certain things, to perform certain linguistic jobs. . . When we speak of the use of words in this way, we mean that words are used to perform certain speech acts (such as issuing orders, asking questions, and so on). . . . 20

A moment's thought on this point should serve to remind us of just how large the number of possible speech acts is. Such speech acts include describing something, commenting on something, reporting

something, requesting something, recommending something, promising, swearing, etc. Being able to wield a word in its speech act aspect is part of what constitutes knowing the concept that is expressed by that word. That is, knowing the concept that is expressed by a word means, in part, knowing the various speech acts that utterances in which that word normally occurs can perform. Consider, for instance, the concept of good. Knowing what the concept of good is requires, in part, knowing the possible speech acts that utterances containing the term "good" can perform. The expression "X is a good knife" can be used to perform a number of speech acts. Among these are the acts of describing, expressing an attitude, and recommending. To say "X is a good knife" might be the act of describing the sharpness of the knife. To say "X is a good knife" might be the act of expressing a favorable attitude towards the knife (notice that the sharpness of the knife is independent of any attitude towards the knife). Or to say "X is a good knife" might be the act of recommending the knife to someone. Of course in uttering the phrase "X is a good knife" I could also be said to be doing all three--describing, expressing an attitude, and recommending. The point, again, is that for us to be said to know the concept of something, part of what we need to know is the possible variety of speech acts that utterances, in which the term expressing the concept occurs, can perform. Further we need to know how this term is similar to and different from the terms of its family of terms regarding this aspect of use. Perhaps here we can begin to see what Wittgenstein meant by

". . . similarities overlapping and crisscrossing: sometimes overall similarities and sometimes similarities of detail."²¹

The term "context" is used in a variety of ways. "Context" is used descriptively to mean not just the parts of discourse that surround a word, but also to mean the interrelated conditions in which something exists or occurs. To talk of a word's context in the parts of discourse sense can mean we are concerned with an utterance in which the word might be found (the grammatical aspect of a word's use). Also it can mean that we are concerned with the surrounding linguistic passages in which the utterance might be found. To talk of a word's context in the interrelated conditions sense can mean that we are concerned with the social environment (part of what Wittgenstein would call "form of life") in which a word or utterance containing that word may occur. In other words we are concerned with the linguistic-physical behavior that might surround or envelop the use of a word. Also to talk of the interrelated conditions can mean we are concerned with the physical environment. Of course any particular use of the term "context" might include any or all of these meanings. However, when Pitcher calls our attention to the semantic aspect of the use of words it is chiefly the "linguistic passage" and "social environment" meanings of the term "context" that he has in mind. Consider what Pitcher says in the following passage:

There is another important aspect of the use of words that is concerned not with the immediate linguistic frame of individual words or phrases, but rather with the wider conditions--both linguistic and nonlinguistic--in which

word-groups (including whole sentences and individual words) and even morphemes are normally used. It is what I shall call the <u>semantic</u> aspect of the use of words. (Though it is different from the grammatical aspect, the two are not, of course, unrelated.) A given word-group (e.g., a given sentence) is normally used only when certain conditions, which may be called semantic conditions, obtain--for example, when certain events have taken place, when the speaker is in a certain kind of situation, when a certain kind of object is present, and so on. To say this is to say that there are semantic regularities associated with the utterance of a given word-group.²²

Notice that Pitcher says that a given word-group is normally used only when certain semantic conditions obtain. He gives an example to illustrate what he means in the following passage:

If two people, A and B, are having their dinner, with all the usual items on the table and with the salt cellar near B, A can say "Please pass the salt" without the least oddity, without deviating from any semantic regularities, for this is the kind of situation in which those words are generally uttered. But under these same conditions A cannot say to B "Look out for that horse!" without deviating from semantic regularities, although he can say it without oddity--for example, if he says it playfully as part of a game they play at dinner, or if he says it in the course of telling a story to B over their dinner. So though the words "Look out for that horse!" can, in special cases, be used without oddity when there is no horse present, still in the standard case, when those words are uttered, there is a horse present, and the speaker is in fact warning the hearer about the horse.²³

Pitcher continues instancing semantic conditions with the following:

Semantic conditions sometimes include other utterances. For example, the words "No, he isn't here" are normally used only if a question has previously been asked (such as "Is Mr. Smith at home?"); one would be puzzled if the first thing one's wife said to him in the morning were "No, he isn't here." Words like "Fine, thank you," "I certainly will," "Did he?" and many others are also normally or regularly used only when there has occurred, immediately preceding them, another of a certain type.²⁴ Though he attaches the following to the passage before last, Pitcher, I take it, intended the following to be a concluding statement of the point relative to the preceding series of passages:

And so there are--indeed, must be, if there is to be a language at all--correlations, although not perfect ones, between the use of certain words and the existence of certain semantic conditions. Words normally "go with" certain semantic conditions, and do not "go with" certain others.²⁵

As might now be expected, the point to be made upon the recording of this last statement of Pitcher's is that knowing a concept requires, in part, knowing the semantic conditions that normally "go with" the use of the word which expresses that concept.

Recall that Pitcher's program in his chapter "Uses of Words" is to show the ways in which Wittgenstein uses the term "use." That Wittgenstein places some importance upon the semantic aspect of the use of words is shown by Pitcher when he quotes the following from the Blue and Brown Books:

. . . let us see what use we make of such an expression as "This face says something," that is, what the situations are in which we use this expression, what sentences would precede or follow it (what kind of conversation it is a part of).²⁶

The upshot of this discussion of the semantic aspect of the use of words is that there are standard contexts in which a word or a particular word-group is regularly used and from which the word or word-group gets its meaning. Knowing the word's use requires knowing what those contexts are--i.e., requires knowing the features of those contexts which must obtain whenever the word is to be correctly used. As we have seen, these features (regularities or conditions) include such things as what is usually said before and after an utterance, the presence or absence of certain objects, the occurrence of a particular event, etc. In other words there are certain conditions, both linguistic and nonlinguistic, which are necessarily connected with a word's use. Understanding a word's use requires, in part, understanding what conditions are generally recognized as necessarily involved whenever that word is used. As the phrase "semantic aspect of use" suggests (compare "aspect of use" with "aspect and use") there is not something that can be called the use of a word and something else that can be called the conditions in which a word is used. To understand the use of a word is to understand its usual and regular connection with a set of conditions. Any description of the use of a word must include as part of that description the connection between the word and the context. So, again, to know this aspect of use is to know the connection between the word and the semantic conditions which the word "goes with." Knowing the concept that is expressed by a particular term then requires, in part, knowing that term's connection with its standard context (if a technical term, its standard context and its standard technical context). Also required is knowledge of that term's family of terms' connections with their standard contexts and knowledge of the similarities and differences between the term's context and its family of terms' contexts. Perhaps here we have the best example yet of what it means to say "Answering the question, 'What is a concept?' is an activity of mapping a term's use."

So far I have noted that being able to correctly wield a word that expresses a concept in grammatical, speech act, and

semantic ways, in part, constitutes knowing what that concept is. We come now to the use of words in what Pitcher calls "speech activities." Near the end of his discourse on the speech act aspect of the use of words, Pitcher makes a distinction between the use of words to do something and the use of words in doing something. I offer the following example as illustrative of that distinction. A stage hand at a live performance of some rock group may hold up a sign with the word "applause" printed on it. He is using the word to give a sort of command to the audience. He is using the word to do something. A journalist is sitting observing the stage hand and is noting the various activities in which the stage hand engages himself. The journalist is preparing a report on the occupation "stage hand." The journalist notes that the stage hand, among other things, regularly holds up prompters to the audience. The journalist notes that one of these prompters is the applause sign. The journalist is using a word in doing something--e.g., in preparing a report. The point to be taken from this example is that speech activities are distinct from speech acts in being somewhat larger enterprises. Speech acts ordinarily would be performed by single words or single utterances whereas speech activities ordinarily would contain a number of utterances. This is not the only way in which the use of words in speech activities differs from the other uses. Rather than being on a logical par with speech activities, the other uses are elements in the undertaking of speech activities. In undertaking a speech activity one must attend to the grammatical aspect of use, the speech act aspect of use, and the

semantic aspect of use. Later in his account Pitcher notes that what he has called speech activities are primarily what Wittgenstein calls language-games. Examples of speech activities/language-games are given in the following passage from the Investigations:

Review the multiplicity of language-games in the following examples, and in others: Giving orders, and obeying them--Describing the appearance of an object, or giving its measurements--Constructing an object from a description (a drawing)--Reporting an event--Speculating about an event--Forming and testing a hypothesis--Presenting the results of an experiment in tables and diagrams--Making up a story; and reading it--Play-acting--Singing catches--Guessing riddles--Making a joke; telling it--Solving a problem in practical arithmetic--Translating from one language into another--Asking, thanking, cursing, greeting, praying.²⁷

Roughly I take speech activities/language-games to be activities in which <u>utterances</u> are wielded usually in some self-contained, purposeful fashion--according to the constitutive rules of undertaking those activities. Regarding speech activities, it is Pitcher's view that "When Wittgenstein speaks of the uses of words, it is usually this aspect of use that he has in mind."²⁸

Let us take a closer look at what the use of words in speech activities means. As we have seen using words in speech activities means not only using utterances that are correctly formed but also means wielding those utterances in accordance with the correct ways of conducting that activity. Finding out what counts as correctly wielding utterances in speech activities means discovering or recalling rules of or limits to word use. For Wittgenstein knowing what a concept is means knowing what these rules of or limits to word use are. And I take it that describing what a concept is requires describing these limits of use--i.e., mapping the ways in which utterances, related to the word expressing that concept, can and cannot be wielded in the various speech activities in which they normally occur. Looking for, finding, and describing these limits or rules are what we are doing when we are correctly responding to the question "What is X?"

Finding out what counts as correctly wielding utterances in speech activities involves a variety of things. It involves not confusing utterances which are similar in form but dissimilar in use. Though I touched on this kind of confusion (see the discussion on surface and depth grammar) earlier, I present now an example of this kind of confusion as it affects understanding a concept. W. D. Hudson offers us the following for consideration:

The sentence "X is right" is syntactically similar to "X is red"--i.e., similar in "surface grammar." A noun, X, is coupled by the third person singular present indicative of the verb "to be" with an adjective. This sentence "X is red" describes X; it attributes to it a feature which is visible to the normally sighted. This is its "depth grammar." It is a sentence which belongs within the language game of describing physical objects in terms of their colors. Now, there is a temptation to think of "X is right" as though it were similar in depth grammar as well as surface grammar to "X is red." Of course, everyone knows that rightness is not visible as redness is. But "X is right" looks like a description of X just as much as "X is red" does. Because they have assumed that this is what it must be, "moral sense" philosophers and intuitionists generally have assumed: (a) that rightness must be a property of some kind; and (b) that we must "see"

it in some sense of the word. But what if the basic error lies in regarding "X is right" as a description? Its "surface grammar" could have "bewitched" philosophers into mistakenly supposing that such was its "depth grammar."²⁹

Here we see how our understanding of the concept of right or rightness is affected by our confusing utterances which are similar in surface grammar but dissimilar in depth grammar, in particular, by confusing "X is right" with "X is red." Also notice that just as we can avoid mistakes in understanding a concept by not confusing the depth grammar of utterances, so too we can come to a correct understanding of a concept by understanding correctly the depth grammar of utterances.

Though it is not unrelated to the examination of the depth grammar of utterances, a second aspect of what is involved in correctly wielding utterances in speech activities can be distinguished. This aspect is perhaps best described by Gilbert Ryle in the introduction to his book <u>The Concept of Mind</u>. The following is some of what he says there about this aspect:

It is, however, one thing to know how to apply such concepts, quite another to know how to correlate them with one another and with concepts of other sorts. Many people can talk sense with concepts but cannot talk sense about them. . . They are like people who know their way about their own parish, but cannot construct or read a map of it. . . .

To determine the logical geography of concepts is to reveal the logic of the propositions in which they are wielded, that is to say, to show with what other propositions they are consistent and inconsistent, what propositions follow from them and from what propositions they follow. The logical type or category to which a concept belongs is the set of ways in which it is logically legitimate to operate with it.³⁰

The first thing I want to do regarding this passage is to draw attention to the first statement. By the phrase "such concepts" Ryle is referring to what he calls "mental conduct epithets." That is, he is referring to terms we use in speaking of the mind--e.g., "stupid," "logical," "vain," etc. Now, regarding that first statement, it seems to me that Ryle is getting at the same sort of thing that Wittgenstein is when Wittgenstein argues that knowing a concept requires that the logical relationships among its family of concepts be known. More to the point of our current interest though is what Ryle says in the passage about propositions. I take him to be saying that being able to wield utterances correctly in speech activities includes being able to move from one utterance to another according to the rules, implicit or explicit, of understanding that speech activity--that is, being able to tell what propositions follow from them (the propositions in which the concepts are wielded) and from what propositions they follow. Though Ryle gives no example immediately following his statement about determining the logical geography of concepts, his entire book can be taken as exemplifying what he has in mind. As an illustration of what he means, I have taken a passage from his chapter on dispositions and occurrences:

Tendencies are different from capacities and liabilities. 'Would if . . .' differs from 'could'; and 'regularly does . . . when . . .' differs from 'can.' Roughly, to say 'can' is to say that it is not a certainty that something will not be the case, while, to say 'tends,' 'keeps on' or 'is prone,' is to say that it is a good bet that it will be, or was, the case. So 'tends to' implies 'can,' but is not implied by it. 'Fido tends

to howl when the moon shines' says more than 'it is not true that if the moon shines, Fido is silent.' It licenses the hearer not only not to rely on his silence, but positively to expect barking.³¹

Showing that "'tends to' implies 'can,' but is not implied by it" is an instance of what Ryle means when he talks of showing "what propositions follow from them and from what propositions they follow." In the passage, we are shown a rule to appeal to in determining whether our utterances concerning tendencies and capacities are correctly wielded. Furthermore, and the chief point here, the concept of tendency has begun to be distinguished from the concept of capacity. The limits of word use tell us the limits of the concepts expressed by those words.

