Contested Concepts in Cognitive Social Science

Alan Schwartz
University of California, Berkeley
May 1992

Acknowledgements

A project such as this is never a solitary effort, and I am indebted to a number of people for their assistance. In particular, I would like to thank:

- Jane Espenson, who has often helped me better understand the field of linguistics and sparked new ideas. Her comments have been invaluable during the writing of this thesis.
- Laura Stoker and David Collier of the Department of Political Science at UC Berkeley whose support has been unceasing.
- Alison Gopnik of the Department of Psychology at UC Berkeley, who served as the second reader for this thesis.
- The Institute for Cognitive Studies at UC Berkeley, which has provided me with facilities and equipment.

Contested Concepts in Cognitive Social Science is dedicated above all to George Lakoff, who is in many ways the founder of the program of cognitive social science. George has given me both enormous opportunities and a sense of scientific responsibility. I can think of no better mentor.

Abstract

Concepts and categories are of critical concern to the social sciences, where there is often significant lack of consensus about the proper definition or application of a concept. It has been suggested that such conflict results from the nature of the concepts in question (for example, democracy, art, science, or feminism) themselves; concepts which provoke such arguments are said to be "essentially contested." (Gallie 1956)

By applying the results of cognitive science, particularly cognitive linguistics, to these concepts, we discover that they are characterized by oversimplified or clustered idealized cognitive models and belief systems which extend and instantiate these models into the full-fledged concepts used in social science discourse. These extensions may be either *principled,* based on independently existing belief systems, or *ad hoc,* based on belief systems specific to the concept in question.

This analysis has serious consequences for the social sciences. The objectivist paradigm (Lakoff 1987) which underlies classical social science can not accommodate such cognitively-based concepts. Efforts by social scientists to sharpen conceptual discrimination are similarly flawed by this paradigm. A cognitively-based social science would more accurately reflect the actual processes by which people understand concepts.

Table of Contents

Foreword: Cognitive Social Science

Brief history of cognitive science

Since I began studying cognitive science I have often been asked to explain what the discipline is about. While cognitive science is still new enough that it is not popularly familiar, its history can be traced back to 1641, when Rene Descartes asked the question that has challenged cognitive scientists since: What is the nature of the mental, and how is it related to the physical? Put into modern terms, how do people perform mental activities (e.g. linguistic communication, thinking, problem-solving, or categorizing), and how are these activities related to the buzz of neurochemical activity which takes place in the brain?

Descartes' question founded the study of the philosophy of mind. Three answers were immediately available: all substance is mental substance *(idealism),* all substance is physical substance *(materialism),* and different physical and mental substances exist *(dualism).* For a number of reasons, not the least of which are irresolvable difficulties with idealism and dualism, the materialist account has attained preeminence, and nearly all cognitive scientists accept the material (neurophysiological) basis of the mind.

Philosophy has often driven science, and the science of mind was no exception. The philosophical revolution of logical-empiricism in the 1930's and 1940's shaped the study of cognition in many important ways. The logical-empiricists' emphasis on science as a mathematically verifiable activity strongly influenced cognitive science, and much cognitive research still posits formal symbol manipulation as the basis of thought and language. This position, however, was not without its challengers, of whom J. L. Austin and Ludwig Wittgenstein are the best known.

The inauguration of the modern discipline of cognitive science came in 1956, as a result of a number of significance events. The MIT Symposium on Information Theory that year featured ground-breaking papers by Allen Newell and Herbert Simon (who described their computer program which could perform mathematical proofs) and Noam Chomsky. (who proposed that syntax could be formally represented by a system of transformations of linguistic structures.) In addition, a seminal summer institute at Dartmouth brought together the pioneers of artificial intelligence and established a community of researchers into machine thinking. (Gardner 1985:28-3 1)

Cognitive research continued through the 1960's and 1970's, when it received a major boost from the Alfred P. Sloan Foundation, which invested 20 million dollars over seven years in research grants. In 1977, the journal *Cognitive Science* was founded, the society of the same named soon followed. (Gardner 1985:36) And field still continues to grow.

Cognitive science has applied its interdisciplinary methodology to a number of interesting problems in cognition, including perception (especially vision), computer reasoning and language understanding, and decision-making and problem-solving.

The program of cognitive linguistics, championed by George Lakoff, Charles Fillmore, Eve

Sweetser, Giles Fauconnier, Ron Langacker, and others, has its roots in the criticisms of logical-empiricism offered by Austin and Wittgenstein, who noted the inadequacy of formal logic in studying propositions in natural languages. Instead, they offered an "ordinary language philosophy", which took seriously expressions in natural languages. Cognitive linguists seek to understand the use of ordinary language to understand not only linguistic activity, but the nature and structure of concepts and categories.

Cognitive linguistic research focuses on the structure of language as a reflection of the human conceptual system. By examining language, cognitive linguists seek to gain insight into the cognitive apparatus which underlies its structure and use. Cognitive linguists also take the experimental results of cognitive psychology seriously, and attempt to explain how they are realized and reflected in language structure and use. Inherent in cognitive linguistics is a criticism of traditional beliefs about categorization and language which will be discussed below.

Social Science Applications

While theoretical cognitive science is still a relatively young discipline, cognitive science findings have already been applied to a variety of problems in its constituent fields. Until lately, however, cognitive science has had little impact on the social and political sciences. There are two notable exceptions in this regard: decision-making research and cognitive linguistics.

Research in human judgement and decision-making has led to some surprising discoveries. Work by Tversky and Kahneman (1981), Mellers and Birnbaum (1981, 1982), and Kahneman and Miller (1986) contradicts the assumptions of so-called "rational" decision-making long held by economists. Economic rationality involves probabilistic decision-making in order to maximize future gain and minimize future loss. In their experiments, these researchers found that people used frame-based reasoning (about which more will be said in Chapter 3) rather than probabilistic reasoning, even when probabilistic reasoning would have been more advantageous, and despite the fact that probabilistic reasoning is more consciously thought of as decision-making. Cognitive psychology suggests that people often systematically make "iffational" decisions due to their decision-making heuristics, the way in which a decision is presented, context effects, and other such factors. These findings challenge the field of economics to incorporate human cognitive processes into their analyses.

ne impetus for the current growth of research around the philosophical and political implications of cognitive linguistic findings can be traced to the Persian Gulf War. Concerned with the motivations for U.S. intervention in the Gulf, cognitive linguist George Lakoff wrote a paper

entitled "Metaphor and War", which used the tools of cognitive linguistics to examine the conceptual underpinnings of the arguments used to justify war in the Gulf. The paper, which was distributed across worldwide computer networks caused a stir among linguists and political scientists around the world.

"Metaphor and War" was a brilliant discussion of the cognitive ramifications of the policy in the Gulf, but perhaps more importantly, it opened up political science as a viable field in which to apply cognitive science findings. Since Lakoff's paper, the study of the application of cognitive science to social science has become more and more widespread.

An example of such a fusing of disciplines is the Harm Project of Laura Stoker, a Professor of Political Science at UC Berkeley. Stoker's investigations center around the concept of harm, an important one in liberal political theory. The project questions how the concept of harm is understood both by the average person and by political theorists. In order to better understand the concept, Stoker chose to apply cognitive linguistics to analyze the concept, and discovered that while people have a number of means of conceptualizing harm available to them, political theory has largely focused on a single concept of harm. Moreover, the metaphor by which harm is understood in political theory has definite entailments about the how theorists have understood the role of government and its relation to the citizenry. (Stoker, forthcoming)

While this paper is concerned with the formulations of specific types of concepts which are used by social scientists, the questions which underlie it are these: What would a cognitive social science look like? How would it differ from the traditional social science paradigm? What could the science of the mind offer the study of social generalization?

Chapter 1 - The problem of social science concepts

Concepts and categories are the basic building blocks of all academic discourse. From the earliest times, philosophers have striven to elucidate the precise nature of these entities, and as Lakoff (1987:157) has written, "philosophy matters." But the classical view of categories as being defined by necessary and sufficient properties shared by its elements has been sharply criticized by psychologists, linguists, and anthropologists who study human categorization.[1] These researchers, who, along with neurobiologists, computer scientists, and other philosophers, participate in the discipline of cognitive science, have discovered that categories may be structured in a wide variety of ways. And unlike classical theorists who hold that concepts must "fit the world", cognitive scientists have revealed that concepts are defined relative to simplified mental models of the world.

Language is a widespread concern of social scientists, and often a crucial one. In particular, terms used to classify and categorize social phenomena come under a great deal of scrutiny in the social science literature. Most social scientists see a need for objectivity in the discipline, and seek clearly delineated categories of analysis, defined by sets of necessary and sufficient conditions on membership.

Strangely enough, however, when social science attempts to posit concepts which are so neatly defined, they often fail to capture important aspects of the concept. In order to see why, it is necessary to examine the history of the necessary and sufficient conditions formulation of concepts, which will be referred to as the classical theory of concepts and categories, and the philosophical commitments upon which it is based, which Lakoff (1980) has called the *objectivist paradigm.*

The Objectivist Paradigm in Social Science

The classical theory of categorization is as old as Aristotle, and has been summarized by Gardner (1985: 341-342) as having three features:

1. Nothing in ... our nervous system determines how we must slice up our observations.
2. Categories have defining or critical attributes. All members of a category share these defining attributes, no nonmembers share them, and there is no overlap between members and non-members.
3. *The intension* (or set of attributes) determines the *extension* of a category (which items are members). Hence it makes no sense to talk about a category as having an internal structure, with some items standing out as better members than other items ... Boundaries are sharp and not fuzzy.

This theory of categories rests on a world-view which posits a world made up of entities, properties of these entities, and relations between the entities. This world-view, *called objectivism* by Lakoff (1987: 159-164), has important ramifications for the study of cognition.

---

[1] For an excellent summary of cognitive science research on categorization and its relevance, see Lakoff, 1987.

According to objectivism, concepts get their meaning via their relation to other concepts and, most basically, via a correspondence between concepts and entities and categories in the real world. Similarly, words in a language also get their meaning through this correspondence.

It is important to note that the classical theory of categorization, and objectivism in general, applies not only to categories in the real world (such as "natural kinds"), but to what Lakoff (1987: 166) calls *conceptual categories,* mental categories composed of entities which symbolize real-world entities. It is these categories, for example, democracy, art, and feminism, with which social science is concerned, and which are the focus of this discussion.

The first of Gardner's features is held in radical subjectivist accounts of categorization. Objectivism, on the other hand, holds that categories in language or the mind correspond directly to categories inherent in the world. As we shall see below, both of these views of categorization have serious flaws.

Problems with objectivism

Cognitive science findings challenge the objectivist theories of cognition and categorization on many levels. Empirical evidence from linguistics and psychology suggests that necessary and sufficient features are often inadequate for characterizing the structure of categories.

One of the first results to challenge the classical view of categorization came from experiments in linguistic anthropology. Studying the way in which different languages' terms for colors carved up the color spectrum, Brent Berlin and Paul Kay (1969) found that while it was difficult to discern any regularity in the portions of the spectrum covered by different terms cross-linguistically, if speakers were asked to indicate the best example of a given color from a set of color chips they consistently chose the same chips. While the boundaries of a color category varied from language to language, these *focal colors* seemed to be universally best examples of color categories. Later work (Kay and McDaniel 1978) suggested that these colors were neurophysiologically most salient.

Reading the Berlin-Kay paper, psychologist Eleanor Rosch wondered if a similar notion of focal membership might exist in other categories. In a series of ingeniously designed experiments (Rosch 1973, Rosch 1975), Rosch found strong evidence for what she *called prototype* phenomena: some elements of a category were judged to be better examples of that category than others. The more prototypical elements were not only consistently judged by subjects as better examples, but were more quickly and accurately recognized in response tests, and were remarkably consistent among subjects. For example, robins and sparrows proved to be the most prototypical members of

the category *bird,* while penguins and ostriches were among the least prototypical.

The implications of prototypicality phenomena are startling. These easily measured goodness-of-example ratings are not predictable from the classical view of categorization. Defining a category in terms of necessary and sufficient conditions of membership suggests that any element which meets those conditions ought to be as good a member as any other.

Upholders of the classical view have attacked prototype theories on two fronts. During the early part of Rosch's work on prototypes, she believed that prototype phenomena were indicative of the structure of the categories which exhibited them. Though in her later work she rejected this position, it has nevertheless become enshrined by some researchers as fundamental to prototype theory. Based on the premise that categories which exhibit prototype phenomena must be *graded -* that goodness of example is degree of membership - Armstrong, Gleitman, and Gleitman (1983) noted that since prototype phenomena can be observed even in categories which are clearly classically defined (e.g., *odd number),* prototype theory must be incorrect.

A second criticism of prototype theory has been levelled by Osherson and Smith (1981). Assigning numerical goodness-of-example ratings to elements in categories, Osherson and Smith noted that the prototypes of categories formed by the conjunction of other categories are not mathematically derivable from the prototypes of the conjoined categories. For example, a very good example of a pet fish is a guppy, but a guppy is neither a prototypical fish nor a prototypical pet.

Both of these attacks on prototype theory are specious, however, and rely on a misunderstanding of the notion of prototypicality. Each criticism successfully disproves a different incorrect view of prototypes. Armstrong, Gleitman and Gleitman's results show simply that prototype phenomena are compatible with categories with flxed boundaries, and Osherson and Smith's paper clearly reveals that fuzzy set theory (their mathematics) is inadequate for

characterizing prototype effects.

A second discovery by Rosch had equally striking impact on the understanding of categorization. In another series of experiments, Rosch, et al. (1976) found that a certain level of categorization seems more cognitively privileged than others. These categories are neither the most general nor the most specific categories in our conceptual systen-4 but reside near the middle of the conceptual hierarchy. Dubbed *basic-level categories* by Rosch, they have a number of important features. They are:

> The highest level at which category members have similarly perceived overall shapes.
> The highest level at which a single mental image can reflect the entire category.
> The highest level at which a person uses similar motor actions for interacting with category members.
> The level at which subjects are fastest at identifying category members.
> The first level named and understood by children.
> The first level to enter the lexicon of a language.
> The level with the shortest primary lexemes.
> The level at which terms are used in neutral contexts. For example, *There's a dog on the porch* can be used in a neutral context, whereas special contexts are needed for *There's a mammal on the porch or there's a wire-haired terrier on the porch.* (Lakoff 1987:46)

The data on basic-level categories supports the assertion that it is at the basic level that we structure most of our knowledge about things. Moreover, since basic level structure is related to our motor and sensory programs, our categories are embodied, rather than simply products of natural carvings of entities in the world.

Objectivist views of categorization can not account for these phenomena. Understanding categories and concepts requires an approach which will accept these effects as a legitimate subject of study and attempt to account for them. Cognitive science is one such approach, and, as I hope to make clear, a necessary approach for understanding the concepts and categories that form the social science discourse.

Chapter 2 - Contested Concepts

The work of W.B.Gallie

> "I shall try to show that there are disputes, centered on the concepts which I have just mentioned, which are perfectly genuine: which, although not resolvable by argument of any Idnd, are nevertheless sustained by perfectly respectable arguments and evidence ... concepts the proper use of which inevitably involves endless disputes about their proper uses on the part of their users."
>
> - W.B. Gallie (1956:169)

In 1956, a philosopher named W.B. Gallie made an startling claim about the concepts used by social scientists. In his paper "Essentially Contested Concepts", Gallie argued that while some disputes over concepts result from miscommunication or language imprecision, some concepts are *essentially contested:* that is, the structure of the concept lends itself to multiple interpretation. Investigating the nature of these concepts, Gallie came up with seven properties which he thought were necessary for a concept to manifest essential contestedness:

(I)   [the concept] must be appraisive in the sense that it signifies or accredits some kind of valued achievement.

(II)   This achievement must be of an internally complex character, for all that its worth is attributed to it as a whole.

(III)   Any explanation of its worth must therefore include reference to the respective contributions of its various parts or features; yet prior to experimentation, there is nothing absurd or contradictory in any one of a number of possible rival descriptions of its total worth, one such description setting its component parts or features in one order of importance, a second setting them in a second order, and so on. In fine, the accredited achievement is initially variously describable.

(IV)   The accredited achievement must be of a kind that admits of considerable modification in the light of changing circumstances; and such modification cannot be prescribed or predicted in advance.

(V)   Each party recognizes the fact that its own use of [the concept] is contested by those of other parties, and each party must have at least some appreciation of the different criteria in the light of which the other parties claim to be applying the concept in question. (Gallie, 1956:171-2)

(VI)   The derivation ... from an original exemplar whose authority is acknowledged by all the contestant users of the concept.

(VII)   The continuous competition for acknowledgement... enables the original exemplar's achievement to be sustained and/or developed in optimum fashion. (Gallie, 1956:180)

Gallie provided both what he called "artificial" examples and "live" examples of essentially

contested concepts. His artificial example was the concept of "the champions." Imagine, wrote

Gallie, a championship in which each competing team has a distinctive style or mode of play, and in

which the teams are judged by the level of style they evince. This judging is not by officials, but by

supporters of each team, whose loyalties vary with the quality of the play of the teams and the cheers

of the other supporters. Assume moreover that the games on which the determination of champion

are based are played continuously, and the "champion" is likewise changing from day to day.

Now, notes Gallie,

> [T]he supporters of *every* contesting team regard and refer to their favoured team
> as "the champions" (perhaps allowing such qualifications as "the *true*
> champions*", "the *destined champions,* "*morally* the champions" . . . and so on).
> [T]he property of being acknowledged effective champions [champions at any
> given moment] carries with it no universal recognition of outstanding
> excellence—in [team] T_1's style and calibre of play. On the contrary, the
> supporters of T_2, T_3, etc., continue to regard and to acclaim their favoured teams
> as "the champions" and continue with their efforts to convert others to their view,
> not through any vulgar wish to be the majority party, but because they believe
> their favoured team is *playing the game best.* There is, therefore, continuous
> competition between the contestant teams, not only for acknowledgement as
> champions, but for acceptance of (what each side and its supporters take to be) the
> proper criteria of championship. (Gallie 1956:170-171)

Imagine the teams as classical definitions of a social science concept, their supporters as social
scientists, and the championship as fulfilling objectivist notions of a true definition, and you can
begin to recognize the situation which exists in contemporary social science discourse.
       Gallie's live examples were calculated to highlight that situation. Among the concepts he

examined were art, democracy, social justice, and adherence to a religion ("a Christian life"), each of

which is the subject of a great deal of discussion and contention in the philosophical literature of

aesthetics, political philosophy, ethics, and religious philosophy, respectively. For each concept he

demonstrated both its adherence to his principles and the fact of its contestedness by actual users.

With reference to democracy, Gallie quite clearly detailed how the concept fit each of his principles.

He noted, for example:

> (I) The concept of democracy which we are discussing is appraisive; indeed many would urge that during the last one hundred and fifty years it has steadily established itself as the appraisive political concept *par excellence.*
>
> (II) and (III) The concept ... is internally complex in such a way that any democratic achievement (or programme [sic]) admits of a variety of descriptions in which its different aspects are graded in different orders of importance. I list as examples of different aspects (a) Democracy means primarily the power of the majority of citizens to choose (and remove) governments ... *;* (b) Democracy means primarily equality of all citizens, irrespective of race, creed, sex, etc., to attain positions of political leadership and responsibility; (c) Democracy means primarily the continuous active participation of citizens in political life at all levels.
>
> (IV) The concept ... is "open" in character .... [D]emocratic targets will be raised or lowered as circumstances alter, and democratic achievements are always judged in the light of such alterations. (V) The concept ... is used both aggressively and defensively. (VI) These uses claim the authority of an exemplar, i.e., of a long tradition. (Gallie 1956:184-186)

Against the background of objectivist categorization, Gallie's proposal is a radical one. These concepts are subject to so much argument by their users (not a few of whom are philosophers and political scientists) not because sufficiently precise definitions have not been found, but because the very nature of the concept lends itself to debate among variations of definition. There is no one definition which can adequately characterize the concept in its various forms.

At the end of his article, Gallie raised two important questions for users of contested concepts. First, he noted that "it is quite impossible to find a *general principle for* deciding which of two contestant uses of an essentially contested concept 'uses it best'". He then asked whether any arguments for the use of a particular form of the concept were logically feasible. Gallie concluded that arguments could well be made which might "explain or show the rationality of a *given individual's* continued use ... of the concept in question." (Gallie 1956:189) However, such arguments (of sufficient logical force to persuade the individual to hold the view) become themselves part of the debate, as users of other senses of the concept strive to incorporate, refute, or otherwise

account for these arguments in their own version of the concept.