Notice that Ryle concludes the above passage with an observation about the connection between language and behavior. Saying "Fido tends to howl . . ." goes with an expectation that Fido will bark. A third aspect of correctly wielding utterances in speech activities is knowing the connection between wielding those utterances and behavior. Observe what Pitcher has to say about Wittgenstein's claim regarding the connection between language and behavior:

Wittgenstein was impressed by the fact that to speak a language is to behave in certain highly complex ways-ways, furthermore, which require skill and which can be rightly or wrongly, correctly or incorrectly, done. To speak a language is to exercise certain techniques, to behave in ways which exhibit various abilities. And speech behavior is not an isolated, hermetically sealed mode of behavior, entirely separate from other modes. Linguistic and nonlinguistic behavior are woven together into an intricate organic whole.³²

For Wittgenstein language and behavior are so interwoven that the use of words in speech activities cannot be known without knowing what behavior is part of such use. Knowing how to correctly wield utterances in speech activities means knowing what behavior is part of wielding those utterances and what behavior is not. To illustrate this interweaving of language and behavior I present an example given us by Pitcher:

Consider what is involved in a child's learning the meaning of a new word--let us say, the word 'ball.' It is not enough that the child be able simply to make the sound 'ball' or even to write the word 'ball'; a parrot or an idiot could do that, and not have the slightest notion of what the word meant.³³

Pitcher next asks what more is required if one is said to know the meaning of a word. He suggests that we look at what the child has learned when he has learned the meaning of the word "ball." Clearly more is required also of someone who claims to have the concept of something. We want also to know what someone has learned when they have learned the concept of something. Let us look at what Pitcher has to say next:

To begin with, he has learned to behave in certain ways; he has learned, for example, to reply "Ball" if someone, pointing to a ball, asks "What is this?" And when he himself points to a ball, he again says "Ball" or, even better, "This is a ball."³⁴

Notice that Pitcher says "To begin with, . . ." Though we often consider actions of the above sort (ostensive definitions) sufficient for our concluding that someone has learned the meaning of the term "ball," Pitcher goes on to show that Wittgenstein did not, and thus that more is required before someone can be said to know the meaning of the term "ball." Pitcher argues this in the following:

It is natural to suppose that such a definition uniquely determines the meaning of the word 'ball,' and hence that the child, in being able to repeat the maneuver, must know what that meaning is. But Wittgenstein shows that this supposition is false. In pointing to a ball, one is at the same time pointing to a round thing, to a thing of a certain color (e.g., red), to a thing of a certain size, to a thing of a certain weight, to a thing belonging to a certain person (e.g., Johnny), to <u>one</u> thing, to a thing made of a certain material (e.g., rubber), and so on. Hence, the ostensive definition, by itself, does not uniquely determine the meaning of the word 'ball,' and the child, in repeating it, does not necessarily know what that meaning is.³⁵

Since for Wittgenstein "An ostensive definition can be variously interpreted in <u>every</u> case," knowing the meaning of a term would require something more.³⁶ What more is required? It is the <u>proper</u> interpretation that is required. A child or an adult for that matter may latch onto only one aspect of the thing pointed to as indicative of the meaning. But when the child or adult properly understands, he has learned to use the term "ball" in the variety of ways permitted by the language. He has come by the disposition to exhibit certain behavior, both linguistic and non-linguistic. More precisely, he is disposed to exhibit the proper connections between linguistic and non-linguistic behavior. Pitcher puts it as follows:

What sort of behavior on the part of the child will show that he has interpreted the definition aright, that he knows the meaning of the word 'ball'? All of the following are certainly relevant: if asked to fetch a ball, he brings back a ball; if asked to draw a picture of a ball, he does so; when asked which of several objects is a ball, he picks the right one; he speaks in appropriate ways--e.g., he says such things as "This ball is green and bigger than Susy's" and does not say such things as "That is very ball--much baller than Suzy's." If he behaves in these and similar ways, we say that he has learnt the meaning of the word 'ball,' that he knows what a ball is.³⁷

Though I think it is implicit in what Pitcher says, let me make explicit the fact that knowing what a ball is also requires knowing the similarities and differences between the behavior connected to the use of the term "ball" and the behavior that is connected to the use of each of the terms of the family of which "ball" is a part. The chief point here, however, is that for Wittgenstein there is a logical connection between language and behavior. This means that acting in a way that is not among the set of ways that is embedded in the use of a word is tantamount to showing that one does not know the meaning of that word. Acting within that set of ways is tantamount to showing that one does know the meaning.

As we have now seen, the use of words in speech activities encompasses a good deal. Being able to use a word expressing a concept in speech activities requires being able to correctly form and wield the utterances which are ordinarily a part of those speech activities. Being able to use a word expressing a concept involves knowing that the word may be used differently in different speech activities and knowing what the import of this is. Understanding depth grammar, the logic of propositions, and the connection between language and behavior is necessary to knowing how to correctly wield utterances in speech activities, and thus to knowing how to use a word correctly, and thus to knowing what the concept is that is expressed by that word. The activities of examining depth grammar, the logic of propositions, and the connection between language and behavior help to unearth the rules of use of the word expressing a concept, and thus to unfold the map of the concept, complete with descriptions of how instances of the concept are related and of how that concept is related to its family of concepts. For Wittgenstein knowing a concept is a highly complex undertaking.

Wittgenstein and the Ways of Mapping a Concept

In the first section of this chapter, we saw what Wittgenstein has given as an answer to the question "What is a concept?" He was not stipulating or proposing an answer but was describing his views of what in fact a concept is. His notion of what a concept is requires that certain ways of analysis as opposed to others be undertaken in order to answer the question "What is a concept?" The purpose of this section of Chapter II is to briefly describe some of those ways of analysis that are suggested in the work of Wittgenstein. The giving of this brief description of these ways of analysis is antecedent to my illustrating them more fully using the concept of justice in the next chapter. The description also provides an understanding of the sort of analysis that is necessary to get at the concept of concept.

<u>Mapping a Concept: Two</u> General Considerations

To get at what a concept is, one of the first things we are going to do is <u>not assume</u> that there is one clear, consistent

essentially defined answer. We will not assume that there is or are something or things that are both necessary and sufficient for a concept being a concept. We will not assume, for example, that in order for someone to be said to know something he must have a justified true belief. Nor will we assume that in order for someone to be said to know a concept he must know what is common to a class of things. We will try to begin our analysis afresh. As we have seen. Wittgenstein found that it is not the case that to know what is common to those things called "games" is to know the concept of However he did not conclude from this that "Anything--and dame. nothing--is right."³⁸ That is, neither is it the case that the concept of game has no limits. The concept of game includes a network of connected cases, and it is the limits of this network that need to be known and specified. There are correct and incorrect uses of the term "game." The concepts of justice and concept may be like the concept of game in these respects. In Chapter III we shall do what Wittgenstein would suggest--we shall look and see.

Another general thing we are going to do to get at what a concept is is that we are going to shift our attention from thinking about concepts to thinking about and examining the language which is used to talk about concepts. This means, for example, that the answer to the question "What is the concept of X (concept)?" will be given by answering the question "What is the meaning of the <u>term</u> 'concept'?" We are going to look at the meaning of a word. Since, as we have seen, meaning is use, the answer to the question "What is the meaning of the term 'concept'?" will be given by answering the

question "How is the term 'concept' used in the language?" There are at least two things that shifting our attention should help us with. First it will help us begin to answer the question "What is a concept?" That is, it will give us a place to begin looking for an answer. It will take away the "mental cramp" we get when first asked that question. 39 Most of us should be able to think of an utterance containing the term "concept" and to describe the occasions of its use. Second, shifting our attention to language will help us to avoid bending language to fit some presupposed notion of what a concept is. Language is composed of certain rules for the use of a term or utterance. These rules of use provide certain limits to the use of a term and therefore certain boundaries for the concept expressed by that term. At one and the same time, we are interested in finding these limits and in using them to guide and control our thinking about--our investigation of--what a concept is. As these limits are found they close off investigation in one direction and provide direction for continuing investigation in another. Hence we are not going to assume a notion of concept and then try to fit or bend language about concepts to that notion. Instead we will examine the language of concepts as it is and see to what concept of concept that examination leads us.

<u>Mapping a Concept: Particular</u> <u>Techniques</u>

What are we going to do in particular? Recall that one of the first things Wittgenstein does in answering the question "What is a game?" is to think of actual games. He enumerates instances or

examples of the concept and then looks for the presence or absence of the features of one game among the features of the other games. He does this with the aim of noting how these features are arranged among the games. Notice that Wittgenstein does not begin analysis by giving a definition of game and then giving examples of games.⁴⁰ He begins with an example and compares other examples. Notice too what he has to say about the value of examining concrete cases when pondering questions aimed at eliciting the meaning of a term:

The idea that in order to get clear about the meaning of a general term one had to find the common element in all its applications has shackled philosophical investigation; for it has not only led to no result, but also made the philosopher dismiss as irrelevant the concrete cases, which alone could have helped him to understand the usage of the general term. When Socrates asks the question, "what is knowledge?" he does not even regard it as a <u>preliminary</u> answer to enumerate cases of knowledge. If I wished to find out what sort of thing arithmetic is, I should be very content indeed to have investigated the case of a finite cardinal arithmetic. For

- (a) this would lead me on to all the more complicated cases,
- (b) a finite cardinal arithmetic is not incomplete, it has no gaps which are then filled by the rest of arithmetic.⁴¹

Clearly Wittgenstein is suggesting that enumerating and comparing cases is just what we should do when asked to analyze a concept. Consider further what he says in the following passage:

What does it mean to know what a game is? What does it mean, to know it and not be able to say it? Is this knowledge somehow equivalent to an unformulated definition? So that if it were formulated I should be able to recognize it as the expression of my knowledge? Isn't my knowledge, my concept of game, completely expressed in the explanations that I could give? That is, in my describing examples of various kinds of game; shewing how all sorts of other games can be constructed on the analogy of these; saying that I should scarcely include this or this among games; and so on.⁴² Here again we find talk of the activity of enumerating and comparing cases. Notice also that this activity does not rule out finding something common to all cases or instances of a concept but it does not assume such commonality. Also in enumerating and comparing instances, examples and cases we are examining and appealing to word use. Thus when enumerating instances of the term "game" we are recalling or discovering that the term "game" is applied to those activities which are games. When we compare games by checking the presence or absence of features, we are recalling, discovering or checking whether the term we use to describe a feature of one game is part of the speech activity of describing other games and whether the term, if part of that speech activity, has the same meaning as in the first game.

For example we use the term "driving" in both golf and basketball. But by examining the speech activity associated with each game, that is, the regular utterances in which the term "driving" occurs <u>and</u> the behavior that is ordinarily understood to go with those utterances, we come to see that "driving" is used differently in the discourse about each game. The utterance "He is driving the ball" is used in golf discourse. The utterance "He is driving with the ball" is used in basketball discourse. Clearly we can, by noticing the difference in grammatical construction in each utterance, see that in the first case something is being done <u>to</u> the ball, whereas in the second something is being done <u>with</u> the ball. Thus we have a hint that "driving" is not the same activity in each game. If, further, we examine the behavior that usually goes with

each utterance we not only see that "driving" is different in each case, but we see precisely how it differs in each case. As a result of the use of this procedure we arrive at an understanding of part of the logic of the connections among the instances of the concept of driving. I say "part of the logic of the connections among the instances of the concept of driving" because a more complete mapping would, of course, include other instances--e.g., "driving" as used in "driving an automobile." Hence, in part, the analysis of concepts involves mapping the logic of the connections among the uses of the terms expressing the concepts.

Let me discuss this part of analyzing what a concept is a little further. John Wilson notes that

One of the best ways to start, particularly if we feel completely lost in the territory of a concept, is to pick a <u>model</u> case: that is, an instance which we are absolutely sure is an instance of the concept, something of which we could say "Well, if <u>that</u> isn't an example of so-and-so, then nothing is."⁴³

I mention Wilson both because I believe him to have similar views to those of Wittgenstein and because in his book <u>Thinking with Concepts</u> he records many of the analytic techniques which are suggested by Wittgenstein's work. Here, for example, we see that both talk of beginning with the examination of instances. In the next chapter I will on occasion make use of the model case technique.

So far we have been talking only about the arrangement of features among instances of concepts. However as we saw with the term "game," mapping the arrangement of features among instances is not sufficient for mapping the concept. We must also map the arrangement of features between a concept and its family of concepts. We must be able to distinguish one concept from another. Indeed, we have found in the case of the concept of game that analysis of the arrangement of features among instances necessarily involves us in examining the arrangement of features between the concept of game and its family of concepts. Again I hasten to point out that this examination is in fact an examination of word use. This examination requires that we think of the utterances in which we reqularly find the term, that we think of the set of actions with which those utterances regularly go, and that we compare and contrast that set of actions with the various sets of actions that go with the utterances in which we find the terms that express the family of concepts. The result of this examination will be a series of statements describing in what circumstances we may use the term and in what we may not, describing which sets of actions or pieces of behavior go with the use of a term and which do not, etc. I am saying that it is by comparing and contrasting the use of the various terms that express a family of concepts that we come to know what any particular concept is that is part of that family. What we come to know is the network of similarities and differences in use among these terms. This is expressed by a series of statements describing the limits of such use. Hence, the analysis of concepts also involves mapping the logic of the connections between the uses of a term and the uses of the term's family of terms.

FOOTNOTES--CHAPTER II

¹Isaac J. Quillen and Lavone A. Hanna, <u>Education for Social</u> <u>Competence</u>, rev. ed. (Chicago: Scott Foresman, 1961), p. 187.

²Ludwig Wittgenstein, <u>Philosophical Investigations</u>, 3rd ed. (New York: The Macmillan Company, 1958), p. 31e.

³Ludwig Wittgenstein, <u>The Blue and Brown Books</u> (New York: Harper and Row, 1958), p. 17.

⁴I mean by this statement that many, perhaps most, people assume this unexamined view. However, as Pitcher points out, William James ". . . makes the same point about the terms 'religion' and 'government' that Wittgenstein does about 'game.'" George Pitcher in <u>The Philosophy of Wittgenstein</u> (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964), p. 218. Jacques Barzun makes a similar point about the term "Romanticism" in his <u>Classic, Romantic, and</u> <u>Modern</u> (Garden City: Doubleday and Company, Inc., 1961), p. 3.

⁵Wittgenstein, <u>Philosophical Investigation</u>s, pp. 31e, 32e, passages **65**, 66.

⁶Ibid.

⁷Ibid.

⁸Cf. Thomas F. Green's A without B procedure, e.g., can there be a battle (A) without fighting (B), to be found in his <u>The Activi-</u> <u>ties of Teaching</u> (New York: McGraw-Hill, Inc., 1971), p. 17.

⁹Wittgenstein, <u>Philosophical Investigations</u>, pp. 31e, 32e, passages 65, 66.

¹⁰Ibid.
¹¹Ibid.
¹²Ibid., p. 118e, passage 383.
¹³Ibid., p. 118e, passage 384.

¹⁴John Wilson, <u>Thinking with Concepts</u> (Cambridge: Cambridge University Press, 1971), pp. 57, 58.

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<sup>15</sup>George Pitcher, <u>The Philosophy of Wittgenstein</u> (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964), p. 231.
             <sup>16</sup>Ibid., p. 230.
             <sup>17</sup>Ibid., pp. 230, 231.
             <sup>18</sup>Wilson, pp. 57, 58.
<sup>19</sup>Garth Hallett, <u>A Companion to Wittgenstein's "Philosophi-</u>
<u>cal Investigations</u>" (Ithaca and London: Cornell University Press,
1977), p. 30.
             <sup>20</sup>Pitcher, p. 231.
             <sup>21</sup>Wittgenstein, Philosophical Investigations, p. 32e,
passage 66.
             <sup>22</sup>Pitcher, p. 234.
             <sup>23</sup>Ibid., p. 235.
             <sup>24</sup>Ibid.
             <sup>25</sup>Ibid.
             <sup>26</sup>Wittgenstein, The <u>Blue and Brown Books</u>, p. 179.
             <sup>27</sup>Wittgenstein, <u>Philosophical Investigations</u>, pp. 11e, 12e,
passage 23.
             <sup>28</sup>Pitcher, p. 239.
<sup>29</sup>W. D. Hudson, <u>Modern Moral Philosophy</u> (Garden City: Doubleday and Company, Inc., 1970), p. 49.
<sup>30</sup>Gilbert Ryle, <u>The Concept of Mind</u> (New York: Harper and Row, Publishers, 1949), pp. 7, 8.
             <sup>31</sup>Ibid., p. 131.
             <sup>32</sup>Pitcher, p. 240.
             <sup>33</sup>Ibid.
             <sup>34</sup>Ibid., pp. 240, 241.
             <sup>35</sup>Ibid., p. 241.
             <sup>36</sup>Wittgenstein, <u>Philosophical Investigations</u>, p. 14e,
passage 28.
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³⁷Pitcher, pp. 241, 242.