Gallie's second, and related, question concerned the effect of his account on conceptual debate. "In what ways," he asked, "should we expect recognition of the essentially contested character of a given concept to affect its future uses by different contestant parties?" (Gallie 1956:192)

To Gallie, essential contestedness was not a flaw in a concept. But when the essentially contested nature of a concept goes unrecognized, participants in the concept's discourse may find themselves expending their energy in "endless disputes". Gallie's hope was that the recognition of the contested nature of the concept by its users would lead to a "marked raising" of the level of quality of arguments in the disputes of the contestant parties, who now are aware of the validity of rival uses. Perhaps contestants could agree on working definitions which would serve as a compromise among their contested versions of the concept. If not, the discussion might at least be conducted on a more conscious level.

Connolly's return to Gallie

Gallie's work, however, was ignored by philosophers, never reached the social science community, and was largely unheard of until political scientist William Connolly reintroduced essentially contested concepts in his volume *The Terms of Political Discourse.*

Examining the concept of "politics", Connolly applied Gallie's criteria to show that it was essentially contested in nature. Users of the term may make reference to any or all of eight different aspects commonly associated with the political (including, for example, relating to the system of government, involving the use of power, and involving one's own interest), making the concept both internally complex and easily contestable. (Connolly 1983:12-13)

One of Connolly's most significant contributions to the study of contested concepts was to

bring into social science the philosophical notion of a *cluster concept.* A cluster concept is a concept which has "a broad and variable set of criteria' where "each criterion itself is relatively complex and open...We often find that various people jointly employing such a cluster concept weight the importance of shared criteria differently. They might also interpret the meaning of particular criteria jointly accepted in subtly different ways." As we shall see later, the idea of a cluster of variably weighted criteria is an important one in understanding the operation of contested concepts.

While Gallie's work was addressed to philosophers of language, Connolly spoke to social scientists, and his paper highlighted ramifications of this new understanding of concepts for theoretical social science. Tackling such understandings as operational concepts, descriptive vs. normative vocabularies, the analytical/synthetic distinction, and the status of ordinary language in social science, Connolly hinted at how these understanding must be modified in light of contested concepts. Moreover, he concluded by suggesting that because uses of the contested concepts are motivated by outside, often political, considerations, the recognition of their contested nature could "introduce into these contests a measure of tolerance and a receptivity to reconsideration of received views." More about these issues will be said later.

Chapter 3 - A Cognitive Analysis of Contested Concepts

Gallie's work on contested concepts was of a philosophical nature. He therefore theorized from his observations of the phenomenon of theoretical debate, and posited a series of criteria for contestedness. Though rooted himself in objectivism, Gallie produced a theory that has entailments which are sharply critical of objectivist assumptions.

What would a cognitive approach to these contested categories look like? Before discussing the actual details of such an approach, let's examine some necessary components:

1. A cognitive analysis begins with certain commitments. The first two of these commitments have been stated most plainly by Lakoff in (1992) as:
   The Generalization Commitment: To seek generalizations in all areas of language, including

polysemy, patterns of inference, metaphor, and semantic change. Gallie's paper was an attempt to account for one such generalization, the observation that certain kinds of concepts seem to be susceptible to ongoing debate about their proper definitions.

The Cognitive Commitment: To take experimental evidence seriously. Here the cognitive scientist draws apart from the philosopher. The tools which I will use to explain the conceptual structure of contested concepts are derived from empirical evidence of language use and development, anthropological research, and psychological studies.

My own commitments also include:
The Experientialist Commitment: Concepts and categories are based in interaction of the mind and the world around it rather than being inherently "out there" in the world or radically subjective. This is an anti-objectivist commitment, which is supported strongly by the empirical evidence noted above.

These commitments differ radically from the traditional social science and philosophy assumptions about the nature of concepts and categories. In particular, the acceptance of empirical evidence represents a descriptive rather than prescriptive approach to the understanding of concepts. The cognitive account is not about how categories *should* be constructed, but about how they are in

practice.

2. A cognitive analysis should answer the basic questions about contested categories and provide a deeper understanding of how these categories are understood. The questions which need answers are:
   - What are the criteria for a contested concept? How do we know when a concept is contested? Which concepts are not?
   - How can we describe the nature and structure of a contested concept in a way that motivates our understanding of these concepts and inferences drawn from them and is also coherent with all our empirical knowledge about the nature of concepts, categories, and discourse?
   - What is the relevance of these concepts to our understanding of cognition and the conceptual system generally?
3. A cognitive analysis should be relevant to the real-world use of these concepts in the social science disciplines and in the practice of politics. This position is also more in the nature of a commitment, a commitment to apply the science of the mind to the problems of other disciplines (as well as cognitive science itself), much as philosophy has motivated and continues to motivate social science discourse.

With these commitments in mind, here are the tools and discoveries which cognitive linguistics offers for the analysis of concepts and categories:

Frame Semantics

Frame semantics, developed by Charles Fillmore, is an inherently cognitive characterization of concepts. According to Fillmore (1982:119), "a 'frame', as the notion plays a role in the description of linguistic meaning, is a system of categories structured in accordance with some motivating context." Frames are akin to scripts (Schank and Abelson 1988) and schemas (Rumelhart 1975). The motivating context includes information about the relationships between the categories in the frame.

An example of a frame is the COMMERCIAL TRANSACTION frame. This frame is characterized by a semantic field of concepts (BUYER, SELLER, GOODS, PRICE, PAYMENT, TRANSFER) as well as propositional knowledge about the nature of the relationships between the concepts and the conventional ordering of frame events in a temporal sequence:

1.   SELLER has GOODS. BUYER desires GOODS

2.	BUYER makes PAYMENT of PRICE to SELLER.
3.	SELLER gives GOODS to BUYER (this is a TRANSFER event)
4.	BUYER has GOODS.

The motivating context of the COMMERCIAL TRANSACTION frame is the human activity of exchanging goods or money. The entities in the frame, like BUYER, SELLER, and GOODS are also called "roles" or, more generally, "slots". In any given description of a commercial transaction, these slots are filled by the actual buyer, seller, and goods.

The crucial intuition of frame semantics is that words are defined relative to a frame, and highlight certain other concepts and structures of the frame. The word "cost", for example, is defined relative to the COMMERCIAL TRANSACTION frame, and highlights the PRICE paid by the BUYER for the GOODS.

Another example of a frame might include our knowledge about the structure of our weeks. Elements in the frame would be concepts like DAY, WEEK, MONDAY,. TUESDAY, etc. as well as knowledge about how these concepts are related (MONDAY is the DAY before TUESDAY) and cultural knowledge about activities performed on various days in the week. Other concepts like WEEK-END are defined relative to this frame. To attempt to define WEEK-END without reference to the entire structure of the week as well as conventional understandings of the ordering of the days and the activities which occur (specifically, that most people work Monday through Friday, and not Saturday or Sunday) would be nigh impossible.

Metaphor

Frames do not inhere in situations objectively, but are imposed on them by users of the frame. The imposition of a frame may induce a cognitive mapping between elements of the frame and elements of the situation, or, more abstractly, of the domain of knowledge onto which the frame is imposed. Such mappings are examples of conceptual metaphor. For example, the TIME IS A

VALUABLE RESOURCE metaphor imposes the framebased understanding of resources (including its semantic field, e.g. such terms as "Wasting" and "saving", and knowledge about the relationships in the frame) onto the domain of temporal events. We can thus speak perfectly coherently about wasting time and saving time.

Metaphor is an important structuring principle of our conceptual system. Research by Espenson (1992) suggests that our understanding of causation is entirely metaphorical in nature. Similar work has established important metaphorical bases for our understanding of mental processes (Schwartz 1991), time (Lakoff and Johnson 1980), and emotion. (Lakoff 1987:380-45 1)

Idealized Cognitive Models

Fillmore provided a particularly interesting example of the frame-based nature of definition. Consider the concept bachelor. A propositional definition might be "a bachelor is an unmarried male". Outside cases immediately spring to mind, however: what about an 8-year-old, a pigeon, or a widower? While one can try to improve on the definition ("a bachelor is an unmarried male adult human being"), cases beyond the intended purview of the concept continue to arise: what about a gay man, Tarzan, the Pope?

A frame semantic definition provides an elegant account of how we understand and use bachelor. Bachelor is defined relative to a cultural frame about typical marriage. This frame assumes that people are adults, heterosexual, social, and not celibate. BACHELOR, then, is a concept which is understood relative to an idealized framework. Because the frame is idealized (and often prototypical), it does not fit the world exactly, and concepts defined relative to these frames display a certain fuzziness when compared with classical concepts. It is the frame-semantic definition, however, that we use in our everyday communication, as these idealized frames are shared by members of a culture.

This idea of idealized models of the world has been advanced in a more general form by Lakoff (1987:68-76). Lakoff's *idealized cognitive models* (ICMs) include propositional knowledge (like Fillmore's frames), as well as image-schematic knowledge and metaphorical and metonymic mappings. The ICM is an enormously powerful concept for understanding other concepts.

Cluster Models

One kind of ICM which will be particularly important in the examination of contested concepts is the *cluster model.* Connolly's notion of cluster concepts is based in objectivism; to Connolly, a cluster concept is a complex concept with variably weighted sets of criteria. A cluster concept in the sense in which it is used by cognitive linguistics (the sense which I shall mean when I refer to cluster concepts below) is a concept delineated by a cluster of ICMs. Taken together, this cluster of models forms a unit which is psychologically more basic than the individual models. (Lakoff 1987:74).

An example of a cluster model is provided by Lakoff (1987:74-85). He notes that the concept *mother* is defined by the conjunction of models of motherhood, including: birth, genetic relationship, nurturance, marriage, and genealogy. In this cluster model, our central ideal sense of mother fulfills all the models in the cluster: the mother is the woman who gives birth to the child, who provides the ovum, who nurtures the child, who is married to the father, and who is the child's closest female relative. However, any number of these conditions can be relaxed and still produce a relationship which we could describe as motherhood.

Radial Categories

The concept *mother* forms a category characterized by a central sense or subcategory and its conventionally learned extensions (for example, *surrogate mother).* Lakoff calls such structures *radial categories.* In a radial category, various senses of a concept radiate from a central sense, linked by folk theories, metaphors, and other conventional principles of extension, and these senses are understood partly in relation to the central sense.