³⁸Wittgenstein, <u>Philosophical Investigations</u>, p. 36e, passage 77.

³⁹Wittgenstein, <u>The Blue and Brown Books</u>, p. 1.

 40 We are often enjoined to begin analysis by defining our terms. However for Wittgenstein "defining our terms" in the sense of mapping a term's use is the <u>aim</u> of analysis. Incidentally I take John Dewey to be saying something similar to Wittgenstein when in <u>The Theory of the Moral Life</u> (New York: Holt, Rinehart and Winston, Inc., 1960), p. viii Dewey says, "The place for an accurate definition of a subject is at the end of an inquiry rather than at the beginning, but a brief definition will serve to mark out the field."

⁴¹Wittgenstein, <u>The Blue and Brown Books</u>, pp. 19, 20.

⁴²Wittgenstein, <u>Philosophical Investigations</u>, p. 35e, passage

75.

⁴³Wilson, p. 28.

CHAPTER III

THE CONCEPT OF CONCEPT

When we inquire about what it is for something to be just or red or equal, the rational first move is to offer examples, to try and give a list of just actions or red objects or cases of equality. But such a list misses the point of the inquiry. What we want to know is not which actions are just, but what it is in virtue of which actions are just. What is it that enables us to mark off those cases which genuinely belong on our list from those that do not? We need a criterion. Wittgenstein will suggest that the criterion is embodied in a rule, and the rule in a socially established practice. Alasdair MacIntyre, A Short History of Ethics

If language is to be a means of communication there must be agreement not only in definitions but also (queer as this may sound) in judgments.

> Ludwig Wittgenstein, Philosophical Investigations

In the last chapter I suggested, following Wittgenstein, that a concept is the map of uses of the term expressing that concept. I also described what a map of uses is--i.e., how the phrase "map of uses" is used. And I described what a use is--i.e., how the term "use" is used. Following Pitcher as he interprets Wittgenstein, I then described four aspects of using the term "use," the last being inclusive of the others. Also in the last chapter I argued that knowing or having a concept requires knowing the map of uses of the term expressing that concept. In addition I noted that knowing the map of uses requires two things. The first is that we must know the network of similarities and differences--i.e., the logical relationship--among the instances of use of the term. The second is that we must know the network of similarities and differences--i.e., the logical relationships--between the uses of the term and the uses of the terms in the family of terms of which that term is a part.

In this chapter I will do two things. First, using the term "justice," I will describe more fully the techniques of mapping the uses of a term. Second, having used the techniques of mapping the uses of a term, I will summarize my conclusions about the map of the uses of the term "concept"--that is, about what the concept of concept is.

An Illustration of the Analysis of Concepts

<u>Preliminary Comment Regarding the</u> <u>Mapping of the Use of the Terms</u> <u>"Justice" and "Concept</u>"

Before moving to the description of the techniques of mapping using the term "justice," I will make some preliminary comments further clarifying what we may find in looking for the concepts of justice and concept and how we may go about finding them.

So far I have said that mapping the uses of a term expressing a concept required finding the logical relationships among those uses, and between that array of uses and the arrays of uses of the terms expressing concepts in the family of terms expressing concepts of which that term is a part. To get at the map of uses of a term, then, we must undertake three general sorts of investigation. We need to find first the typical, non-technical cases of a term's use and how these cases of use are logically related--i.e., we need to find the stock use of the term. Second we need to find the logical relationships between the stock use of the term and the stock uses of its family of terms. Third we need to find the logical relationships between the map of stock or ordinary use of the term and the map of non-stock (e.g., scientific) use of the term.

Now while it is clear that in getting at the map of uses of a term we must first look for the various uses of a term, it is not entirely clear how we are to go about looking and what initially and ultimately we are to look for. Regarding the problem of what initially to look for in looking for use, I have said that there are four aspects of use and that the aspect that we are chiefly concerned with is the speech activity aspect. We thus want to know the various sorts of speech activities in which a term occurs. In speech activities terms and utterances and behavior are related. Thus in looking for the uses of a term we will look for certain term-utterance-behavior connected activity.

Clearly speech activities are undertaken by people in some context. Thus part of what we want to know in looking for use is whose use and in what context. We can, for example, distinguish between typically scientific use--i.e., stipulated or invented use-and ordinary or stock use. The latter use is that involved in communication in everyday, non-technical contexts. The former use is that involved in communication in technical contexts, for example, stipulations so that hypothesis testing can get underway or

definitions in ways appropriate for use in science. Also there are other sorts of use, and, while we can distinguish these sorts, they are not unrelated as we shall later see. The point of noting that there are various sorts of use is twofold. First being aware of the various sorts of use aids us in knowing what to look for and in how to look. Second, there is an ambiguity in the use of the phrase "the concept of concept." Let us examine this ambiguity. In one sense "the concept of concept" can be used to refer to the map of the various sorts of uses--i.e., the logical relationship among ordinary use, invented use, personal use, programmatic use, etc. In another sense "the concept of concept" can be used to refer to just ordinary use--i.e., to the logical relationship between the stock use of the term and the stock uses of the terms of its family of terms. The phrase "the stock use" is used here not to mean some specialized way in which individual people or particular groups of people use a term, but to mean the way in which a term is widely and generally understood within a given natural language. "Stock use" refers to the basic, received use against which other uses are contrasted and from which other uses are understood. Hence in looking for the concept of concept, we ultimately will be looking for two things--the logical relationships among stock uses of terms in a family, and the logical relationships between stock and non-stock uses of terms in that family.

We now have some idea of what we are going to look for in getting at the concept of justice and the concept of concept in the two respective sections of this chapter.

Now we want to know how we are going to go about looking. While there seems to be no mechanical procedure for gathering uses and for mapping uses, there are certain questions that can be asked and certain techniques that can be applied in the pursuit of such gathering and mapping. In the gathering of uses for examination we will first ask ourselves to think of some typical utterances in which we use the term in question. Second, we will ask what the customary occasions are when those utterances are uttered. Description of those occasions would include description of the behavior that is endemic to such occasions. Third, we will ask ourselves what the stock use is and what its features are. Once the stock use is determined, the logical relationship between it and the stock uses of its family of terms can be determined, thus producing a map of the ordinary use of the term. We can then look at the logical relationship between the map of stock use and other sorts of maps of use--e.g., scientific. In determining these logical relationships certain techniques are helpful. These include use of the aspects of use mentioned in the previous chapter and use of different kinds of cases for drawing out features.

Now that we have a clearer notion of what to look for and of how to proceed, we will continue clarifying that notion by providing an example, namely, examination of the term "justice." We will then examine the concept of concept. The first examination is undertaken largely to illustrate use of the questions and techniques of conceptual analysis--i.e., mapping. What the concept of justice is is of secondary importance. The second examination is undertaken

to get at the concept of concept. What a concept is is of primary importance.

<u>An Illustration of the Analysis</u> of a Concept--Mapping the Use of the Term "Justice"

What is justice? In getting at an answer to this question let us first ask, "In what typical utterances does the term 'justice' customarily occur?" In response to this latter question, consider the following as possible candidates. People regularly say (1) "He got his just deserts"; (2) "Justice is served"; (3) "Justice was meted out"; (4) "There is no justice"; and (5) "You are not being just"--meaning "You are not being fair." Certainly there are other utterances involving uses of the term "justice," but these will serve to get us started and to give us some notion of the complexity of mapping a term's use.

Now that we have these utterances, we want to know and describe the circumstances which occasion their use. That is we want to know and describe the occasions <u>when</u> the utterances are customarily used. Let us now examine our five utterances. "He got his just deserts" is often said about X when X murders Y, is caught, tried, found guilty, sentenced, and sent to prison. Notice that the utterance is also used of X when X murders Y, X is known to be guilty, is not caught or cannot be tried within the law, but nevertheless suffers a timely punishment.

"Justice is served" is said when someone, say X, gets his just deserts. That is,the phrase "Justice is served" functions at times in the same way that "He got his just deserts" does. Yet also of interest is whether they function differently and in what ways. For instance "Justice is served" is often used as an official pronouncement or way of announcing that certain proceedings are completed. "He got his just deserts" can also be a pronouncement, though not ordinarily an official one. And though both may be used to express approval of a particular action, the approval expressed in the former is that of a judge satisfied that all has been done that could be done to reach a verdict. While the approval expressed by the latter is that of someone agreeing with the verdict. The point is that while "Justice is served" is often used in similar circumstances as "He got his just deserts," there also are circumstances where it is correct to use the one but not the other. The circumstances of use are not identical.

"Justice was meted out" is often said on the occasion of someone receiving an appropriate punishment--in particular a punishment that is in proportion to the offense. More generally the phrase is used to describe the apportioning of something in a fair manner. When this apportioning involves the distribution of goods and services, it is known as distributive justice.

The phrase "There is no justice" may be heard as an exclamation on the occasion of someone having stroked a putt (during a round of golf) in an appropriate manner and the "rub of the green"-e.g., an unseen pebble, etc., keeps the ball from going into the cup. About the third or fourth time this happens, X may be overheard to exclaim "There is no justice." We would say of this case

that it is of a kind where X does everything correctly, honestly and forthrightly, yet his undertaking failed nevertheless.

Our final utterance is "You are not being just." This is often said of someone who plays favorites (not in the race track sense), who is unfair, who in other words one day rewards a child for behavior that the next day the child is punished for, or perhaps gives different grades to different students for the same work. The idea of fairness, though not always in the same sense, seems to be an element of these cases.

We now have connected five utterances containing some form of the term "justice" to some of the occasions of their use. The next question is somewhat more difficult than the first two. What aspects of these occasions impel us to use these utterances in connection with the occasions of their use? Why, for example, do we say of the crook who was caught and punished, "He got his just deserts," when we do not say it of the crook who is successful in his crime? The "why" of this question is not one of asking for us to examine our <u>motives</u> for applying a term or phrase to a situation. It is a logical why, one asking us to pick out those features or behaviors of the occasion which are regularly and uniquely endemic to that occasion and similar occasions.

There seem to be two techniques that regularly emerge for getting at what these aspects or behaviors are. One technique is that of comparing phrases similar to the original phrase, but which we would not use to describe the occasion as could be done with the original phrase. Why, for example, do we say about a crook who was

caught and punished, "He got his just deserts" and not "He got away with murder"? What, in other words, makes us use "his just deserts" and not "away with murder" for this and similar occasions of the use of "He got his just deserts"? Why also do we not say about this occasion "He was dealt with arbitrarily"? What, in other words, makes us use "just" rather than "arbitrary" in this case? In this vein we might also ask why we say "He got his just deserts" rather than merely "He got his deserts." Included in this way of proceeding then would be the substitution, in a phrase used to describe an occasion, of terms that are contrary to key terms, of terms that are similar but different in some way and of simpler utterances for complex ones. The point here is that by comparing utterances that we ordinarily use in relation with a particular case with utterances of the sort mentioned above that we do <u>not</u> use, we can come to see what features of the case impel us to use the former utterances.

The second technique for getting at the features of a case that makes us use a particular utterance to describe it is to hold the utterance constant (so to speak) and to invent cases which are similar to the original case but which lack one or more features of the original case. For example, we say of a crook who was caught and punished "He got his just deserts." But do we still say this of the following cases: of an innocent man who was caught and punished, of a crook who did something untoward but was not caught, was caught but not punished, was caught and rewarded? Note that in building these cases we did some of the same things that were done above in the substituting of terms in utterances, namely, substituting

similar key terms--e.g., "man" for "crook"; dropping key terms-e.g., shortening "a crook who was caught and punished" to "a crook who was caught"; substituting opposite meaning terms--e.g., "reward" for "punishment." Again these techniques aid us in ascertaining just what features of a particular case (and cases of similar use) make us use an utterance in connection with that case.

Now what are the features of these five cases? In case one the concepts of punishment and wrongdoing emerge. And it seems that one of the features of some cases of justice is that there be punishment for wrong doing (notice again that this includes cases where someone is intentionally punished and cases where someone is coincidentally punished). In case two we note that cases of justice are not just those with punishment for wrongdoing as a feature--in fact some do not have this element at all. Case two indicates that a feature of some cases of justice is merely that competing claims to something are dealt with satisfactorily. What emerges from case three is the feature of apportionment or distribution and its connection with justice. Another feature of these cases of justice is that things (punishments?) are apportioned according to some principle. Notice that this case opens up the question of what principle or, in other words, how to apportion, based on what. In case four we use the term "justice" for those cases where "fate has not apportioned fairly." We tend to think that all manner of good things come to those who work hard, but alas this is only an empirical (contingent) claim and fate does not always see fit to reward us. In such cases we tend to feel we have been unjustly dealt with

by fate. Finally in case five the notions of consistency and fairness come to the fore. A chief feature of these cases is that someone is consistent in his dealings with others.

Now we have six features of five cases of the use of justice or one of its cognates. Is one and only one of these features the essence of justice? Is there one feature that is common to all cases? Is there a set of necessary and sufficient features that is common to all cases so that some particular case is representative of all? Or do these cases merely exhibit an array of features so that no case is representative of all? Regardless of what the appropriate characterization of the arrangement of features is among these cases of use, what we arrive at is the stock use.

It does appear as though there is an element of fairness involved in all of these cases, but is fairness always understood the same way and if fairness is a commonality and understood the same way, would knowing this commonality enable us to wield the term "justice" and the utterances containing it in an appropriate fashion? That is would knowing that fairness is common to all cases of justice provide us with an ability to recognize cases of justice, of injustice--to recognize the <u>various</u> cases of justice? Would knowing a commonality provide us with an ability to wield the term appropriately? If the stock use of the term "justice" is a set of necesary and sufficient features, perhaps all we need know is this set in order to <u>recognize</u> cases of justice, though we may want to question whether knowing the differences among cases is not also important. If the stock use of the term "justice" is an array of
features connecting cases, then what is necessary is knowing the entire map of these cases, the entire array of features connecting the cases including knowing the similarities <u>and</u> differences among the cases, and thus knowing how to use the term "justice" in connection with its cases.

So far we have been examining the stock use of the term "justice." But recall that knowing the stock use--i.e., the network of similarities and differences among the cases of justice--is not enough for someone to be said to know the concept of justice. We must also know the connection between the stock use of the term "justice" and the stock uses of its family of terms. This consideration brings us to our next task in the process of mapping the use of the term "justice"--that of discovering the stock uses of the family of terms of which justice is a part <u>and</u> comparing, or better, locating the stock use of the term "justice" among the stock uses of justice's family of terms.