The principles by which a central subcategory is extended to noncentral members are not automatic and general. They are, as noted above, conventional and learned. This is not to suggest that they are unconstrained. The ICM which structures the central sense may well constrain the possible extensions, and it is for this reason that extensions are spoken of as *motivated* by the central sense, but not *determined.*

An ICM account of Contested Categories

We now have the tools at our disposal to provide a cognitive linguistic characterization of the structure of contested concepts.

A *contested concept* is a radial category which is generated by a central ICM which is subject to contention. The central model is extended in a number of possible ways, and these fully instantiated extensions are the versions of the concepts which conflict.

The central ICM can be subject to contention in two ways: it may be oversimplified (and thus subject to multiple interpretations) or it may be a cluster model (where the users differ in their evaluation of the relative importance of the models in the cluster), or both may apply.

Oversimplification similarly takes two forms. An ICM may be *underspecified.* An underspecified ICM makes provisions for certain roles or slots, but does not indicate any one element with which to fill a given slot. As such, it is too general to be used for most practical purposes (especially social science discourse), and must be fleshed out. This filling of the slots creates a particular instantiation of the model, with sufficient detail to be used in discourse.

The second way in which an ICM can be oversimplified is by being *prototype-based.* A prototype-based ICM represents its concept by means of a typical, stereotypical, or ideal example of the concept. Lakoff's central concept of "mother" is an example of a stereotypically oversimplified ICM. The cluster model which defines central motherhood is a model of the stereotypical mother.

It is common for ICMs to be both underspecified and prototype-based. In these cases, the concepts in the prototype are of sufficient abstraction to require further specification. Democracy, for example, can be said to have a central model which is prototypically-based (on the simplified exemplar of Athenian democracy) as well as underspecified (who counts as a citizen?).

There are, then, two loci of contestedness. The first, which was noted by Gallie, is in the

user's weighting of the various models which make up the cluster model at the center of the category. Different users of a concept may consider different submodels to be more primary in importance, and this will be reflected in the fully instantiated form of their concept.

The second locus of contestedness is belief system chosen to extend the central model and fill in any underspecified slots. As we shall see below, the belief systems which extend the central model may be either principled, derivable from more general ideologies, or *ad hoc,* specific to the contested category in question.

It is instructive to immediately look at some examples of contested concepts. Rather than present full analyses of each concept, I will briefly show some of the variations that can be observed in these phenomena. A fully detailed examination of one contested concept, feminism, is given in the case study at the end of the paper.

Democracy:

Democracy was one of the first examples of contested concepts, cited by Gallie himself. While the complete analysis of democracy as a radial structure is beyond the scope of this paper, it has been addressed at some length by Pierre Ostiguy (1992). I will summarize Ostiguy's analysis with minor modifications.

Ostiguy identifies five major conceptions of democracy which are in conflict among political theorists:

> 1) *representative democracy,* involving the election of representatives ... and the possibility of removing the authorities in power through competitive elections; 2) *democracy as participation* in the decision making process... 3) the *class or social stratum conception of democracy,* which is close to the original political meaning of democracy in Ancient Greece... 4) *liberal democracy,* based on checks and balances... 5) *democracy as the people's will,* in which the government is the expression of a collective will, as exemplified in the discourse of the French Revolution. (Ostiguy, 1992: 1)

Noting that the *Oxford English Dictionary* defines democracy simply as "government by the people", Ostiguy goes on to investigate how such conflicting conceptions can exist side-by-side with a single well-accepted definition. His analysis leads him to the same tools I have enumerated above: frame semantics, idealized cognitive models, and radial category structure.

Ostiguy posits Athenian democracy as a generative exemplar of the notion of democracy, which gives rise to the idealized cognitive model which is at the center of the radial structure. Idealizing from Athenian democracy leads to an oversimplified model of "rule by the people". The model is then extended by specifying what is meant by "rule" (which is a consequence of how society is understood) and who the "people" are.

The concept of the people is fleshed out in one of two ways. If the people are taken to be the masses (what Ostiguy calls the "popular stratum"), the conception of democracy entailed is the class or social stratum concept. This conception is evident in the work of Aristotle, Machiavelli, and Lenin.

On the other hand, "people" may refer without distinction to every member of the society, of whatever class. The other forms of democracy are motivated by this understanding of "people", along with further specification of the nature of society.

When society is metaphorically understood as an individual person, it can be understood as having metaphorical faculties, e.g., passion, reason, and will. It is this understanding which motivates the "democracy as the people's will" extension of the central model. Society is seen to have a set of desires, and fulfilling these desires, by whatever political means, has been considered to be democratic.

Society may also be understood as a collection of institutions in which the people participate. This understanding lies behind the participatory concept of democracy. By the conceptual

metonymy by which a single person can stand for a group of which they are a member, this concept can be further extended to the notion of representative democracy. Liberal democracy is the intersection of representative democracy and the belief system of liberalism.

Ostiguy provides a convincing analysis of how democracy is understood by political theorists. Moreover, the analysis of democracy as a radial category explains both the relationships between the different concepts of democracy in the discourse of political science and where they differ.

Art:

That the concept of "art" is contested requires no proof. Art is one of the most controversial and fluid concepts in our culture, and, not surprisingly, users of the concept often conflict around its proper definition and application.

Lakoff (personal communication) has described some of the features of art. Art is often: not natural, a creation, an expression, an investigation, a bringing-to-attention, a display of skill, not practical, and a product of history and culture. Each of these features structures an idealized cognitive model of art, and each model has numerous special cases. For example, the "Art is distinct from nature" model encompasses (as special cases): art as an imitation of nature, art as an improvement on nature, art as an alteration of nature, and art as imagination.

Taken together, these models form a cluster model of art, and give rise to the first locus of contestedness, the weighting of the models. Artists, art critics, and art historians who hold different versions of the cluster model defined by differently weighted submodels will not surprisingly conflict in their assessment of whether a given entity constitutes art.

Moreover, as was mentioned above, each submodel has its own special case structure, and the choice of special cases is itself an ad hoc extension of the concept of art. The second locus of contestedness thus may come into play as well.

Science:

The question of what constitutes a "real" science is an interesting one which has

captivated scientists and philosophers of science alike. It is also particularly interesting as an

example of a contested concept structured around an ideal prototype.

The prototypical exemplar of science is a simplified form of classical Newtonian physics.

Its important features include these beliefs:

1. Science studies the natural world outside of us, striving at objectivity.
2. There are natural, universal laws which govern the interaction of aspects of the world, and these laws are discoverable.
3. The correct way to study these laws is through falsifiable experiments with reproducible results.
4. The aspects of the world in which science is interested are measurable and quantifiable. Mathematics is thus a useful scientific tool.

These beliefs, extracted from physics, constitute a cluster model for the concept of

science, and the weighting of these models often determines whether an individual will find a

given field of study to be a science. Consider, for example, the following disciplines:

Physics	Fulfills all the above criteria
Chemistry	Fulfills all the above criteria
Geology	Many people are unclear that geology operates by experiment. Insofar as it is seen as operating by observation (and methods like chemical analysis), is it is not as "sciencey' as physics.
Biology	Folk impressions of biology similarly do not include either the experimental methodology or the focus on quantification of physics.
Psychology	Experimental psychology fulfills many criteria, but focuses on the mental rather than the external (physical) world. Clinical psychology fulfills very few criteria.
Computer Science	Computers are not part of the natural world, and hence no natural laws exist. Computer science does not operate by experiment.
Anthropology	Anthropology, like psychology, does not study the external world. It uses observational rather than experimental methodology, has no natural laws, and is not easily subject to quantification.
Political Science	As Anthropology.

An individual's choice of which of the features of physics are most important to science (and, conversely, which can be relaxed) will have direct impact on which of the fields in the list above they are willing to consider sciences. The most striking contrast for me is between geology and (experimental) psychology. Psychology seems to me the better example of a science, owing to its experimental methodology; having spent time in psychology labs worrying about controlling independent variables, and none doing geology, this is perhaps to be expected. And yet I somehow know that geology is a "harder" science, more scientific, because it studies physical phenomena that can be more easily known than the tangled world of the mind.

The Advantages of a Cognitive Account

As I noted above, there are certain questions which a cognitive analysis of contested concepts must be able to answer. The first set of questions concerns the nature of these concepts. What are the criteria for a contested concept? How do we know when a concept is contested? Which concepts are not contested?

A concept can be seen to be contested when debate about the application of the concept becomes debate about the proper definition of the concept, and when the assumptions underlying the proposed definitions conflict. As Gallie noted, complex concepts are more susceptible to variation of definition, and concepts which are appraisive in the discourse have more at stake for the discourse participants.

There are few concepts which are *never* contested. With the exception of mathematical concepts which are clearly classically defined (e.g., "odd number"), we can often imagine possible, albeit unusual, situations in which even the most basic concepts might be contested. For example, "chair" might become a contested concept at a convention of furniture designers trying to decide if a

piece of furniture radically different from the prototypical chair could be called a chair. Note that in these circumstances, the concept becomes appraisive; calling it a chair lends it credibility. Moreover, the concept becomes contested among specialists, though its contested uses may spread to nonspecialist users of the concept. "Music" is another example of such a concept.

A second question is how we can describe contested concepts in a way that motivates our understanding of the concepts and conceptual debate, while remaining true to empirical findings about categorization. As the analysis above shows, contested concepts are structured as a central idealized cognitive model and extensions of this central model, by specification of underspecified slots or by weighting of clustered submodels, or both. This picture of contested concepts makes use of cognitive linguistic mechanisms which have been demonstrated to operate in our thinking by cognitive linguists and psychologists.

The cognitive science account of contested categories is extremely powerful as both an explanatory mechanism and an analysis of conceptual structures. Moreover, it is capable of accounting for phenomena which objectivist notions of concepts and categories can not.

As an explanatory mechanism, the cognitive science account precisely locates the loci of contestedness in a concept. As noted above, concepts can be contested at either the level of the central model (which features or models are given more weight in a given version of a concept) or at the level of extension (how will the central model be extended.) Applying this framework to the debate over a particular concept can provide useful insights for users of the concept (for an example, see the case study at the end of the paper).