Before proceeding, however, some preliminary comments on finding the family of terms expressing concepts of which justice is a part are in order. What is the family of concepts of which justice is a part? As I have said elsewhere, some of these come to the fore in the process of examining the occasions of the use of the term "justice." We have already found it necessary to talk about punishment, fairness, wrongdoing, apportionment or distribution, principle, and consistency. Further investigation along these lines would, I suspect, turn up most of the family of concepts that have been connected with the concept of justice. Another shorter way of getting

at justice's family of concepts (though not without its dangers to our thinking on the matter) would be for us to peruse the works of those writing on justice. Merely by looking over the table of contents of John Rawls' A Theory of Justice, we can collect most of the family of concepts that are usually involved in discussions of justice. Some of these are duty, right, privilege, obligation, equality, rationality, impartiality, the good, liberty, and toleration. Also we may add to the family by using the technique of thinking of those cases of use that are similar to but are not identical with the stock use of justice. We may also use the technique of thinking of those cases of use which are contrary to the stock use of justice. An example of the former case might be that of someone arriving at a just arrangement, yet his doing so was only coincidental. An example of the latter might be someone arriving at an unjust decision and doing so intentionally. In describing these two cases we often use, in some connection, terms expressing such concepts as arbitrariness, power, injustice, favoritism, perfidy, etc. There are other techniques of importance for determining a family of concepts, but these provide us with cases to contrast with cases of the stock use of justice. They thus provide us with the terms expressing the concepts that are a part of justice's family of concepts.

Now notice the enormity and complexity of the task of locating the concept of justice within its family of concepts. The uses (stock and non-stock) of each of the terms of the family must be determined <u>and</u> then compared and contrasted with the use (stock and

non-stock) of the term "justice." Yet an ability to wield properly the term "justice" in connection with its own cases of use and in connection with the cases of use of the terms in its family, observing the limits of use of each term is what is required if we are to be said to know the concept of justice. However, as I have said before, it is not my purpose to give a complete description of the concept of justice. My concern is to use the concept of justice chiefly to examine and illustrate what is involved in knowing a concept. As such just one more thing will be done in connection with this end. I will give an example of the locating of the concept of justice among its family of concepts. However I will not locate the stock use of justice among the stock uses of its family of terms. I will, though, bring out some of the similarities and differences between a case of the use of the term "justice" and a case of the use of the term "arbitrariness" and a case of the use of the term "favoritism." Notice that "arbitrariness" and "favoritism" are only some of the family of terms of which "justice" is a part. They were chosen because they provide us with cases to contrast with those of "justice." Also notice again that I am going to contrast only one case of the use of the term "justice" with one case each of the use of the terms "arbitrariness" and "favoritism." A complete locating would include the mapping of the logical relationships between "justice" and its entire family of terms and would include mapping the logical relationships among all the cases of use, namely, individual stock and non-stock cases of each of the terms.

As an example of a case of the use of the term "justice," I will use the case where competing claims are settled in a satisfactory manner. Some of the particular features of this case are consideration of merit, fairness, consideration, rationality, and appeal to principle. Consider the following instance of this case:

The Fonz turns in his paper to Socrates for a grade. The grade obtained on the paper will be the grade for the course. Socrates gives the paper a 2.5 (returning it to the Fonz) largely because he notices parts of the paper are missing and part of the assignment is not done. The quality of the work done is no better than a 3.0. Two weeks after the end of the course, Socrates gets a letter from the Fonz in which the Fonz includes the missing pages of the assignment asking for a re-evaluation and noting that receiving a 2.5 would just keep the Fonz from getting his mechanic's license (a 3.0 would result in his getting his license).

What is the just thing for Socrates to do? His choice seems to be between keeping the grade as is, at a 2.5, or raising the grade to a 3.0. Also the missing work indicates that the paper is closer to a 2.5 than a 3.0. Suppose Socrates decides to raise the grade to a 3.0. Notice that in this case neither the mere choosing of an alternative, nor what is chosen as a particular alternative, makes this a just decision. Regarding the latter, compare the choice of honesty over deceit. Socrates based his decision on the following considerations (made his decision in the following manner): He considered the consequences of making the choice each way. Going the 2.5 way means that the Fonz does not get his license, yet it also means giving a grade by considering only quality of work-something that appears necessary if one is to promote the ideal of treating students fairly and the ideal of acting consistently. Going the 3.0 way means the Fonz gets his license--means promoting the ideal of giving grades by not just considering quality of work. This appears to mean promoting the ideal of treating students unfairly and acting inconsistently. Socrates reasoned, however, thusly:

> I do not want to promote unfair treatment, nor act inconsistently, and I want to make a decision which is the best or most satisfactory for all concerned. Also making judgments by the case is not necessarily being unfair or inconsistent. As long as I were to allow other students re-evaluations <u>because of missing work</u>, I would not be acting inconsistently. Also as long as for all students I took into account the effect on employment of a last course grade when those occasions arose, then I would not be treating students unfairly. Thus I judge that giving a 3.0 will be defensible to others and in the best interest of the Fonz, thus the decision is a just one.

Now, what are the cases of use of "favoritism" and of "arbitrariness"? Our procedure, remember, is that we think of ordinary utterances containing the terms, we describe the occasion to which the utterance is usually applied, and we look for those features of that occasion that make us use that utterance in connection with that occasion. We say "The teacher is showing favoritism." We say "Where to eat was arbitrarily chosen." We say "The teacher is showing favoritism" when the teacher makes a decision--e.g., as to which of two students is to have the lead in a play, based on factors not relevant to the decision such as perhaps the teacher's liking for motorcycle riders vs. acting ability. More precisely, we say "showing favoritism" when the teacher continues to make decisions based on irrelevent factors, a number of these untoward decisions resulting in the epithet "showing favoritism." A chief feature of the case is not only that the teacher makes decisions not based on merit, but that the other factors which he takes into account are irrelevant to the situation--he shows partiality or bias.

We say "Where to eat was arbitrarily chosen" when the choice was one of caprice or whim; that is, no consideration was given to the various things that might usually go into such a choice--e.g., quality of food, expense, travel time, service, etc. A chief feature of this choice is that not even a consideration of merit is necessarily made.

Though I have not as fully developed the cases of favoritism and arbitrariness as I have that of justice, I think that all have been elucidated sufficiently to function in illustrating what is meant by locating a concept among its family of concepts. And this "locating" is just what I mean by "discovering the network of similarities and differences between a concept and its family of concepts," the final condition for knowing what a concept is.

Suppose Socrates in deciding what to do about the Fonz was to give him a 3.0 largely because Socrates likes those who ride motorcycles and are "cool." Or suppose the teacher received the request for re-evaluation from the Fonz and without considering anything, and merely on impulse, changed it to a 3.0. Would we call these actions just actions--would these be cases of justice? Of course not. But why not? How are these three cases precisely similar and different. Consider the feature of "consideration of merit." Consideration of merit is a feature of the cases of justice and of favoritism but not the case of arbitrariness. Yet in the

case of justice, consideration of merit is a necessary part of the decision, but is not so in the case of favoritism, though it may be. Consider the feature of fairness. Though the term "fairness" is ambiguous, fairness in some sense is a feature of the case of justice, but of neither the case of favoritism nor of arbitrariness. Consider the feature of consideration. In the cases of justice and favoritism, consideration is made before decision is rendered--not so in the case of arbitrariness. Clearly in all three cases choices are made, but it is in how the choices are made that the cases differ. Choices are made in a rational manner (another feature) in the cases of justice and favoritism but not in the case of arbitrariness. But notice further that though choices are made in a rational manner in both of the cases of justice and of favoritism, decisions are still unjust in the case of favoritism. The difference is that in cases of justice, appeal is made to some principle (another feature)-utilitarian, aesthetic, general satisfaction, fairness, etc.--whereas in cases of favoritism, appeal to principle is not involved.² I think that enough has now been done to illustrate the drawing of part of the network of similarities and differences between the concept of justice and the concepts of favoritism and arbitrariness. I might add that in one sense the array of sentences expressing the above network expresses, in part, the concept of justice.

What I have done in this last paragraph is map <u>cases</u> of use. Each of the cases of use of "justice," "favoritism," and "arbitrariness" <u>may</u> be <u>the stock</u> use in the sense of each case being representative (containing the necessary and sufficient features) of all

cases of use of the three terms. If so, we have begun to get at the ordinary concept of justice. However, each of the cases of use may be only cases of some uses of "justice," "favoritism," and "arbitrariness." If the latter is the case (as I have suggested that it is with "justice"), then to get at the ordinary concept of justice, the array of cases of use that is the stock use of each of the concepts of justice, favoritism, and arbitrariness needs to be determined. And then the network of similarities and differences between the array of cases of use that is the stock use of "justice" and the stock uses of "favoritism" and "arbitrariness" needs to be mapped. Finally, to get <u>the concept</u> of justice, the logical relationships must be determining the logical relationships between the ordinary concept of justice and all non-ordinary concepts of justice. 3

The Concept of Concept--A Summary of the Use of the Term "Concept"

So far I have argued that a concept is a map of uses of the term expressing that concept. Also I have said that a map of the uses of a term can be understood to mean both the particular map of the stock use of a term and the stock uses of its family of terms, and the map of the map of stock uses and non-stock uses. Thus in mapping the concept of concept we must understand the connections between the stock use of "concept" and the stock uses of its family of terms, and we must understand the connections between the map of the stock use of "concept" and non-stock uses. Now, rather than

undertake here a full mapping of the concept of concept (something that may require volumes), I will merely summarize some of my conclusions regarding the use of the term "concept."

- We use the term "concept" to describe that which general terms express in contrast to that which uniquely referring expressions express. The general term "chair" applies to any chair whatever. The uniquely referring expression "the present king of France" applies to one, and only one, person.
- 2. We use the term "concept" to describe that which general terms express in contrast to that which certain sentences express. We use certain sentences to express facts or generalizations. We do not use sentences that express facts or generalizations to express concepts. We do not use the sentence "Caesar's blood type was AB" to express a concept.
- 3. We use the term "conceptual" (a cognate of "concept") to refer to those kinds of sentences that express definitions. The sentence "All bachelors are unmarried" expresses a definition and a definition is a conceptual claim. Conceptual claims in contrast to factual claims are shown to be true or false by an analysis of the use of the terms of the claim. Thus the factual claim "Caesar's blood type is AB" is is shown true or false in principle by scientific investigation. The conceptual claim "All bachelors are unmarried" is shown true or false by an analysis of the terms "bachelor" and "unmarried."
- 4. We use the terms "concept" and "definition" differently. We use the term "concept" to indicate something more than that for which we use the term "definition." One can know that a bachelor is an unmarried man and can understand what being an unmarried man means and still not know the concept of bachelor. We might say that knowing a, or the definition of, bachelor is to have a limited concept. However, knowing the concept of bachelor requires more than knowing a use of the term "bachelor"-i.e., knowing that "bachelor" is used to mean unmarried man. It requires knowing the use of the term "bachelor" and knowing the logical relations between the use of the term and its family of terms. Thus concepts and definitions are related but not identical.

Note here that I have, in part, mapped the logical relations among the terms "concept," "definition," "uniquely referring expressions," and "fact expressions."

- 5. We use the term "concept" to indicate terms that admit of essential definition and terms that do not. Probably the stock use of "triangle" is to express triangles, each of which has three sides and interior angles that sum to 180°. These features are necessary and sufficient for something to be a triangle. The stock use of "game," if Wittgenstein's analysis holds, is to express games, each of which has features that are different, and none of which has features necessary and sufficient for all to be games. What is the stock use of "bachelor"? Are the features "unmarried" and "man" necessary and sufficient for something to be a bachelor? Regardless of how we answer these questions, knowing only the stock use is having a limited concept.
- 6. We use the term "concept" to indicate that which can be taught. Concepts are features of culture that are transmitted. What is transmitted is the correct use of terms in speech activities, including certain word-behavior, word-action connections.
- 7. We use the term "concept" to indicate that which is relatively fixed and known. Thus one may correctly or incorrectly use concept-terms. It is on occasion appropriate to say "The student has a limited or faulty concept of X."
- 8. We use the term "concept" to indicate that which can be known or mastered by degrees. We say "He has not yet fully mastered the concept."
- 9. We use the term "concept" to indicate that which is an interrelation of concepts. Knowing any concept requires knowing some other concepts. Concepts are interrelated. One can know some of the uses of a concept-term and one can know some of the relationships among some concepts. It is in this sense that knowing a concept is a matter of degree.
- 10. We use the term "concept" to describe that which is modifiable for certain purposes. Concepts may be modified for scientific purposes. The term "concept"

is used to refer to those modified concepts. Thus, fully knowing the use of "concept" requires knowing the non-stock--e.g., scientific--uses of the term.

The foregoing uses have been arrived at by an examination of the use of the term "concept" and its cognates in our language. When one understands these uses (and doubtless others not here called attention to) and the relationships among them, one knows the concept of concept. One has a map of the use of the term "concept."

FOOTNOTES--CHAPTER III

¹John Rawls, <u>A Theory of Justice</u> (Cambridge: The Belknap Press of Harvard University Press, 1971).

²Some may want to distinguish justice from favoritism by arguing that rationality plays a part in cases of justice but not in cases of favoritism. This issue clearly requires as a first step to resolution a clarification of the concept of rationality-i.e., a mapping of the use of the term "rationality."

³Such a complete mapping is clearly not usually necessary to indicate knowledge of the concept. A good example of a booklength mapping of concepts is John Dewey's <u>Experience and Education</u> (New York: The Macmillan Company, 1938).

CHAPTER IV

THE CONCEPT OF CONCEPT AND THE SOCIAL STUDIES

There is a tendency rooted in our usual forms of expression, to think that the man who has learnt to understand a general term, say, the term "leaf", has thereby come to possess a kind of general picture of a leaf, as opposed to pictures of particular leaves. . . . We say that he sees what is in common to all these leaves; and this is true if we mean that he can on being asked tell us certain features or properties which they have in common. But we are inclined to think that the general idea of a leaf is something like a visual image, but one which only contains what is common to all leaves. . . This again is connected with the idea that the meaning of a word is an image, or a thing correlated to the word. (This roughly means, we are looking at words as though they all were proper names, and we then confuse the bearer of a name with the meaning of the name.) Ludwig Wittgenstein. The Blue and Brown Books

Philosophers constantly see the method of science before their eyes, and are irresistibly tempted to ask and answer questions in the way science does.

> Ludwig Wittgenstein, The Blue and Brown Books

Chapter I sampled the variety of ways in which a concept is viewed by some social studies educators. We noted that little work had been done by most in determining just what a concept is--yet many were concerned to identify central social studies concepts and to teach these to children. We noted that their views of what a concept is bore upon the ways they developed for teaching concepts.

We then held their views of what a concept is to be inadequate and thus, too, their ways of teaching concepts. In Chapter II we appealed to the work of Wittgenstein and ordinary language philosophy for an accurate understanding of what a concept is and for some ways of analyzing (mapping) concepts. One of my proposals is that these ways of mapping concepts ought to be used by teachers and taught to children. I believe with social studies educators that children ought to have a grasp of what a concept is and of what the basic concepts of the social studies are. How else can we understand what social studies is, what practitioners do? Teaching these ways of mapping concepts will provide better understanding of what a concept is and thus of what the basic concepts of the social studies are. Hence. it is my intent in this chapter to describe and criticize some of the views of what a concept is that are held by those social studies educators writing on concepts, to describe and criticize the ways of teaching concepts that are suggested by those authors, and to compare and contrast the view I have developed in the preceding chapters with those views of concept and ways of teaching concepts. Throughout this undertaking I will illustrate by using certain social studies concepts.

While, as I noted in Chapter I, there are many writing in the social studies on such questions as "What is a concept?" and "How ought we to teach a concept?" there are some authors whose views, while distinct from each other, are representative of the thinking of some of the others. Three of these representative views are

those of (1) Maurice P. Hunt and Lawrence E. Metcalf, to be found in their Teaching High School Social Studies, 1968; (2) Barry K. Beyer to be found in his Inquiry in the Social Studies Classroom, 1971; and (3) Robert F. Madgic, to be found in his Relevance and the Social Studies, A Conceptual Analysis, 1973. Hunt and Metcalf's text is well known in the social studies field. Edgar B. Wesley and Stanley P. Wronski, also well known for their text Teaching Secondary Social Studies in a World Society, 1973, sixth edition (in their chapter, "Developing Concepts and Generalizations"), make use of the work of Beyer. Madgic's work is fairly new, and I mention it here not just because he represents a different view from that of both Hunt and Metcalf and Beyer, but also because his approach, in part, ". . . stems from a philosophical position referred to as ordinary language philosophy,"¹ and that can fairly be said of the approach I have taken, though we diverge in our understanding and application of ordinary language philosophy. However that may be, it is my intent in this chapter to examine only the views of Hunt and Metcalf and of Bever.

In what follows, then, I will describe what each views a concept to be and how each would go about teaching a concept. I will then suggest certain difficulties with these approaches and using examples of social studies concepts indicate how the approach I have elucidated in the previous chapters differs from theirs. Finally, though the Beyer book was written after the Hunt and Metcalf text, I will discuss Beyer first for reasons which I trust will later become apparent.

Beyer on Concepts

<u>Preliminary Comments</u> on Beyer's View

Before getting at Beyer's view of concepts, a few comments that have bearing upon the formulation of his view are in order. Beyer is an advocate of "inquiry thinking" and of "inquiry teaching." Inquiry teaching is the teaching of a method of knowing, namely, inquiry thinking. Inquiry thinking is largely that which we know as the scientific method. For Beyer such thinking consists of five steps: defining a purpose for inquiry, hypothesizing, testing the hypothesis, drawing conclusions, and applying the conclusions to new data and generalizing.² Because of the explosion of knowledge and rapidity of change that characterize life today, among other things, Beyer feels that rather than teaching what is "right" or "true" we must give students a means for deciding for themselves what is "right" or "true"--in itself a most worthy suggestion. However, Beyer apparently feels that there is no truth or knowledge; there is only what we think is truth or knowledge. And this means, for Beyer, that each of us has a different perception of whether something is knowledge or not. This means then, for Beyer, that we cannot teach what knowledge is; we can only show others how to rationally arrive at what knowledge is for them. Consider what he says regarding this in the following excerpts:

1. Moreover, there is today considerable peddling of what others \underline{think} is true as it if were the absolute truth.

2. Who should decide what is right? Textbooks? Professors? News media? Teachers?

3. Questions such as those just listed and the belief that anyone can really "tell it like it is" (or was) are naive to say the least. In all frankness we don't know the way it is--or was--or even will be. The best we can do is tell it like we <u>think</u> it is. I emphasize the word <u>think</u>. Each of us thinks differently. What we think--or know--is, among other things, a product of the questions we ask, our methods of investigation, the quality of the information we use, and our own unique frames of reference. These differ for each one of us.

Apparently we forget that most of what is passed off as knowledge in history and the social sciences is nothing more than interpretation--and someone else's at that.

4. Should it be a function of social studies to stuff children's minds with other peoples' perceptions of reality? To make them first sponges and then parrots? To make their heads nothing more than data storage bins--bins full of answers to questions they never asked? To teach them to accept unquestioningly someone else's perception of "the way it is"--or was? Or should it be a function of social studies to teach youngsters how to establish their own perceptions of reality in more honest, rational, and reliable ways, how to evaluate what others present as the truth, how to find out for themselves?

The answer, it seems to me, is obvious. Our social studies programs must teaching children <u>how to know</u>--not just what someone else thinks or believes he knows.³

Beyer's advocacy of inquiry thinking and his attendant belief that there is no knowledge, only what each of us <u>thinks</u> is knowledge, bears upon his view of concept in two ways. First he holds that "inquiry thinking" is the best way of coming to <u>form</u> concepts. He concludes (or assumes) at the end of his chapter "Concepts and Inquiry Teaching" that "Inquiry teaching is a strategy best suited to conceptualizing in the classroom."⁴ We later will see that Hunt and Metcalf and I disagree with this assertion. Second he apparently holds that there can be no appropriate understanding of a concept. Consider the following:

Concepts thus do not exist ready-made just waiting to be discovered and learned. There is no right way to imagine any given concept. They are simply inventions created individually in order to help make experience meaningful. The image of any given concept will vary according to the background or experience of whoever is conceptualizing. Even among specialists, indeed especially among them, it is impossible to get unanimous agreement about the precise nature of a given concept. Yet in many cases a number of different conceptualizations of the same idea may be remarkably similar in the basic categories included. Moreover, one person's concept of any given thing may be more valid than another's in the sense that his experience has led him to a broader. more inclusive, and thus more universally applicable concept. Descriptions of such concepts may be useful as guides to conceptualizing. However, such images should never be treated as the exact substance of what is to be learned.⁵

Notice here that, for Beyer, concepts are inventions, and further that this seems to mean that we cannot find or judge that someone's concept of something is mistaken. Beyer does admit to calling a concept or conception "valid," but this merely means that one's understanding of a concept is larger, more complete. No mention is made by Beyer, nor could there be, given his concept of concept, of "valid" referring to the correctness of someone's understanding of a concept (and of someone's understanding of the concept of concept). As we shall see later, Hunt and Metcalf also view concepts as inventions, though of a different sort. One of the major difficulties with the views of both Beyer and Hunt and Metcalf is their view of concepts as only inventions. While it is true that in some anthropomorphic sense all concepts are invented as distinct from qod-given, it is not true that all concepts are inventions. We distinguish between a common ordinary understanding of a concept and a new, stipulated (e.g., scientific) understanding of a concept; that is, between the ordinary use of a term and the scientific use

of a term. Even science distinguishes between its established use of a term and its new, invented uses of a term. Indeed it is only by understanding the ordinary use of a term that we can understand a scientific use, and it is only by understanding an ordinary scientific use that we can understand a new scientific use. The point here is that my understanding of the concept of concept is inclusive of "concepts as inventions" but not limited to that. Thus I and, as we have seen, Wittgenstein, differ with and object to the work of Beyer and of Hunt and Metcalf. Terms can be correctly and incorrectly used, as well as used in new ways. Thus concepts can be understood (correctly mapped) and misunderstood (incorrectly mapped), as well as modified (newly mapped).

I will have more to say later of the difficulties with Beyer's and Hunt and Metcalf's views of what concepts are and of the similarities and differences between their understanding and mine. However, note again the two difficulties that have been discussed: (1) that inquiry thinking and teaching is the best way of coming to form and teach concepts, and (2) that concepts are inventions or that the scientific use of the term "concept" is the only use. Notice that just our brief discussion of these assertions raises further questions about the teaching of concepts in the social studies. Is it appropriate to structure the teaching of all concepts, of any, in the social studies according to the scientific model of what a concept is? Is social studies only or at all social science? It is not my intent to examine these questions here, but I submit that consideration cannot be given to the

teaching of concepts in the social studies without also giving consideration to these sorts of questions.

Beyer's View of What a Concept Is and of How a Concept Should be Taught

We have seen that certain of Beyer's assumptions have bearing on what he thinks a concept is. Let us look further at what a concept is for Beyer. According to Beyer, a concept is a mental image of something--of anything. Words or phrases function to conjure up the images that are related to those words or phrases. Yet concepts are not mere words, as words are only labels used to suggest concepts.

Because they are so imprecise and usually mean different things to different people, words cannot thoroughly describe a specific concept. Neither can simple definitions. Concepts are much too complex for that.⁶

For Beyer, a concept contains a number of interrelated elements. Beyer presents a diagram of ovals and arrows of a concept of decision making. Elements that apparently <u>any political scientist thinks</u> <u>about</u> when thinking of decision making (e.g., decision maker, process of, factors shaping, etc.) are ovaled, and arrows are drawn connecting the ovaled elements to an oval containing the term "decision making." Beyer points out that each element contains further elements--e.g., the element "<u>decision maker</u>" has such elements as "traits," "training," etc. We are thus provided with a diagram spacing those elements which have anything to do with decision making (see Figure 1, p. 81). Beyer says of this diagram that it

. . . represents a mental image of a concept, but is not the only way this concept may be imagined. Different people may conceptualize it differently because of the



- Figure 1.--The Diagram of Beyer's Image of a Concept of Decision Making.
- SOURCE: Barry K. Beyer, <u>Inquiry in the Social Studies Classroom</u>: <u>A Strategy for Teaching</u> (Columbus, Ohio: Charles E. <u>Merrill Publishing Co.</u>, 1971), p. 114.

way they go about it, the questions they ask, the nature of the data used, and the degree of intellectual inquiry they employ. Some may not include all the elements shown here, while others may include additional or different elements. A mental image is indeed an individual impression.⁷

Notice that if we consider concepts as images and images as entirely individual, it follows that there is nothing that is the essential nature of a concept, nor that is the mapping of uses that is a concept. The only thing that could count as <u>the</u> concept of X would be the entire collection of individual images of X. Holding this view of what a concept is and having a desire to avoid the mere presenting or telling of someone else's version of a concept to passive students, Beyer avers that "Involving students in learning activities that require them to invent their own conceptual images about a particular thing is a much more useful approach to introducing students to a concept and to the process of conceptualizing."⁸ Notice that though the approach is justified by appeal to its being more useful, the approach is compatible with Beyer's view that concepts are images which are individual impressions and inventions.

<u>Beyer's View of Forming a</u> Concept of Landscape

There are four elements to Beyer's approach to forming concepts or "process of conceptualizing." These steps according to Beyer are roughly congruent to those that we undergo in solving some problem, in testing empirical generalizations. When applied to forming concepts the elements of this process are called by Beyer "brainstorming," "grouping or classifying," "identifying interrelationships," and "synthesizing."⁹ Brainstorming is ". . . listing

all the various implications of a word or phrase, its synonyms, or its associated terms."¹⁰ Some of the <u>terms or features</u> Beyer <u>associates</u> with the term "landscape" are homes, trees, erosion, schools, shrubs, parks, hills, valleys, roads, billboards, etc.

Grouping is explained as follows: "Once these associated terms or features have been listed, they <u>must</u> be categorized. All those terms with similar features should be placed in a single group and the group labeled with a term <u>describing the common element</u>."¹¹ (My underlining.) Applying this categorizing step to his list, Beyer reports the following classifications. First, items that are man-made (homes, parks, schools, roads, billboards) and items that are natural (trees, erosion, shrubs, hills, valleys). Second, further division into six groups: (1) structures that house people or property (homes, schools); (2) structures that service people (billboards, roads); (3) recreational structures (parks); (4) things that grow on the ground (trees, shrubs), (5) surface features (hills, valleys), and (6) one way that surface features evolve (erosion).

The third step is that of examining the groups ". . . to determine any relationships which might exist among them. Some will appear to be elements of major significance while others may be only related to these elements."¹² It is not clear here just how Beyer is using the term "relationship." Rather than state what relationships he had found among the groups of terms or features associated with the term "landscape," Beyer refers us to a diagram of his mental image (see Figure 2, page 84). One interpretation of the diagram is that based on the size and spacing of the ovals, the elements



- Figure 2.--The Diagram Representing Beyer's Mental Image of a Concept of Landscape.
- SOURCE: Barry K. Beyer, <u>Inquiry in the Social Studies Classroom</u>: <u>A Strategy for Teaching</u> (Columbus, Ohio: Charles E. Merrill Publishing Co., 1971), p. 122.

"man-made features" and "natural features" are of "major significance" and the groups numbered 1 through 6 are "only related to" the "major significance" elements.

The last step is that of synthesizing. This is done by arranging the groups ". . . mentally or visually as in a diagram-so as to make these relationships readily apparent."¹³ The result of this four-step procedure is, according to Beyer, a concept--a mental image of "landscape."

Beyer says inventing a mental image is only the first of two steps in the process of conceptualizing. The second step is one of "broadening" the concept.¹⁴ Broadening involves using the invented image "to analyze new data." The object of such analysis of new data is both to reinforce the basic elements of the concept and to add new dimensions. Beyer views the student as working with three sorts of data. Thus students should do the following: (1) students should reinforce their invented concept by examining data that exhibits the same features as the invented concept, (2) students should add to their concept by examining data that has commonly accepted features of the concept but which are not part of the students' invented concept, and (3) students should reinforce the essential elements of their concept by examining and contrasting with their concept data that are similar but lacking in basic elements. Completion of this two-step process of conceptualizing is sufficient, according to Beyer, for someone to be said to know a concept--though he adds that we are continually broadening our concept.

Difficulties with Beyer's View

We now have some understanding of Beyer's view of what a concept is and of the bearing of that view on the question of how to teach concepts in the social studies. My next concern is to describe some of the difficulties with this position. Following that I will apply to the term "landscape" the method for analyzing concepts that was described in the previous chapters. At certain points in the mapping of the term "landscape" I will return to Beyer's formulation of a concept of landscape and contrast that formulation with mine and then point out some of the difficulties with his formulation.

In describing Beyer's position, I have already mentioned some difficulties with that position. Not all concepts are inventions, in the sense that we are free to understand a concept in any way that suits us. Even those concepts of science that are or were inventions have definite agreed-upon boundaries which are capable of being misunderstood. And while there usually is no one essential use of a term (a particular fixed boundary to a concept), neither can a term be used in any way whatsoever. As we have seen, there are definite uses and misuses for a term, and the map of these uses is something that is accurately understood or misunderstood. The map is neither an invention in Beyer's sense nor something that a student may map in any way that suits him. The limits of use might be affected by the kinds of invention that language undergoes from time to time, but in general such limits are relatively permanent. Hence there is a certain mapping of the use of a term which is

correct. Furthermore, it is the student's responsibility to understand the correct mapping of that term. An understanding of a concept can be "valid" not only in Beyer's sense of being larger or more complete, but also in the sense of being <u>correct</u>. Thus to understand or form a concept is not to invent one's own concept, but is to learn the correct ways of using and the limits of use of the word that expresses that concept.