As an analysis of conceptual structure, the cognitive account is unique in its reliance on such features as prototypes, frames, and idealized models. Though there is ample experimental evidence for these mental representations, they have no place in the classical theory of categorization, which

admits of no contested concepts. Our final question is about the relevance of these concepts to our understanding of cognition in general, and it becomes clear that the existence of contested concepts is extremely problematical for traditional accounts of categorization. The problem of conceptual debate is approached by classical social science theorists as problem of inadequate definitions, and in the next chapter, I will compare one such approach to the cognitive analysis.

Chapter 4 - Social Science's own attempts: The work of Giovanni Sartori

While Gallie's work has been unknown or ignored by social scientists, social science has not been unaware of problems with conceptual definition and application. In fact, social science's overwhelming concern with concepts has spawned a number of programs of conceptual clarification, which seek to improve the discriminatory power of concepts by sharpening their definitional criteria. Most notable of these is that proposed by Giovanni Sartori (1984) in his book *Social Science Concepts: A Systematic Analysis.* As Sartori's work has been extremely influential in the social sciences, I will examine it in some depth. As we will see, however, the Sartori program is based on objectivist principles and so fails to account for some of the features of categorization which have been observed by cognitive scientists.

Sartori's method

In *Social Science Concepts,* Sartori offers a systematic methodology for reconstructing and clarifying concepts in the social sciences. Sartori hopes to reduce semantic debate by settling on a precise (and optimally denotative) meaning for each word, and (ideally) a one-to-one correspondence between words and concepts.

Sartori provides an overview of his method in the introduction:

[T]he analysis essentially hinges on three successive steps: (1) anatomy, (2) reconstruction, and (3) concept formation. The anatomy consists of sorting out the constituent elements of a given concept—that is, its characteristics, properties, or attributes. The reconstruction consists of recombining and organizing these elements in some meaningful and logically sound fashion. Finally, the formation consists of selecting a definition or definitions of a concept on warranted and explicated grounds." (Sartori 1984: 11)

Sartori has also described the process stages as (1) establishing the characteristics of the concept (which constitutes the anatomy), (2) determining all the referents of the concept-term (reconstruction of the concept's current denotative meanings from the features of the anatomy), and (3) making sure that terms are understood to refer to a single referent or class of referents, based on the groupings of characteristics (the intension), by means of declarative definition (formal concept formation). (Sartori 1984: 34-35)

In the language of linguistics, the method involves identifying the feature bundles of the various concepts referred to by the polysemous concept-term, organizing these features into a hierarchy, and choosing definitions for various terms to denote various combinations of features which satisfy the MINIMAL DISTINCTION PRINCIPLE, which states that "'good' definitions must minimally distinguish sister categories." (Lakoff, 1987:167)

In order to aid the analyst Sartori provides 10 specific procedural rules. Because these rules are constitutive of Sartori's method, I reprint the most important of them here:

Rule 1: Of any empirical concept always, and separately, check (1) whether it is ambiguous, that is, how the meaning relates to the term; and (2) whether it is vague, that is, how the meaning relates to the referent.

Rule 2a: Always check (1) whether the key terms (the designator of the concept and the entailed terms) are defined; (2) whether the meaning declared by their definition is unambiguous, and (3) whether the declared meaning remains, throughout the argument, unchanged (i.e., consistent).

Rule 3a: Awaiting contrary proof, no word should be used as a synonym for another word.

Rule 4: In reconstructing a concept, first collect a representative set of definitions; second, extract their characteristics; and third, construct matrixes that organize such characteristics meaningfully.

Rule 5: With respect to the extension of a concept always assess (1) its degree of boundlessness, and (2) its degree of denotative discrimination vis-a-vis its membership.

Rule 6: The boundlessness of a concept is remedied by increasing the number of its properties; and its discriminating adequacy is improved as additional properties are entered.

Rule 8: In selecting the term that designates the concept, always relate to and control with the semantic field to which the term belongs—that is the set of associated, neighboring words.

Rule 9: If the term that designates the concept unsettles the semantic field (to which the term belongs), then justify your selection by showing that (1) no field meaning is lost, and that (2) ambiguity is not increased by being transferred into the rest of the field set.

Rule 10: Make sure the definition of a concept is adequate and parsimonious: adequate in that it contains enough characteristics to identify the referents and their boundaries; parsimonious in that no accompanying property is included among the necessary, defining properties. (Sartori, pp. 63-64)

In one way, Sartori's method is similar to that used by cognitive linguists: Sartori advises thinking about how various meanings of a concept are related. However, Sartori's method and his understanding of concepts as feature bundles relies upon the assumptions of an objectivist notion of language, as we shall see below, assumptions which have been challenged, and in many cases disproven, by cognitive scientists.

Philosophical underpinnings

Sartori outlines his assumptions early in the work:

Briefly sketched, this work attends to the analysis of concepts under the assumption that it is the concept that structures the sentence - not vice versa. That concepts are defined and elaborated via sentences or propositions does not detract from the fact that "before we can understand any proposition at all, even a false one, we must first have concepts" (Hospers, 1967:101). (Sartori, p. 11)

This assumption is a cognitive commitment; Sartori asserts that the conceptual system motivates the semantics. Cognitive linguistics is also predicated on this assumption.

However, Sartori's other assumptions are clearly within the realm of objectivism:

My premise is that in the beginning is the word, that is, *naming*. We express what we mean (what we have in mind) by picking from within the ambit of our natural language the "right words." Conversely, we are unable to express exactly what we mean unless we find words for it. By affirming that in the beginning is the word I am simply asserting that we cannot form a sentence

unless we already know the meanings of the words it contains. (Sartori 1984: 17, emphasis in original)

This view can be seen even more clearly in Sartori's discussion of concepts. Sartori first outlines the (traditional) distinction between the intension and the extension of a concept. According to Sartori's definitions, "the intension (or connotation) of a term consists of all the characteristics or properties of that term, that is, assignable to a term under the constraints of a given linguistic-semantic system' (Sartori 1984: 24), while the extension is "the referent or referents to which a term applies." (Sartori 1984: 77) Sartori goes on to discuss referents:

"But what does the word referent mean? I shall define it: whatever is *out there* before or beyond mental and linguistic apprehension. So to speak, referents are the real-world counterparts (if existent) of the world in our head." (Sartori 1984: 24)

Here Sartori reveals his stance as being clearly objectivist. Specifically, his position corresponds to Cognitivist Objectivist Semantics, as described by Lakoff:

COGNITIVIST OBJECTIVIST SEMANTICS:
Linguistic expressions (e.g. words) get their meaning indirectly via a correspondence with concepts which are taken to be symbols used in thought. Those symbols, in turn, get their meaning via their capacity to correspond to entities and categories in the world. (Lakoff 1987:168)

In addition, Sartori holds an objectivist paradigm of definitions, differentiating between "defining properties" (what Lakoff calls "definitional knowledge") and "accompanying properties" (what Lakoff calls "encyclopedic knowledge"). Sartori notes that "while this distinction may be difficult to draw in practice, it is an essential one in principle." Unfortunately, this distinction runs into trouble in a case given by Sartori himself:

The crucial question thus is, how do we decide which characteristics belong to the defining properties? With respect to empirical knowledge (not in other domains and respects) I answer the follows: The *defining properties are those that bound the concept extensionally.* To illustrate, if the ability to fly were considered a defining property of birds, then an ostrich could not be classified as a bird. As a consequence, either we unsettle (and resettle differently) the criteria according to which zoologists classify all living beings, or we must make "ability to fly" an accidental, if very frequent, property. Note that a minor borderline problem relating to marginal entities (mainly ostriches and turkeys) wins over the visible property that most people would consider the characteristic of birds. So, the defining properties are the bounding ones - not the most frequent or ostensibly obvious ones."

(Sartori 1984: 55)

Sartori wishes to exclude accompanying properties from his definition of a concept in order to arrive at "correct" definitions for such concepts as "bird". Cognitive semantics has little difficulty with this issue, suggesting that even categories with clear boundaries can nonetheless exhibit some internal structure which yields judgements of the prototypicality of exemplars. Lakoff notes that this prototypicality knowledge must be part of the concept, as it produces asymmetrical inferences when used in reasoning with the concept.[2]

Sartori attempts to incorporate the notion of fuzzy category membership by positing a hierarchy of definitions to be applied to concepts. *Denotative definitions* (discussed above) are intended to be used to set category boundaries, while *precising definitions* are used to "sort out the membership of any given denotatum", that is, to specify whether a given entity should be included in the category. This definition scheme could be made to explain some prototype effects (entities which require precising definitions are less prototypical), but seems far too simple to account for the continuum of goodness-of-example ratings, and, despite his use of the term "fuzzy membership", still structures categories with strict boundaries rather than true graded categories.

Finally, Sartori is only concerned with words that function as subjects and predicates, and indeed, in the social sciences such words (e.g. democracy, power, resistance, freedom, acting) are perhaps the most interesting and fertile. However Sartori overstates the case when he argues that "even though it goes without saying, it is safe to say it: Not all words have semantic meaning ... semantic considerations apply to words that can be used - in sentences - as subjects or predicates (and, derivatively, to the verbal forms which have a corresponding noun form)." (Sartori 1984: 17) Work in cognitive linguistics continues to reveal that complex semantic meaning can be found in

---

[2] For examples, see Lance J. Rips, 'Inductive Judgements about Natural Categories' in *Journal of*

even "simple" spatial prepositions (e.g. "over" as discussed by Brugman (1981) and Lakoff (1987: 416-461)).)

It is clear, then, that Sartori holds a variant of the objectivist philosophy of language, and that this doctrine will affect conceptual analysis undertaken with his methods. It is also clear that results from cognitive science cast serious doubt on the tenets of objectivism, and suggest that Sartori's views are not empirically sound.

Failings of the method

In order to see more concretely the contrast between an analysis like Sartori's and a cognitive linguistic analysis, I will turn to an examination of two analyses which are included in the Sartori volume. Jackson's analysis of the concept of ethnicity and Kotowski's analysis of revolution reveal the weaknesses of Sartori's method. I will also suggest what a cognitive approach to these concepts might look like.

An example of the use of Sartori's method on the concept *ethnicity* is provided by Robert

Jackson (in Sartori, 1981). Eschewing the use of the term "ethnicity" in the analysis, Jackson

provides a table of features (p. 223):

	Ascription	Plurality	Identity	Organized	Authority
E. Category	x	x			
E. Group	x	x	x	x	
Ethnonation	x	x	x	x	x
Nation[a]	x		x	x	x
Caste[b]	x	x	x	x	
Clan[c]	x		x	x	
Social class[d]		x	x	x	
Interest group		x	x	x	

[a]Also has feature of political independence
[b]Also has feature of hierarchical structure
[c]Also has feature of blood relation
[d]Also has feature of inequality

At the top of the table, Jackson lists relevant features in the semantic field, which he takes to

be groupings of people. Ascription refers to the involuntary nature of the assignment to the group.

Plurality refers to groups which exist (inherently) side-by-side with other groups. Identity refers to

---

groups which are conscious of their ascribed group membership, and Organized to groups which are organized around this identification. Finally, Authority refers to publicly sanctioned special privileges or rights (e.g. Native American tribes in the United States)

Using this feature matrix, Jackson assigns terms to different bundles of features (or, put another way, defines such terms as "ethnic group" in terms of these feature bundles), forming a system of contrasts (between the ethnic terms and the other terms like "nation") and levels of abstraction (within the ethnic terms.) Other terms are defined as collectivities of these more basic terms (e.g. "ethnic collectivity" denotes "ethnic category", "ethnic group", and "ethnonation").

The goal of such conceptual analysis is to redefine concept-terms to maximize their discriminatory power and thus eliminate the ambiguity potential of using polysemous terms. Given Jackson's analysis, for example, it would be easy to discuss empirical questions about ethnic groups and be understood as referring only to ethnic categories which are organized around and identified with their ethnic ascription (as opposed to, for example, white Americans, who rarely organize around their skin color or identify with it.) Such a clarification of concepts seeks to free the discourse from semantic misapprehension and permit more focused investigation of the subject itself.

But Jackson's analysis falls short of this goal. He describes ascription as an uncomplicated assignment of ethnic category to a group, but ascription functions at a variety of levels which depend on who is ascribing. "Person of Color", "Asian", "Chinese", and "Han Chinese" (or "Miao Chinese", or any of China's hundreds of minority groups) could all be ascriptive labels for a given individual, depending on the context of the ascription. Identity and Organization are similarly problematic.

Moreover, because of its basis in classical feature bundle categorization, Jackson's analysis can not account for more complex cases involving persons of mixed ethnicity. For example, a man

of mixed Caucasian and African heritage might be taken to be white by others, be considered African-American for the purposes of affirmative action, identify with both ancestries, and organize around multi-racial issues. Jackson's simple "ascription" and "identity" features are not enough to handle these "fuzzy" cases (which, in the United States, are rapidly becoming the majority).

A cognitive linguistic analysis would begin by recognizing that the category *ethnicity* does not fit the world exactly, as classical categories are assumed to do. Rather, *ethnicity is* defined relative to an idealized cognitive model of society. The ICM contains notions of various genetically distinct, visually discriminable groups of human beings which share a common culture and in which all procreation is within group. The groups are also aware of the existence of the other groups (this corresponds roughly to Jackson's concept of plurality). Ethnicity, in this ICM, is membership in one of these groups.

But this ICM is obviously too simple to fit the world well. Like Jackson's concept, it does not fit people with multiethnic backgrounds, and does not predict misascription ("passing"). However, where Jackson suggests that his concept fits the world better than other formations of *ethnicity,* cognitive linguistics makes no such claim about the ICM. It is precisely because the model is idealized and cognitive that it need not fit the world. Situations in the world that match the ICM are the most clear and representative cases of *ethnicity.* Situations in which some of the model's constraints are relaxed (which in fact make up many of the situations in the real world) are less representative and most subject to argument. In accordance with this model, we would expect to find prototype effects in judgements of what is an ethnicity. This analysis does not purport to "properly" define *ethnicity;* rather, it explains how we use and understand the concept in practice, and why there is so much disagreement over the referents of the term.

Furthermore, the ICM described above is a cluster model, and when users of the concept

differentially weight the submodels of a cluster model, we can expect the concept to become

contested. In fact, the definition of 'ethnicity' (as well as 'race' and many other terms in the same

semantic field) is hotly contested by anthropologists and sociologists, and will probably remain so.

The clarification Jackson proposes is unlikely to offer a solution to the debate, as it does not address

this issue of differential weighting; Jackson's concepts would become yet another instantiation of the

underspecified ICM.

The analysis in Sartori's book which most closely approaches the spirit of a cognitive

linguistic concept analysis is Christoph Kotowski's article on *revolution* (1984:403-451). After

examining the (necessary and sufficient) criteria for revolution given by nine political theorists,

Kotowski concludes that there is no classical definition which can encompass the category as it is

actually used. Revolution is situated in three different semantic fields, and the classification of

events as revolutions depends upon which "formulation" of the concept is in use.

Kotowski's "formulations" (which include "revolution as a violent outburst", "revolution as a

progressive historical transformation", and "revolution as an illegal and violent political change") are

parts of an idealized cluster model of revolutions. Each ICM in the cluster incorporates a different

semantic field, and produces a different notion of revolution. We can describe the <u>semantic</u> fields

and their ICM's as follows:

(1) Collective Violence: revolutions are one of a number of types of collective violence.
Other concepts in this semantic field include riots, coups, terrorism, and rebellion.
Revolutions differ from rebellions in that revolutions result in a change of the governing
body, while rebellions do not. Kotowski attempts to distinguish revolutions from riots,
coups, and terrorism by the distribution of the participants (riots being collective violence
by the unorganized masses alone, coups and terrorism being collective violence by an
elite alone, and revolution being collective violence by elite-organized masses), but this
argument is dependent on a particular ideology of organization as well. One of the most
interesting projects for cognitive analysis of political concepts is to study how concepts
like societal organization and collective violence vary systematically together.
(2) Historical Transformation: revolutions are abrupt, conscious transformations towards

"progress". Other elements in the semantic field include evolution (unconscious and gradual) and reform (conscious and gradual), as well as reaction (in the sense of "reactionary"), conservatism, and counterrevolution.

Once again, we would expect this ICM to vary systematically with the notion of progress.

This model is thus underspecified with regard to what constitutes progress, and may be extended by any belief or belief system which specifies what is to be considered progress (it seems to me quite likely that these will be principled extensions, based on complete systems of belief or an ideal of the desired society). If progress is defined as moving toward a classless society, the resulting notion of what is to be considered a revolution will differ from an ideology which sees capitalist democracy as the goal. In fact, one ideology's revolution may well be another's conservatism or counterrevolution.

It is this conception of revolution which is often metaphorically extended to refer to nonpolitical transformations (e.g. the industrial revolution).

(3) Political change: revolutions are violent, illegal changes in political structure. Other elements in this semantic field include legal changes in officials (elections, succession), territorial units (plebiscites), and political structure (legislated reforms, constitutional amendments), illegal nonviolent changes in political structure (bloodless coups like the Latin American *continuismo,* when an elected leader does not stand for reelection), illegal violent changes in officials (coups), and illegal violent changes in territorial units (secession).

An excellent example of a revolution, then, is one which embodies all three of the ICMs in the cluster: an act of collective violence which results in a progressive change in political structure. Such cases do exist, and are among those most likely to be agreed upon by political scientists (e.g., the American Revolution, the French Revolution, and the Russian Revolution.) Historical events which partake of only one or two of these models are less prototypical cases of revolutions, and more likely to be subject to debate.

Unlike Jackson's, Kotowski's argument does not lead to a conceptual clarification which sets out necessary and sufficient conditions for the use of the concept revolution.

Most succinctly put, "revolution" is a "loaded word." Among major social science

concepts it has perhaps the strongest evaluative connotation, both positive and negative. If one sees revolution as a step toward human progress and if one has a theory that posits the necessity of revolution for such progress, then one will hardly be satisfied with a definition of revolution that stops at violence. Contrariwise, if one attaches a negative value to the term and one has a theory that revolution is caused by a malfunction in the political and/or social system, then there is a great temptation to put everything that happens after the shooting stops into the category of "contingent characteristics."

In short, revolution is appraisive, internally complex, and open.

Ideally, this reconstruction might serve as a foundation for the formulation of a single, improved concept of revolution. However, in the case of revolution, I doubt that such a consensus is possible ... This indeterminate conclusion should not, however, make us despair. Perhaps consensus on the concept of revolution is beyond our reach, but clarity and consistency never is. If scholars do not all attach the same meaning to the concept of revolution, they can at least specify which "meaning" they "mean."

Gallie himself could not have said it better.

Sartori's work on social science is a typical example of social science attempts at conceptual clarification, which is seen as the solution to the difficulty of fitting contested concepts into an objectivism notion of concepts and categories. The attempt, however, is flawed by these same objectivist assumptions.

The goal of these programs of conceptual clarification is prescriptive rather than descriptive; they seek to establish normative classical definitions for contested concepts and thereby eliminate the conceptual debate. Sartori himself recognizes this tension between prescription and description in his requirement that concept reconstruction be informed by the actual historical or current usage before being finally clarified. However, even these analyses of historical and current usage are objectivist analyses and, as noted above, can not account for empirical observations about concepts (such as prototypes, basic-level phenomena, and inferences from idealized models.)

Conclusions

The field of social science is an important one in American culture. It is, by and large, the social scientists whose work informs decisions of public, economic, and foreign policy, and it is the social sciences whose methods, theories, and results are most salient to the general populace and to the media. This places an enormous responsibility on social scientists to understand their subject matter.

Our examination of social science concepts has turned up some interesting results. Work in cognitive science has established that most concepts are internally complex, exhibiting prototype effects, frame-based structures, or idealized models. This stands in sharp contrast to the traditional understanding of concepts and their relation to the external world, a position called the classical theory of concepts and categories, or

objectivism, above.

It has been noted that some concepts seem to engender debate about their application. The classical view of concepts insists that this must the effect of faulty definition; the cognitive view reveals that it is the structure of the concept and our conceptual system which makes it susceptible to contest. Debate about such concepts will not be quelled by redefinition; it will merely become debate over the appropriateness of

the definition.

The difficulties in concept usage among social scientists have already been alluded to above, in the discussion of Sartori's work. The problems faced by Sartori and other social scientists will not be solved by programs of conceptual clarification which rely on the classical theory of categorization. The results of cognitive science flatly disprove many of the assumptions upon which the classical theory rests. Contested concepts will not be susceptible to redefinition, because they

were never truly defined by sets of necessary and sufficient criteria.