I noted earlier that Beyer argues that inquiry thinking is the best method of "conceptualizing" in the classroom. Given his view of what a concept is, his method may very well be the best. However, his view is mistaken in parts and inadequate in others. Though it does not follow that if his view is faulty then his method is not the best; nevertheless his method is not the best. More accurately, his method is neither the best nor the worst; it is just inappropriate to the task. Beyer assumes both a view of what a concept is and a method of analysis. He does not first look and see in the sense I have described. While there is no doubt that the inquiry method is appropriate to arriving at generalizations or resolutions to situations, it is not at all clear that the method can be transferred for use in the analysis of concepts. Nor is it clear that inquiry teaching is appropriate to the teaching of concepts. Concepts are not generalizations. The task is to learn a concept, to get an understanding of the map of uses of a term expressing a concept. The inquiry method is too simplistic for such a task and its use produces an artificial and misleading configuration of use. It is too simplistic, for example, because it commits in

step two the sin of requiring that "terms or features" be grouped by their common element--and apparently any common element will do. I have spoken earlier of the difficulty that arises from assuming commonality. That use of the method results in an artificial and misleading configuration may be seen by examining what we are asked to do in step three. In step three we are asked to determine the relationships among our constructed groups. Yet this seems merely to mean arranging the groups such that more "significance" is given in one's image to the "features" that are inclusive of more terms than to the "features" that are inclusive of fewer terms. This may be a "relationship," but it is hardly one of much use in understanding the concept of landscape. We instead want to know what counts as a landscape, what the precise relationship (network of similarities and differences) is between a landscape and, for example, a park, a seascape, a moonscape, etc. Are all parks landscapes? Are any? Are parks sometimes landscapes and sometimes not? When? Do we use the term "landscape" only for something that is painted on canvas? Asking for relationships of major and minor significance among artificial groups leads us away from an understanding of the configuration of use that is the result of asking the sorts of questions just mentioned. And finally, the inquiry method produces what it is expected to--a diagram that is no more enlightening as to what a concept is than would be a collection of all the images each of us has.

Mapping the Use of "Landscape"

Let us now examine the concept of landscape using the "look and see" method. First we will try to think of utterances containing the term. Notice that appealing to bits of language--to how we talk--helps prevent us from assuming things about a concept, such as that it is an invention, that it has one meaning, that it has an essence, that it has one use, etc. The following typical utterances contain the term "landscape" or one of its cognates: (1) "Constable is a landscape painter"; (2) "He is in landscape architecture"; (3) "Oh, what a beautiful landscape!"; and (4) "Landscaping makes a house." We next want to describe the occasions when each of these utterances is used. We say "Constable is a landscape painter" when we are distinguishing the kinds of subjects for which painters are known. We say "He is in landscape architecture" when talking of someone's profession or course of studies. We gush "Oh, what a beautiful landscape!" upon being moved after viewing a wide panorama--e.g., from a mountaintop. We say "Landscaping makes a house" upon noting that houses that stand on barren land are not as attractive as houses that are surrounded by shrubs, trees, flowers, walkways, etc.

Next we want to know what features of these occasions impel us to use the term "landscape." In the first case we note that we use the term to describe certain painted scenes, and as we recall those scenes we remember them to be not of cities, not of farm buildings, not of rivers, but of a wide expanse of land which might contain farm buildings, rivers, fields and cities all in the same

painting. In case two we use the term "landscape" to describe a kind of planned reworking of an environment so as to give it some of the flavor of a natural setting. We call the architecture "landscape architecture" because it involves designing not buildings or houses, but designing the environments around the buildings or houses--it involves the placement of trees, paths, shrubs, etc. for aesthetic effect. Here "landscape" is used to indicate something as small as an arrangement of a few trees, shrubs, and flowers around a house. In case three a feature of the case, in contrast to case one, is that "landscape" is used to refer to a physical setting rather than a painted setting. Also we think of a wide expanse, a panorama, either of natural objects or of man-made, or of both. In case four we use the term "landscaping" to describe the "look" of a house in its setting and to refer to the activity of molding that setting in accordance with some principle, such as the aesthetic. Now we have some uses of the term "landscape" and its cognates, and some notion of what features each use has and how those features are arrayed among the uses. We thus have a start on the mapping--i.e., of when to use the term and when not, of what counts as a landscape and what does not.

Let us return for a moment to Beyer's formulation. It is important to note that the "image" that Beyer's inquiry method produces aids us very little in knowing how to wield a term. Images/ diagrams of the sort Beyer produces can be misleading in two ways. First the so-called essential or common elements are extracted and used as a model against which new or different cases are compared.

The new or different cases must have the same set of features as the model to count as a case of the concept--e.g., of a landscape. This view has the effect of ruling out legitimate cases of the concept. If, for example, the necessary features of the concept of landscape are (1) man-made things and (2) natural things, then a view of an expanse of land containing no man-made things would not be a landscape. Yet we often call such views landscapes. Now in all fairness to Beyer, he does not produce a restricted "image" of this sort. He is concerned to construct an "image" containing all of the "features" of the concept. But this "image" is misleading in a second way, this time by including too much. Beyer's "image" provides us with no way of deciding what is and is not a landscape. Is a park a landscape? Is a house? Is Brazil? Is a small plot of ground? Is a view of an expanse a landscape rather than the land itself? Is pulling weeds from your lawn landscaping? Is building railroads landscaping? Beyer's diagram offers us no help in determining these things. Indeed given Beyer's view that concepts are individual inventions, there can be no determining these things. In sum neither the "bare bones" image nor the all-inclusive image provides help in using the term "landscape" correctly--i.e., in knowing the concept of landscape. In the first instance the error is that of using only one case as a model. In the second the error is that of using no cases (i.e., Beyer begins not by examining cases, but by grouping associated terms or features); his image is produced apart from consideration of cases. Only a mapping of the uses of a term

(i.e., of word-case connections) can prevent these errors and provide us with knowledge of a concept.

Our final step in examining a concept is to locate the uses of a term among the uses of the terms of its family of terms--i.e., locate the concept among its family of concepts. For the term "landscape" this means comparing its cases of use to related cases, contrary cases, borderline cases--i.e., to the cases of use of its family of terms. The ambiguity of the term "landscape" (i.e., that it refers to a kind of painting or artist's view, that it refers to a view of a physical expanse of land, and that it refers to a manmade, natural looking area) has bearing on our collecting "landscape's" family of terms. The ambiguity means that there will be three different but related families of terms. In the painting context "landscape" needs to be located among such concepts as sea pictures, portraits, modern art, and object studies. In the manmade context the concept of landscape needs to be located among such concepts as natural settings, unplanned placement of vegetation, and the non-landscaped barrenness of land. In the natural land expanse context the concept of landscape needs to be located among such concepts as seascapes (a related case), "man-made scapes" (another related case if attempt is made to mirror a natural setting; a contrary case if design is unnatural--e.g., an inner-city skyscraper and its surrounding area of Tarmac, glass and cement), subdivisions (perhaps a borderline case), panoramas, scenes, views, and perhaps some sort of invented case. Since my purpose here is illustrative, I will confine further remarks to the natural land expanse use of

"landscape." Even so, knowing of the other uses and of their relation to the uses of their families of terms is part of knowing the concept of landscape.

Now let us briefly elicit some of the relationships between "landscape" as a view of natural land expanse and the family of terms noted above. Clearly the chief difference between a seascape and a landscape is that the latter is a view of a natural expanse of land and the former of the sea. Most of the other aspects of each are similar. A seascape must be a view of a natural expanse of the Notice though what happens when we compare landscape and sea. seascape to "man-made scape" (actually our second sense of the ambiguity). It makes sense to talk of landscaping a piece of land or new building complex, but not to talk of seascaping a piece of sea. Thus land has the aspect of being capable of being modified (landscaped), whereas the sea (seascaped?) does not. So landscape and seascape are different also in that human intervention is an aspect of the one concept but not the other. Also when landscaping is done it ordinarily is done with an eye to making the result as near natural looking as possible. Thus a landscape in the sense we are discussing is not--cannot be--man-made. However, it is similar to a "man-made scape" in that both have a natural aspect--though the difference (one being natural, one being like natural) is of more importance in knowing how to wield the words.

Comparing a contrary case gives us even more limits and relationships. As I have said, it strikes me that a view of an inner-city skyscraper and perhaps of the city itself, are <u>not</u>

landscapes <u>and</u> are all that is contrary to what a landscape is. A view of a skyscraper is limited in scope, and the view is of manmade, unnatural design. It is doubtful even that a view of the city itself is a landscape. It may be that a view of the city and surrounding countryside is a landscape (a borderline case). Definitely a view of an expanse of unpopulated natural country is a landscape. Finally we might note, without going into detail, that all landscapes are panoramas, or scenes, or views, or expanses, but not vice versa.

Comparison with Beyer's View and Further Appraisal

We now have a sample of the "location" of the term "landscape" among its family of terms. We arrived at this "location" by comparing the uses we found of the term "landscape" to the uses we found of "landscape's" family of terms. That is we compared a case of use of "landscape" with the cases of use (e.g., borderline, related, contrary) that make up the family of uses of the terms of "landscape's" family of terms. Thus in teaching students concepts we want to ask the sorts of questions, to carry on the sorts of discussions, that help students to do this comparing and this "locating." There are some similarities to Beyer's "broadening a concept." Chief among these is that locating a concept among its family of concepts is in some respects similar to what, I take it, Beyer has in mind when he talks of <u>examining new data</u>; that is, when he talks of data that is ". . . similar but lacks the basic ingredients of the concept . . ."¹⁵ and of contrasting that new data

with the essential elements of the concept in order to reinforce those elements. But how does this aspect of Beyer's "broadening" provide us with an understanding of the limits of use of the term "landscape"? What cases do we look for to contrast with "landscape"? Remember the essential elements of "landscape," for Beyer, are man-made features and natural features, further subdivided into housing, service, and recreational structures; and evolution, surface features, and vegetation, respectively. Were we to use this as a model of what counts as a landscape, for finding cases of landscape, we would either rule out many of the legitimate cases of landscape we discovered by locating the concept among its family of concepts or we would include too many cases--legitimate and otherwise. Also merely including all legitimate cases still leaves us with no way of getting at the relationship among legitimate cases and between legitimate cases and illegitimate cases. The cause of this difficulty is the separating of elements from cases (though Beyer did not even begin with cases, yet still he obtained an abstract set of features). Paying attention to language use not only remedies this difficulty but positively provides the way of coming to know the concept "landscape"--i.e., the variety of cases to which the term can and cannot be applied. An added bonus is that paying attention to language use provides a basis from which to evaluate misconceptions and new or invented conceptions. It is not clear to me that Beyer has conceived the concept of landscape aright. For example he offers no discussion of "expanse" and "aesthetic view" as elements of cases of "landscape." If he is merely

presenting the geographer's conception, then we may want to question the reduction of the concept of landscape to the geographer's conception and perhaps even the appropriateness of the geographer's conception.

So far we have examined what an advocate of inquiry thinking and teaching envisions a concept to be. We saw how Beyer would have us form concepts and teach concepts. We examined his application of his view to the concept of landscape. Following this our task was to undertake an analysis of the concept of landscape using the techniques of the method described in Chapter III. Next we noted some similarities and differences between Beyer's view and that of this dissertation. Finally we examined certain difficulties with Beyer's view.

Because it is markedly different from that of Beyer, the work of Hunt and Metcalf will concern us for the remainder of this chapter. We have already briefly mentioned two points of difference between Hunt and Metcalf and Beyer, and presently we will discuss those again along with others. In what follows, a discussion of the similarities and differences between Hunt and Metcalf and Beyer will lead into a characterization of what Hunt and Metcalf think a concept is and of how they advocate teaching concepts. We will see how Hunt and Metcalf apply their method to some social studies concepts, and we will then apply our method to some of those same concepts (though in a less extensive manner than was done in connection with the criticism of Beyer). The purpose of this activity is the same as that done with Beyer, namely to compare
and contrast views, and in the course of so doing to point out difficulties with the Hunt and Metcalf view, our final task.

Hunt and Metcalf on Concepts

Beyer and Hunt and Metcalf Contrasted

One of the points at which Hunt and Metcalf would differ with Beyer, I take it, regards whether the "inquiry method" is appropriate to thinking about and teaching <u>concepts</u>. Consider what Hunt and Metcalf say in the following:

The method of discovery is probably most effective for testing empirical generalizations. . . It is probably least appropriate for the teaching of concepts; not because it is ineffective, but because it misrepresents concepts by peddling them as empirical truths. If we are to teach the nature of concepts, then we are forced into some kind of deductive (expository) teaching.¹⁶

Clearly a major assumption in construing this passage to refer to Beyer's work is that the "method of discovery" is synonymous with, or essentially similar to, Beyer's "inquiry method." If "the method of discovery" is Beyer's "inquiry method," then Hunt and Metcalf would agree that Beyer's approach to thinking about and teaching concepts is inappropriate. Apparently there is among those writing on the social studies some uncertainty regarding the synonymy of such terms as "inductive method," "inquiry method," "discovery method," etc. Beyer himself notes that

. . . inquiry teaching has seldom been defined clearly enough to be easily mastered. . . . It is sometimes labeled an approach, sometimes a method, and more frequently a strategy. Terms such as reflective thinking, problem solving, critical thinking, inductive teaching, discovery, and guided discovery are often used to describe it.¹⁷ Beyer acknowledges that these terms do not mean exactly the same thing but avers that what they all have in common is a certain way of inquiring. It is fairly clear, however, that Hunt and Metcalf would not agree with Beyer. They are concerned to distinguish among the above appraoches. According to Hunt and Metcalf

Inductive teaching, even when it succeeds in becoming an exemplification of inductive thinking, is not the same as reflective teaching. Reflective teaching has both inductive and deductive elements.¹⁸

We might now see then that the sort of view of concept and the sort of approach to teaching concepts that Hunt and Metcalf have in mind are not those of Beyer.

<u>Hunt and Metcalf on What</u> a Concept Is

What then is a concept for Hunt and Metcalf? Influenced by the work of Jerome Bruner, Hunt and Metcalf consider a concept to be a category, a collection of things which ". . . belong together because of the attributes they are said to share under a given system of classification."¹⁹ The items of any particular class are <u>determined</u>, rather than <u>discovered</u>, to be a part of that class. Like Beyer, Hunt and Metcalf consider concepts to be inventions.

Further influenced by Bruner, Hunt and Metcalf suggest that there are three kinds of concepts. The first, conjunctive, is a concept whose essential attributes are jointly necessary for that concept to be that concept. This is the traditional "characteristics in common" view we have discussed. The second sort of concept, the disjunctive, is a concept whose essential attributes are only

alternately necessary (rather than jointly necessary) for that concept to be that concept. Citizen, according to Hunt and Metcalf, is a disjunctive concept: "A citizen may be defined as a person who was born in this country, or whose parents were born in this country, or who has passed certain examinations."²⁰ (My underlining.) Only one of these conditions is necessary for someone to be called a citizen. Here we might notice that Hunt and Metcalf already have a more complex and accurate notion of concept than does Beyer. We see that Hunt and Metcalf notice, as did Wittgenstein, that not all concepts are such that all their cases have features in common. Hunt and Metcalf also note that the different kinds of concepts require different teaching methods.²¹ They warn us of the confusion that results when someone unfamiliar with baseball is taught the concept of strike by getting them to look for the features common among examples of strikes--a difficulty that Beyer does not address. The third sort of concept, relational, is one which is "defined by a relationship among attributes."²² According to Hunt and Metcalf, density is such a concept. Density is mass divided by volume. Mass and volume are attributes of density and their relationship to each other is "divided by."

Hunt and Metcalf observe that science favors relational and conjunctive concepts to the disjunctive concept, and science is constantly trying to reduce disjunctive concepts to the former two. The hope is that by continued examination of a disjunctive concept what is common will be determined--thus resulting in the concept being defined conjunctively or relationally, the advantage being

that much can be inferred from little regarding these sorts of concepts. Also Hunt and Metcalf are concerned to distinguish relational concepts (definitions) from generalizations (confirmed hypotheses of law-like status). Their distinction can be seen by comparing the following examples. An example of the former is "... full employment defined as a relationship between number employed as a percent of the labor force, length of work week, and per capita productivity expressed in constant dollars."²³ An example of the latter is "... deficit financing contributes to inflation under conditions of full employment."²⁴

Hunt and Metcalf tie their distinction between a concept and a generalization to the philosophical distinction between analytic assertions and synthetic assertions, respectively. An analytically true statement for Hunt and Metcalf is one that could never be shown false, while a synthetic statement is one that is capable of being shown by evidence to be false or true. Concepts then are analytic. As such inductive thinking (or in other words, Beyer's method of inquiry) cannot be applied to concepts since they are not synthetic statements--e.g, generalizations. Concepts as analytic assertions require other teaching methods than Beyer's inquiry teaching method.

Hunt and Metcalf on How to Teach Concepts

For Hunt and Metcalf, "The verbal expression of a concept is a definition."²⁵ According to them, "The statement that 'bachelors are unmarried males' expresses a concept."²⁶ They correctly point

out that we do not "test" this assertion by gathering evidence as we would, for example, for the assertion "all bachelors live alone." So they ask how a teacher should treat statements of this sort. They answer:

In general, we can say that he would want to guide the class <u>toward answers to such questions as</u>, Can the statement be made more clear and precise in its meaning? Is the assigned meaning customary or unusual? Is the definition too broad or too narrow? He might also be interested in a comparative study of different meanings for the same term, and the practical results of such difference. He might keep in mind as a guide that, as Hullfish and Smith have said, the concepts of science are more explicit, precise, rigorous, abstract, general, and systematic than those of common sense.²⁷ (My underlining.)

The next question, of course, is how does one guide students toward such answers.

The chief way in which Hunt and Metcalf would have teachers develop concepts is to get students to learn and distinguish the extensional and intensional meanings of a definition or concept. The former meaning refers to the set of examples to which the definition of a word allows that word to apply. The latter meaning is the set of characteristics which we use in applying a word correctly to an example. In giving an example of the distinction, Hunt and Metcalf cite the Beardsleys:

The extension of "city" is London, Paris, New York, Berlin, Tokyo, Moscow, Nairobi, etc. The intension of "city" is (roughly) the characteristic of being a politically independent area of high population density and large population total.²⁸

Hunt and Metcalf go on to say that "Obviously, city is a conjunctive concept by this definition."²⁹ In the following excerpt, Hunt and Metcalf state the chief aim, I take it, in teaching concepts:

Ideally, we want students to be able to define a concept intensionally, and then be able to illustrate it with concrete examples, indicating for each example why it qualifies as an instance of the concept. 30

This aim has much to recommend it--especially the parts about illustrating with examples and about explaining the "why" of each example. However, notice that these latter activities are dependent upon "defining a concept intensionally" and this, as might now be expected, is where I will shortly take exception to what Hunt and Metcalf have said.

How do we go about defining a concept intensionally? Let us briefly look at three cases where Hunt and Metcalf explain their position by using examples. In the first, in the process of illustrating Bruner's concept as category notion, Hunt and Metcalf offer the following:

For example, many discriminably different wars are placed together in a category called civil war. This is done in accordance with certain criteria. Bruner calls these criteria the defining attributes of a category. A particular war can be classified as a civil war only by first defining civil war according to its attributes, and then showing that the war in question has those attributes.³¹

Notice here that the question of how one arrives at the defining attributes--the criteria of the concept "civil war"--is left unanswered, unless "science invents concepts"³² is acceptable.

Regarding the second case, consider what Hunt and Metcalf say in the following:

If students cannot agree on whether a given community is a city, they can resolve their differences only if someone can state an intensional meaning of city which is acceptable to everyone. Some agreement must be reached

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on the characteristics common to all cities, assuming that city is a conjunctive concept. Then it must be decided whether the community in dispute has those characteristics. The reflective task is to determine a meaning for city, and to then decide whether the community in question is properly designated city or noncity. In order to do this, what "facts" are needed? Is it a fact that we customarily label a community a city only if it has certain characteristics? What are the characteristics we customarily associate with a city? And is it a fact that community X has those characteristics?

In a culture with language and other symbolization as advanced as ours, a person is at a serious disadvantage when he cannot express the intensional meanings of concepts. More importantly, theory building is seriously handicapped when intensional meanings are unclear. It is impossible to deal with questions of causation without resort to theories, and it is equally impossible to build theories when basic concepts are fuzzy. We cannot settle for a scholarship that can merely cite examples.

On the other hand, we may suspect that a student who can give a verbal definition of a concept but cannot recognize or supply examples does not understand the concept. Ideally, we want students to be able to define a concept intensionally, and then be able to illustrate it with concrete examples, indicating for each example why it qualifies as an instance of the concept.³³

Here we get some idea of how to apply a definition or concept to a new case. But notice that little is said to aid us in getting at the intensional meaning of the concept "city." The apparent first step is to decide whether "city" is a conjunctive concept. If it is then "agreement must be reached on the characteristics in common to all cities." Notice the lure and presence again of the "characteristics in common" notion. Notice also that the "agreement" necessary seems to be only that among students. It is not clear whether Hunt and Metcalf intend to suggest that agreement among students is sufficient for there being an appropriate understanding of the concept "city." In making another of their distinctions, that between "personal" and "official" meanings of a concept, they, in apparent contrast to Beyer, hold that official meanings--those set forth by authority (e.g., law, scholarship, religion)--are "superior" to personal definitions.³⁴ Thus while concepts are inventions for both Beyer and Hunt and Metcalf, they differ as to which invention (official or personal) is of more importance. In any case, upon reaching "agreement" the new case must be examined to see if it has the characteristics agreed upon. If so then it is an instance of the concept of "city." In general for Hunt and Metcalf, the first part of the reflective task is to determine <u>a</u> meaning for city, and the second is to decide whether the community in question is <u>properly</u> designated "city" or "non-city." Notice however that the questions of how to determine a concept to be conjunctive and of how to determine <u>the</u> or <u>an</u> intensional meaning remain unanswered.

Our last case is a case where Hunt and Metcalf are concerned to illustrate a problem of conflicting meaning. Consider what they say in the following:

The tendency of some to call this country a republic rather than a democracy poses a similar problem. A policy such as a minimum-wage law may be advocated in the name of democracy, only to be met with the comment, "But America is a republic, not a democracy." How can a teacher expose this comment to reflective criteria, and so avoid any temptation to indoctrinate his own point of view? If he takes an extensional approach, he might point out that Red China and the Soviet Union are usually cited by political scientists as republics. Are these countries democracies? Is this country a republic? Is it a democracy? Can any country be both a republic and a democracy? Why do Red China and the United States oppose one another, if both are republics? Are the differences between us at all political? This line of questioning moves gradually into the problem of intensional definitions of republic and democracy. Students will learn from this line of

questioning that some republics are more democratic than others, and that growth toward democracy does not undermine our republican form of government.

The procedure of defining a category intensionally, and sorting examples according to whether they belong in or out of the category, rather than using meanings that relate to narrowly conceived social purposes, is the proper way to attack any problem that involves conflicting meanings.³⁵ (My underlining.)

Notice here Hunt and Metcalf talk of taking an "extensional approach," which apparently means examining cases of what political scientists think are republics and democracies. They correctly note that questioning in the way they have described usually raises further questions about the intensional definitions of "republic" and "democracy." But note that again, unless appeal to some authority (e.g., what political scientists think) is sufficient explanation, the question of how an intensional definition is arrived at is unaddressed. Also compare the "extensional approach," which leads to "the problem of intensional definition," with the earlier cited "ideal" procedure-that of defining concepts intensionally, then applying such to examples. In neither case do we get help with how intensional definitions are arrived at.

It should now be apparent that Hunt and Metcalf distinguish between determining a meaning and applying that meaning to new cases. Also it should be apparent that they continue to dodge (unless one is satisfied with the explanation that "determines" here means "invented") the questions of how one determines whether a concept is conjunctive or otherwise, and of how one determines the intensional meaning of a concept.

Before turning to a critique of Hunt and Metcalf's view, let us summarize briefly some of the major points just presented. Hunt and Metcalf appeal to both scientific and philosophical thinking for aid in determing what a concept is. Accordingly they view a concept as of an artificial nature--as an invention. Following Bruner, they note that concepts are categories--i.e., collections of different items that are classed according to some criteria. The criteria are the defining attributes of the items that are to make up the category--concept. Having noticed that not all items that are regularly included in certain categories exhibit the defining attributes (another way of stating what Wittgenstein noticed about "games"), Bruner and Hunt and Metcalf divide concepts (categories) into three kinds: conjunctive, disjunctive, and relational. And because of their greater usefulness in doing science, conjunctive and relational concepts are preferred by scientists. Indeed as Hunt and Metcalf suggest, the possibility of there not being something common to all instances of a concept does not deter scientists from looking for such commonality.³⁶

Also according to Hunt and Metcalf the verbal expression of a concept is a definition. Philosophy has determined that definitional statements are analytic assertions. Since inductive thinking--i.e., the inquiry method--is not appropriate of analytic assertions, then the inquiry method is not appropriate to the examination of the "truth" or "falsity" of concepts. With the verbal expression of a concept narrowed to a statement of definition, Hunt and Metcalf feel that examination of a concept now consists in

examination of the clarity, definiteness, accuracy, and truth of the definitional statement. The teacher's job then is to introduce and use those features of definitions to accomplish such examination. These features include having intensional and extensional meanings, having personal and official meanings, being invented for a certain purpose, and so on. Finally Hunt and Metcalf not only want students to be able to intensionally and extensionally define a concept and to verbally describe the why of the connection between such intensional and extensional meanings but also to locate that concept in a conceptual system--meaning to put concepts together to form generalizations (our synthetic law-like propositions).³⁷ This and the previous paragraph summarize Hunt and Metcalf's view on what a concept is and how a concept ought to be taught.

Difficulties with Hunt and Metcalf's View

Clearly Hunt and Metcalf are to be praised for the extensiveness of their view--say in contrast to that of Beyer. Beyer, on the other hand, is to be praised for his clarity of method in contrast to that of Hunt and Metcalf. The view suggested by the work of Wittgenstein, however, is both more extensive and of greater clarity, in addition to being overall a more accurate view of the state of affairs regarding concepts.

While Hunt and Metcalf's view seems to be a better account of things than Beyer's, it is not without difficulty. In what follows I will discuss some of that difficulty. Prior to this criticism there are a number of questions, a consideration of which should

enter into any reflection on that criticism. These questions are: What is social studies? What is social science? How are they related? In teaching social studies concepts, are we concerned with teaching what a concept is or with what a concept is in science? Or with both? Is understanding what the former is necessary for (or even useful for) understanding what the latter is? These questions--which I consider to some extent later--have bearing upon my criticism of Hunt and Metcalf.

If we are talking about how to teach concepts as Hunt and Metcalf purport to be doing, then it is a mistake to suggest or assume that concepts are inventions if this means all concepts. As we have seen the use of a term includes invented uses, but it is a mistake to equate the use of a term merely with an invented use. There is a mapping of uses for each of the terms "civil war," "war," "city," "republic," and "democracy." Each mapping is the concept of each term--not some one particular use. It is also true that each term has a stock use--though to be sure the stock use of some terms is a scientific use--for example "black hole" or "neutrino" as currently employed by scientists. When we want students to understand the concept of city, we want them to know the variety of uses of the term that exist; but chiefly we want them to know the stock use--or better, the map of the stock use of a term with that of the term's family of terms. We want them to know how the word "city" is used and thus to know how to use the word "city." It is thus misleading to view concepts as inventions.

Also because it is misleading in a similar way, it is a mistake to classify concepts as being of three kinds--conjunctive, disjunctive, and relational. To their credit, Bruner and Hunt and Metcalf notice that not all concepts are such that their instances are instances because they have a characteristic or a set of characteristics in common. But to the extent that attention is diverted by such classifying, from the mapping of the use of a term, to that extent such classifying of final and fixed kinds of concepts is misleading. It is interesting to note that Hunt and Metcalf after having mentioned disjunctive concepts dealt with them not at all.

Also it is not at all clear what it means to say that the verbal expression of a concept is a definition. Clearly in one sense the verbal expression of a concept is the term that expresses it. It is doubtful that the statement "bachelors are unmarried males" (Hunt and Metcalf's example) expresses a concept. It may express an aspect of a concept. However single statements do not express concepts--terms do. The terms "unmarried male" and "bachelor" express concepts but "bachelors are unmarried males" does not. Since the verbal expressions of concepts are not single statements, and the philosophical distinction between analytic and synthetic applies only to single statements, then Hunt and Metcalf are mistaken to apply the language of and operations with analytic statements to concepts. Because the verbal expressions of concepts are not definitions in the sense of being single statements, much of what Hunt and Metcalf say about concepts as analytic and about the appropriate techniques for teaching concepts comes into question. It is

interesting to note that an appeal to language use might have avoided this particular difficulty for Hunt and Metcalf. We talk about concepts as being correct or incorrect, useful or useless, limited or full-blown, but not as being true or false.

There is a second sense in which the verbal expression of a concept is not a single statement. If a concept is the map of the uses of a term, then the verbal expression of this map would be a rather lengthy collection of sentences (statements) describing how the term is used, not used; how its use is similar to and different from the uses of the term's family of terms; and what examples are used and why. We might note that Hunt and Metcalf's concern that definitions of concepts can be too narrow, thus their advice to teachers to "broaden" the definition to include "personal" and "official" meanings, could be included in a description of use.³⁸ One final comment in this regard. Hunt and Metcalf express a concern of many of us regarding the eschewing of verbal expression in favor of behavior change. They note that the concern to avoid the memorization of definitions has led to concern solely with behavior change. In response to this difficulty, let it be noted that verbal expression is behavior, and that thinking of the verbal expression of a concept not as a definitional statement (sentence) but as a description of a map of use both avoids memorization of definitions and serves to exhibit the students' understanding of word-behavior connections.

Differences Between Hunt and Metcalf's View and the Map of Use View and Further Appraisal

Perhaps the chief difference between the work of Hunt and Metcalf on concepts and the map of use view is that their view of concept offers no place or way to begin mapping concepts, nor any standard against which students' understandings can be compared (evaluated). Earlier we noted that Hunt and Metcalf dodge the question of how one determines whether a concept is conjunctive or otherwise, and perhaps more importantly the question of how one determines the intensional meaning of a concept. Recall also the "civil war" example that "a particular war can be classified only by first defining civil war according to its attributes, then showing that the war in question has those attributes." While here we have some idea of how to proceed once we have first defined "civil war," we are at a loss as to how to proceed to define "civil war." Indeed we are told that concepts are inventions, meaning apparently that since there are infinite ways of classifying things, there is no correct classification. Thus the attributes chosen to define a class are chosen according to theoretical purposes and such choosing is merely an invention. So for Hunt and Metcalf defining is not arbitrary, but neither is defining guided by consideration of the ordinary ways in which we use language, by examination and understanding of the ordinary concepts we all employ. Consider what P. F. Strawson says regarding the connection between understanding the ordinary ways in which we use language (ordinary concepts) and

understanding the ways invented for the purposes of science (invented concepts). (In the passage the term "constructed concepts" is to be taken as synonymous with "invented concepts" and "unconstructed concepts" is to be taken as synonymous with "ordinary concepts.")