This is not to say that such concepts should be given up. What must be given up is the assumption upon which the necessary and sufficient view of categorization rests. Cognitive science can offer the social sciences a powerful set of tools for understanding how these concepts are constructed and interpreted. In so doing, it may both help to curtail unresolvable debate ("That's not feminism!") and focus more attention on the assumptions and entailments of particular instantiations of concepts as they are applied in the public arena.

If social science continues to hold its assumptions about categorization and conceptual analysis, it can expect to encounter the same difficulties at every turn. The alternative is to change course, to embrace a commitment to categories and concepts as they are understood by the empirical methods of cognitive science. It remains for social scientists to apply the cognitive analysis to their disciplines and, perhaps, to gain a better understanding of how we experience the world around us.

Feminism: A case study of a contested concept

Feminism comes to mind as a good contender for a contested concept for a number of reasons. Its application has historically been contested by its users. Moreover, it fulfills Galliee's criteria rather well.

Users of the concept have historically conflicted in cases of application of the concept. There have been numerous arguments about whether a given ideology or practice should be called feminism and these arguments have been conducted not only by outsiders, but by the users of the concept themselves.

Many arguments about the proper reference for the concept feminism took place during the second wave of feminism in the 1970's. The resurgence of feminist theory in this period inevitably led to conflict about the definition of feminism itself, conflict which is still present in the literature. As Sharon Sievers (1989) has noted, "It is impossible not to notice the ambiguities in recent historical descriptions of feminism, many of which are included within the framework of competing world views…All of us realize the term *feminism* itself can pose problems, particularly when it is used literally and exclusively." (Sievers 1989)

Another reason to believe that feminism may be a contested concept is that it fulfills the most important of Gallie's criteria. When the users of the concept are contesting its application to a particular situation, they are doing so because it is *appraisive*. When feminists choose to label an ideology or practice as "feminism", they grant it an enhanced status and importance. This feature of categorization is what makes the debate important to the users of the concept.

The "valued achievement" which the term feminism accredits to the ideology or practice to which it is applied is clearly *internally complex* (the details of the complexity will be discussed

at length below.) Moreover, the achievement "admits of considerable modification in the light of changing circumstances" (i.e., is "open"), reflecting as it does a reaction to a similarly complicated sociopolitical milieu. Feminism also fulfills Gallie's fifth criteria (that users acknowledge the contested nature of the concept) and can be said to have an acknowledged exemplar in the woman suffrage movement of the 1860's-1920's.

Feminism is not only a good potential candidate for a contested concept, but an interesting one as well. Feminism is a political concept which has historically been applied to a number of different ideologies. It behooves us to attempt to explain what these ideologies have in common as well as how they could be different and still share the single term.

What follows is not a historical analysis of the feminist movement, but a synchronic examination of the *concept* of feminism, as it was used and applied by people during the second wave of the feminist movement. While the synchronic analysis admits of the criticism that it fails to account for historical change in the meaning and use of the concept, describing the atemporal structure of the concept now is more important to our goal of understanding the cognitive structures of conceptual systems.

The most interesting period of debate about the application of this concept occurred in the wake of the proliferation of a number of pro-woman positions all of which labeled themselves as simply feminism. The terminology which I use to distinguish the various instantiations of feminism is not drawn from this period (which predates the division of the terms), but from the current usages of specialists: feminist theorists, feminist activists, and women's studies researchers. Terms like "cultural feminism" and "radical feminism" are part of the specialists' taxonomy of the concept.

Our approach to feminism as a contested concept begins by laying out the oversimplified

cognitive model upon which feminism is instantiated. Feminism lies in a semantic field with other concepts, particularly gender and patriarchy, and it is necessary to examine these concepts briefly before going on to discuss feminism itself.

Folk theories of gender

Feminism is a cultural concept, embedded in and defined relative to a the cultural conceptions of gender. These conceptions form a cluster of stereotypical folk models of masculinity and femininity. Gender is understood primarily by means of two superordinate folk theories and a number of culturally-specific explications of these theories. The overarching stereotypical folk theories of gender in our society are:

Sex and Gender are Related

In some way there is a connection between masculinity and maleness, between cultural notions of womanhood and biological facts of being female. In the prototypical scenario, males should be, and are, masculine by nature; females are likewise feminine. Historically, this has often been taken to be a result of biological factors: inherent constitutions, the presence of the uterus, hormonal differences.

This folk theory cuts across cultures. While the actual notions of masculinity and femininity in use in a given culture vary from culture to culture (some American notions are discussed below), the superordinate belief in the connection between sex and gender can be found in numerous societies.

Masculinity and Femininity are opposites

Men and women are seen as essentially different, and masculinity and femininity are opposed. To be more masculine is to be less feminine and vice versa. Again, the specific traits associated with masculinity and femininity vary cross-culturally, but the notion that the genders are

diametrically opposed is very common.

This theory runs so deep that it is often difficult to understand why it is really a folk theory and not a truism. Consider, however, some of the other possible relations between masculinity and femininity that have been or could have been suggested by gender psychologists throughout the years:

> Masculinity and femininity encompass different and separate, but not opposite, traits and roles. (e.g., "hunter" and "gatherer" are not logically opposites.) (Spence and Sawin 1985)
> Masculinity and femininity encompass different and overlapping traits and roles. (e.g., "responsible" might be a virtue in both men and women.)
> Masculinity and femininity encompass different and complementary principles which can be present in the same individual. (Jung 1925)
> Evidence for the existence of the opposition model is readily available. The common

belief that working women have become less feminine through their exposure to the masculine world is one example. The difference between masculinity and femininity here is construed as a linear scale between opposing poles. The scale is especially evident in psychology. Until 1974, psychological tests designed to measure masculinity and femininity routinely reported results on scales with masculinity at one end and femininity at the other. (Lips, 1988:20-22)

These folk models are ICMs: they are idealized and cognitive. Gender as a concept is necessarily cognitive (as evidenced by the variation across cultures of conceptions of gender; there are attested examples of cultures with more than two genders). Moreover, these models are idealized: many real men and women display both traditionally masculine and traditionally feminine qualities.

The theories above, however, focus on the structure of the relationship between sex,

masculinity, and femininity. As noted above, they make no mention of the *content* of the

differences between men and women, which varies from society to society. Some American

folk models about how men differ from women include:

The Physical Prowess Model

    Men are strong
Women are weak

The Interaction Model

    Men are dominators
Women are cooperators

The Family Roles Model

    Men are providers
Women are nurturers

The Division of Labor (Separate Spheres) Model

    Men work in the public spheres of government, commerce, war
Women work in the domestic sphere

The Thought Model

    Men are rational, objective, detached
Women are emotional, subjective, in touch with themselves

The Morality Model

    Men have a morality based on laws which apply consistently in all situations Women
have a morality based on social harmony (Gilligan: 1982)

The Sexual Initiation Model

    Men initiate sexual behavior
Women respond

The Discourse Model

    Men talk in order to act on the world Women talk to maintain social networks
These models, taken together, constitute a cluster model of the concepts of masculinity

and femininity. Beginning with the Physical Prowess model, which is based on typical

prototypes of men and women, natural traits are ascribed which make use of this difference: as

the stronger, men have the ability to physically dominate women, while women, owing to

their reproductive biology, can be seen as essentially nurturing. These natural traits then

can be used to prescribe a consonant division of labor, and to argue for the Thought

model. The Morality and Discourse models are products of the Thought difference, while

the Sexual Desire model can be motivated from the Trait model with the metaphorical

assumption that having sex is a challenge, a metaphor which has been discussed by

Beneke (1982:11-23) and Lakoff, et al. (1992).

While the models do not predict or necessitate one another, their relationship is

immediately discernible. These models and others have often been summarized by

psychologists (Parson and Bales 1955) as:

The Psychological Traits Model
    Men are instrumental
    Women are expressive

       The final point to be made about these gender models is that, in almost all cases, the
role or trait ascribed to the male is considered to be of higher value than that ascribed to the
female. In a famous 1970 study, Broverman et al. found that mental health professionals,
when asked to describe the traits of an ideally healthy man, woman, and person, indicated
that the mentally healthy person would have characteristics similar to those of the mentally
healthy man. Indeed, Broverman's disturbing result strongly suggests that, at that time, a
woman who fulfilled the mental health community's standards for female mental health
would utterly fail to be considered a mentally healthy person under gender-blind conditions.

Patriarchy
       A second concept in feminism's semantic field is *patriarchy,* a word which originally means

"rule by fathers", but which has been used by feminism to refer to the institutionalized practices of

male privilege and domination over women.

       Patriarchy and feminism are in many ways inverse concepts. Each concept of feminism

which targets institutionalized sexism informs and is informed by a corresponding concept of

patriarchy which arises from that feminism's analysis of the position of men and women in society.

Systems of coherent and related contested concepts are common, particularly for concepts like feminism which have principled extensions.

Patriarchy is itself a contested concept. A system of patriarchy is one in which men have advantages women do not, and have power over women. The forms of this advantage and power is underspecified in this formulation, and will vary with the belief system which gives rise to the user's instantiation of feminism. This conceptual covariance is one of the most interesting aspects of the study of contested concepts, and requires more and deeper examination that it will be given here.

Oversimplified Feminism

At the core of the concept of feminism, then, is an underspecified propositional model. The propositions in the model include:

- Men and women live under a patriarchal system. Men have advantages that women do not have, and have power over women.
- This power dynamic results in women being disadvantaged in many domains: physical, political, economic, social, and interpersonal.
- The power dynamic and advantage difference is not due to anything essential about men, women, or culture. It can, in principle, be eliminated.
- The power dynamic and advantage gap should be eliminated forever.
- The power dynamic and advantage gap is instantiated in a collection of
- stereotypical gender roles, in which the male roles are more highly valued than the female roles.
- The nature and source of this power dynamic and advantage gap can be understood by some method of inquiry. Such inquiry is necessary if the power difference is to be eliminated.

The lay concept of feminism certainly seems to include at least the first five points of the model. The final point is only part of the underspecified model as used by specialists: feminist activists and theorists.

What, then, is not specified by this central model? The following questions stand out as requiring answers if the model is to have any practical value whatsoever:

- How important and legitimate are sex differences? What should be the consequences of these differences?
- What is the nature and source of the difference in power and advantages between men and women?
- What means should be used to redress the power/advantage difference? What counts as redress?

- What methods of inquiry are to be used to become informed about the nature and source of the power/advantage difference?