That is to say, if the clear mode of functioning of the constructed concepts is to cast light on problems and difficulties rooted in the unclear mode of functioning of the unconstructed concepts, then precisely the ways in which the constructed concepts are connected with and depart from the unconstructed concepts must be plainly shown. And how can this result be achieved without accurately describing the modes of functioning of the unconstructed concepts? But this task is precisely the task of describing the logical behaviour of the linguistic expressions of natural languages; and may by itself achieve the sought-for resolution of the problems and difficulties rooted in the elusive, deceptive mode of functioning of unconstructed concepts. I should not want to deny that in the discharge of this task, the construction of a model object of linguistic comparison may sometimes be of great help. But I do want to deny that the construction and contemplation of such a model object can take the place of the discharge of this task; and I want also to suggest that one thinks that it can, only if one is led away from the purpose of achieving philosophical understanding by the fascination of other purposes, such as that of getting on with science. 39

In science, defining is not arbitrary because it is done according to criteria, but it is inventive because it is said that there is no clear way to choose among attributes and thus the canons of science must control the choosing. Neat classes of things with attributes in common are thus acknowledged as invented but are defended as necessary to the doing of science. Conjunctive and relational concepts are desired because they function easily within the current conception of science.

Even if defining attributes are chosen with the purpose of science in mind, Hunt and Metcalf owe a precise explanation of how that

is done. The point here though, as the passage of Strawson's suggests, is that there are ordinary concepts and that there is a way of getting at what those are, and that understanding those concepts is a necessary preliminary to understanding any invented concept whatsoever. With this said let us note again the questions: What concepts are to be taught in the social studies? Scientific concepts? Ordinary concepts? Both? Is revolution a scientific concept? Is city? If we are talking about teaching concepts, I suggest that at the least we report that there is a difference between ordinary stock concepts and invented scientific concepts-though the matter should not be left here. Teaching concepts in the social studies or elsewhere should include teaching the ordinary understanding of the concept and the invented understandings, and the connection between them should be made clear. Thus whether we are in a scientific context or an ordinary one, knowing the map of a term's use by examination of the occasions of the use of the utterances containing that term, identification of the features of those occasions, and location of that term among its family of terms is knowing the concept expressed by that term. Furthermore, knowing the relation of the scientific use to the ordinary use would be part of what it means to know the concept.

The chief difference then between Hunt and Metcalf's "method" and the method of appeal to use is that Hunt and Metcalf's "method" offers no way to begin getting at the defining attributes of a concept--"city" for example. This difference is connected to a difference between their view and the view of this dissertation

regarding what a concept is and also to a difference on whether there is a standard ordinary use against which we can compare and contrast other uses. The way to begin to get at the concept of city is to think of the utterances in which the term "city" occurs, to describe the occasions on which we utter those utterances, to uncover the features of those occasions that impel us to use those utterances, to uncover the stock and other uses of the term "city," and to locate those uses among the uses of the term "city," not a set of attributes separate from cases. We get an understanding of how to wield the term "city" correctly, not a personal or official abstract meaning--though we might also include these in the map. And last we get an ordinary use for use in detecting and evaluating misuse and new use.

A final point of criticism of Hunt and Metcalf's view concerns their claim that "A part of the meaning of any concept is to be found in its relationship to another concept or concepts."⁴⁰ Clearly at first glance this appears to be identical to my position-that a final condition of knowing a concept is that its relationship to other concepts, a family of concepts, be understood. However, it is fairly clear from the context of their utterance that Hunt and Metcalf are thinking of the sort of empirical relationship that concepts have with one another in forming generalizations. Consider what they say in the following excerpts:

We look upon generalizations as law-like statements which express a relationship among concepts. The generalization, "deficit financing contributes to inflation under conditions of full employment," is a law-like statement expressing a relationship between the concept "deficit financing," and the concepts, "inflation" and "full employment" . . .⁴¹

The teacher who seeks this level of concept attainment may ask his students not only to relate one concept to another, but to look for empirical evidence on the validity of any hypothesized relationship.⁴²

The sort of relationship I am referring to when I talk of locating a concept among its family of concepts is a logical one--not that among the concepts employed in an empirical generalization. The relationship I am referring to is more akin to that among attributes in which Hunt and Metcalf call relational concepts. Recall that they distinguish between a relational concept and a generalization. The former was exemplified by the definition "density is defined as mass divided by volume." However, as should now be apparent, the relationship I refer to is a defining one, but it is not invented. It is a rule of language use relationship. Thus here my difference with Hunt and Metcalf is in how "relationship" is used in "a part of the meaning of any concept is to be found in its relationship to another concept or concepts." My criticism is not necessarily that their two uses of the term "relationship" are of no importance, but that they fail to include discussion of the use of "relationship" I have been concerned to present in the previous chapters.

¹Robert F. Madgic, <u>Relevance and the Social Studies: A</u> <u>Conceptual Analysis</u> (Belmont, California: Lear Siegler, Inc./ Fearon Publishers, 1973), p. 13.

²Barry K. Beyer, <u>Inquiry in the Social Studies Classroom</u>: <u>A Strategy for Teaching</u> (Columbus, Ohio: Charles E. Merrill Publishing Co., 1971), pp. 21, 22, 23.

³Ibid., pp. iv, v. It is interesting to note that Beyer mentions Dewey when discussing the appropriateness of teaching children <u>how</u> to know (p. vi), yet he falls prey to a duelism that Dewey would reject, namely, that in the Social Studies children should be taught how to form "their own perceptions of reality," not "other peoples' perception of reality."

⁴Ibid., p. 130. In another part of the chapter Beyer makes a similar claim, namely ". . . inquiry teaching is ideally suited to the teaching of concepts," p. 126.

⁵Ibid., p. 126. ⁶Ibid., p. 112. ⁷Ibid., p. 113. ⁸Ibid., pp. 119, 120. ⁹Ibid., p. 120. ¹⁰Ibid. ¹¹Ibid. ¹²Ibid.

¹³Ibid. The reader is advised to consult the diagram of landscape to see these "relationships readily apparent."

¹⁴Ibid., p. 123. ¹⁵Ibid. ¹⁶Maurice P. Hunt and Lawrence E. Metcalf, <u>Teaching High</u> <u>School Social Studies</u>, 2nd ed. (New York: Harper and Row, Publishers, 1968), pp. 98, 99. ¹⁷Beyer, p. 6. ¹⁸Hunt and Metcalf, p. 98. ¹⁹Ibid., p. 85. ²⁰Ibid., p. 86. ²¹Ibid., pp. 86, 87. ²²Ibid., p. 87. ²³Ibid., p. 88. ²⁴Ibid., p. 84. ²⁵Ibid. ²⁶Ibid., p. 88. ²⁷Ibid., p. 89. ²⁸Ibid. ²⁹Ibid. ³⁰Ibid., p. 90. ³¹Ibid., p. 85. ³²Ibid. ³³Ibid., pp. 89, 90. ³⁴Ibid., pp. 90, 91. ³⁵Ibid., p. 93. ³⁶Ibid., p. 87. ³⁷Ibid., p. 101.

³⁸Ibid.

³⁹P. F. Strawson, "Carnap's Views on Constructed Systems versus Natural Languages in Analytic Philosophy," in <u>The Philosophy</u> <u>of Rudolf Carnap</u>, ed. Paul Arthur Schilpp (La Salle, Illinois: Library of Living Philosophers, Open Court, 1963), p. 513.

⁴⁰Hunt and Metcalf, p. 101. ⁴¹Ibid., p. 84. ⁴²Ibid., p. 101.

CHAPTER V

SUMMARY

For the time being, the one who understands the words "Greek helmet" becomes mentally a partner with those who used the helmet. He engages, through his imagination, in a shared activity. It is not easy to get the <u>full</u> meaning of words. Most persons probably stop with the idea that "helmet" denotes a queer kind of headgear a people called the Greeks once wore. We conclude, accordingly, that the use of language to convey and acquire ideas is an extension and refinement of the principle that things gain meaning by being used in a shared experience or joint action; in no sense does it contravene that principle.

> John Dewey, Democracy and Education

Although it will not do to force actual language to accord with some preconceived model: it <u>equally</u> will not do, having discovered the facts about 'ordinary usage' <u>to rest</u> <u>content</u> with that, as though there were nothing more to be discussed and discovered.

> J. L. Austin, "The Meaning of a Word" in <u>Philosophical Papers</u>

In Chapter I, I indicated that there is among social studies theorists much current interest in the teaching of concepts. I noted that those theorists argue for concept-oriented curricula and attempt to identify and describe particular social studies concepts. I argued that such arguments and attempts at identification and description are dependent upon there being an understanding had of what a concept is. I then suggested that the accounts of what a concept is, given by some social studies theorists, indicate that their understandings of what a concept is are limited, superficial, and inaccurate. In particular I mentioned that there are difficulties with the accounts of Barry K. Beyer and of Maurice P. Hunt and Lawrence E. Metcalf. I next suggested that in the work of Ludwig Wittgenstein the basis for an extensive and accurate understanding of what a concept is could be found. I noted that therein, too, could be found certain ways of analysis that would aid the development of the understanding of any particular concept. Following that I held that a correct understanding of what a concept is has bearing on what ought to be taught when concepts are taught and on how concepts ought to be taught.

I then concluded that this line of reasoning to be convincing required that two general things be done. First a view of what a concept is needed to be delineated. Second the claim that that view has greater utility in the social studies than the views currently held by social studies theorists needed to be defended. I then noted that these two tasks would be accomplished by first delineating, following Wittgenstein, a particular view about what concepts are and describing some techniques required by that view for analyzing concepts; second by illustrating the analysis of concepts by doing an analysis of the concept of justice, and then by summarizing the results of an analysis (of the sort illustrated) of the concept of concept; and third, by appraising the views of social studies theorists Beyer and Hunt and Metcalf regarding what concepts are and how concepts should be taught, and contrasting their views with that

taken in this dissertation. These latter three tasks were undertaken in Chapters II, III, and IV, respectively.

In the first section of Chapter II, I argued that Wittgenstein's example of the concept of game is a counterexample to the view of concepts as being common properties of their particular instances. I described more fully what the concept of game is and what is required to know the concept of game. I discussed the extent to which other concepts are analogous to the concept of game. A consideration of this led to the conclusion that some concepts are common properties of their particular instances and some are not. I argued, following Wittgenstein, that rather than assuming a particular concept is one or the other, we ought to look and see. I held, following Wittgenstein, that what we ought to look at is a term's use. I argued that a concept is a term's use in the language and that knowing a term's use is knowing a concept. The remainder of that section was spent delineating what "a term's use in the language" means. In the second section, I briefly described some ways of getting at a term's use in the language and thus some ways of analyzing a concept.

In the first section of Chapter III, I commented on what an analysis of the concepts of justice and concept involves; that is, on what the mapping of the use of the terms "justice" and "concept" involves. I then mapped the use of the term "justice" and in so doing illustrated such things as a way of collecting uses, techniques for determining a family of concepts, and the "locating" of a concept among its family of concepts. I illustrated the latter activity

by mapping a case of use of the term "justice" with a case of use of each of the terms "favoritism" and "arbitrariness." In the second section, I listed some of my conclusions regarding the map of the use of the term "concept." In other words to some extent I described what the concept of concept is.

In the first section of Chapter IV, I showed that two assumptions Beyer makes have bearing on his view of what concepts are and of how concepts should be taught. These assumptions are (1) that inquiry thinking is the best way of coming to form concepts, and (2) that concepts are inventions--meaning there is no correct understanding of a concept. I held these assumptions to be false. I described Beyer's view of what a concept is and of how a concept should be taught. I instanced his view that concepts are individually invented mental images and that inquiry teaching is the best way of teaching concepts by recording his application of it to the social studies concept of landscape. I then described some difficulties with Bever's position. I showed that not all concepts are invented in the sense that there is no correct understanding of concept. I argued that inquiry thinking is not appropriate to forming concepts. I analyzed the concept of landscape using the sort of analysis developed in this dissertation. In the course of doing this latter task I showed that thinking of concepts as images/ diagrams and inquiry teaching are of little utility in teaching concepts in the social studies. I showed that neither provides students with knowledge of a concept in the way that thinking of concepts as maps of uses does and as mapping use does.

In the second section of Chapter IV, I described some points of difference between the view of Bever and the view of Hunt and Metcalf. I described what, for Hunt and Metcalf, a concept is and how they suggest teaching concepts. I noted that they view the former as an invented collection of different items, classed according to some criteria or system of classification, the verbal expression of which is a definition. I noted that they--having concluded that the verbal expression of a concept is a definition--suggest that the teaching of concepts be the teaching of definitions and all that that involves--e.g., getting students to learn and distinguish intensional and extensional meanings, official meanings; getting students to identify instances of the defined term and to explain why the instances are instances and broadening definitions by showing their place in generalizations. I noted that this view has much to recommend it. I argued, however, that there are some difficulties in Hunt and Metcalf's position. I argued (1) that not all concepts are inventions and that it is misleading to view them as such, (2) that it is false that there is no correct understanding of a concept, (3) that concepts and definitions are different and that definitional statements are not expressions of concepts, (4) that no explanation is given regarding how intensional definitions are arrived at, and (5) that the question of the logical relations among concepts is unaddressed. In addition to discussing these difficulties, I counterposed what the map of use view would require. I noted that Hunt and Metcalf's view might produce some understanding of scientific concepts. I argued, however, that knowledge of any scientific concept required

knowing the ordinary understanding of the concept. I questioned the apparent reduction of social studies concepts to scientific concepts. I concluded that teaching concepts in the social studies and elsewhere should include teaching the map of use of a term including the relation between the ordinary use and any non-ordinary use.

There would seem to be a number of things that require further study. For example: (1) a fuller analysis of the concept of concept would be of importance; (2) a more extensive examination of the import for the social studies of Wittgenstein's philosophy and ordinary language philosophy in general might be undertaken; (3) ordinary analyses of particular social studies concepts would be of great utility; (4) fuller development, including empirical study, of how to teach concepts in the manner suggested here would be highly important; and (5) work on elucidating and clarifying the relations between the ordinary understanding of a concept and scientific understandings would benefit all concerned with social studies education.

This latter concern--(5) above--is connected to the question I earlier raised regarding what the nature of social studies is. While there is much value in social scientific study, not all social study is scientific study. That is social science is not social studies. Social studies then being like education--a meeting ground for a variety of ways of examining social life--is a particularly good area in which we may begin to work toward commanding a clear view of the relationship between the problems of ordinary life and the sciences that study them. Accordingly it has been my concern

in this dissertation not to disparage scientific thinking but to aid the development of a rapprochement between science and ordinary life.

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