These questions define the shape of the slots left unfilled in the underspecified model which stands at the core of the concept of feminism. Let us now turn to the shape of the belief systems which have filled these slots and instantiated the concept.

The belief systems and their corresponding feminisms

The model given above, along with a set of independently existing belief systems, can motivate a wide variety of American usages of feminism. Feminisms discussed below include positions which has come to be known by specialists as liberal feminism, Marxist feminism, radical feminism, cultural feminism, and women of color feminism.

The general belief systems fill out the underspecified portions of the model, by providing an analysis of the situation of women which can successfully answer the questions of the underspecified model. The addition of the belief system fully instantiates the model in a useful form. These are *principled* extensions of the central model; the extensions are based on belief systems which exist independently of their use in feminism.

What follows is a list of belief systems and their instantiations of the central model of feminism:

Liberalism

All people are, at the core, individuals. The individual is paramount, endowed with natural rights and responsibilities. These rights are of a political and economic nature, and the political and economic domains are, in general, the ideal realms in which the individual acts.

Government is created by the people to secure and protect their natural rights in the domains of politics and economics. Originally, liberal theory was used to promote minimal government; since the industrial revolution, however, liberalism has often supported strong government to protect individuals interests from harm by big business.

Liberal Feminism

- Sex differences are irrelevant to one's status as an individual. Gender stereotypes, however, are problematic when they impede individual rights (as with the Division of Labor model).
- The nature of the power difference is political and economic. Its source is the historical denial of women's political rights as individuals, and the control of politics and economics by men.
- The power difference can be reconciled by government action, as it is government's function to secure rights. Legislation, elections, and affirmative action policies are tools of redress. As more women get involved in the public sphere, old gender stereotypes will break down. The redress will be complete when political and economic institutions are gender-blind.
- We can examine the state of the power difference by examining objective indicators (e.g., education, wage, and employment disparity studies) and public policy.

Liberal feminists demand that women be allowed to enjoy their status as individuals and citizens. As Mary Wollstonecraft, an early feminist and staunch liberal noted, "to render her really virtuous and useful, she must not, if she discharge her civil duties, want individually the protection of civil laws..." (Wollstonecraft 1792:259)

An excellent example of liberal feminism action is the proposed Equal Rights Amendment to the Constitution, which sought legislative protection from, and redress of, discriminatory practices based on sex.

Marxism

According to Marx, politics is determined by economic factors. Societies progress through identifiable economics stages: feudalism, capitalism, socialism communism. Each progress further eliminates class structure, leading to a classless society where each gives according to their ability and receives according to their need, superseding private property.

In industrial capitalist societies, the fundamental dialectic is the oppression of laborers (the proletariat) by the bourgeoisie. Oppression is understood as exploitation of labor. The bourgeoisie, who control the means of production, exploit the work of the proletariat.

In order to advance beyond capitalism, a revolution of the proletariat must be engineered.

Once the proletariat gains control of the means of production, society will develop into a dictatorship of the proletariat, with decision-making vested in labor organizations. As the economy is converted to a need-based system of distribution, this dictatorship will itself dissolve into classless society.

While the discussion of feminism below draws from this Marxist ideology, it is worth noting that just as there exist other forms of socialism, there have been other forms of (non-Marxist) socialist feminism.

Marxist Feminism

While early Marxists, including Engels, did give some attention to the "woman problem", they generally felt that the situation of women was the result of their class exploitation, and would be rectified in the revolution.

Marxist feminism arose as feminists began to point out that women's oppression cut across class, affecting even bourgeois women, and across history, predating capitalism. What is now commonly referred to as Marxist feminism fills in the underspecified slots like this:

- Sex differences are used to exploit women in a manner akin to class difference.
- Exploitative gender stereotypes must also be overthrown.
- The nature of the power difference between men and women is an economic
- one. Women are exploited for their domestic, reproductive, and sexual labor as women, as well as for their wage labor as workers. The source of this power difference is the nuclear family. (Engels 1884)
- The power difference can be redressed only by a widespread socialist revolution. Because of the interconnection between capitalism and patriarchy in modern society, both must be destroyed together. Redress win have been effected when the classless, gender-blind society has been achieved.
- The power difference can best be studied by applying Hegelian dialectical analysis of historical economic and political events, focusing on women's status.

At the heart of Marxist feminism is an assumption and a metaphor. The assumption, which comes directly from Marxism, is that oppression is best understood as exploitation of labor. The metaphor employed might be called GENDER IS A CLASS. The metaphor links men with the bourgeoisie, and women with the proletariat. While Marxist feminism rejects class as the sole locus

of oppression, it nonetheless frames the oppression of women as exploitation of their labor, and

introduces new definitions of labor, which include not merely wage labor, but reproductive labor,

sexual labor, and domestic labor as well. (Hartmann 1981) Labor thus becomes a contested category

as well.

Radicalism (Radical Politics)

Radical politics is also metaphorically based. The radical assumption that every domain with

power relations is political, is in fact a statement of DOMAINS OF LIFE ARE POLITICAL

DOMAINS, a metaphor which imposes a more specific frame (the political) upon a more generic

category (domains of life.) Part of the metaphor is that subordination in any domain is oppression.

Society, family, sexuality, education, etc. are viable loci for political action as they harbor power

differences between their participants.

A second important assumption is that any system of power relations is contingent, thought

power relations themselves may be essential features of human relations (there is difference of

opinion on this point). Governments can't (and shouldn't) act in most domains of experience (e.g.,

those listed above), and are hence limited in their effectiveness and not good tools for change.

Many forms of radicalism suggest that revolution against oppression is required in every

domain of life. Separatist positions, however, hold that the current power relations are too deeply

entrenched to be fully overthrown. People seeking relief must therefore live apart from the society.

Anarchism is a subcase of radicalism which adds the belief that government, which subordinates the

individual, is necessarily oppressive and must also be overthrown.

Radical Feminism

While radical feminism encompasses a wide variety of positions (and indeed, some
feel the term is a catch-all for unlabeled feminisms), there are certain commonalities which
can be observed as a result of the application of the radical metaphor and assumptions to the

central model of feminism:

- Present gender models do not follow from anything essential about males and females. They are illegitimate and oppressive, defining women negatively with respect to men. (DeBeauvoir 1952)
- The power differences between men and women are the result of the imposition of stereotypical gender roles and their extension to all domains of life. While the source of the differences is not clear, social institutions (especially marriage, reproduction, the family) are certainly implicated. As radical feminist Catherine Mackinnon has written, "Our issue is not gender difference, but *the difference gender makes.*" (1987:23)
- The power difference can be redressed only by radical change in every do in to eliminate or radically restructure gender roles. Government is of limited usefulness in this endeavor.
- A variety of academic means are particularly well-suited to radical analysis, as they focus on the contingency and development of the power difference: psychoanalytic theory (Lacanian or object-relations theory), Marxist dialectical analysis, and poststructuralism are all popular currently.

Lesbian feminisms frequently accept this model of feminism, but posit the institution of heterosexuality itself as oppressive. Their means of redress therefore includes repudiation of sex with men in favor of lesbian sex, autoeroticism, or celibacy. These positions have often been seen as the vanguard of the feminist movement in their willingness to step outside of the heterosexual power structure.

Bioculturalism

According to this position, politics and economics flow from biological and cultural considerations: our biology and evolution, family life, community life, spiritual life, and personal development. To affect political change, one must first develop themselves and others personally. Changing politics without societal changes will always be ineffectual.

Cultural Feminism

- Our biological differences do have social and psychological consequences. The female experience of connection to life (via the potential for childbirth) gives women a better understanding of nurturance than men.
- The nature of the power difference is that women's roles and traits are valued less than men's. The source of this devaluation may be that men, envious of the power of childbirth, seek to deny it by denigrating women's roles. This power difference is not necessary, as is evidenced by more matrifocal societies.

- The power difference can be redressed by recognizing the value of female gender roles and traits. Redress may mean either assigning equal value to masculinity and femininity or assigning higher value to femininity in compensation. This recognition must begin on a personal level (through women's spirituality, therapy, consciousness-raising, etc.).
- The power difference should be studied with "feminine" methods (shared experience, introspection, spiritual experience) rather than "masculine" analytic techniques.

Because cultural feminist positions accept that differences between male and female go beyond the merely anatomical, they are often accused by holders of other feminisms of reifying traditional gender role stereotypes.

Ecofeminism

Ecofeminism is a subcase of cultural feminism. It adds the metaphor THE EARTH IS A WOMAN, and ascribes to her the feminine traits and roles of nurturance, interconnectedness, and motherhood. As a woman, the earth is threatened by the overvaluation of masculinity, particularly the lauding of domination and technology. Cultural feminism can be used to address global ecological issues, which are seen as overwhelmingly pressing, by promoting a return to nurturance of the planet. Women's spirituality (e.g., the Goddess movement, wicca) and shared experience are among the most common methods of investigating and reshaping the valuation of gender roles.

Multiculturalism

It is an overwhelming fact of our society that people are discriminated against on the basis of their race, ethnicity, and skin color. Racism and imperialism pervade our cultural institutions. The multicultural movement seeks to eliminate racism and imperialism while maintaining cultural diversity. Its insistence on respecting the importance of cultural difference while challenging discrimination based on that difference sets it apart from liberalism, which considers the individual paramount, regardless of ethnicity. It also differs from bioculturalism in its focus on the historical sources of the difference and the institutions which perpetuate oppression, and from socialism in its acceptance of factors other than class as a basis of oppression.

Woman of Color Feminism

Feminisms focused on women of color seem to share the same central model as the feminisms discussed above, and indeed may partake of their belief systems to a greater or lesser degree. But just as Marxist feminism highlights the interconnection of class and gender oppression, and lesbian feminism problematizes the institution of heterosexuality, women of color feminism has called attention to the synergetic "multiple jeopardy" experienced by women who must confront both sexism and racism. By superimposing a multicultural frame on feminism, it affects the underspecified model:

- Gender differences are significant as sources of oppression, but must be understood in a broader cultural context. In addition, race is no less important than gender.
- The analysis of the nature of the power difference varies among different forms of women of color feminism, but all acknowledge that women of color also experience a power difference based on race, and, for third world women, on colonial status. The source of these power differences is rooted in imperialism.
- The power difference can not be adequate redressed with out redressing differences of race as well as gender, and recognizing cultural variation. For example, liberal feminist solutions which suggest that women enter the workplace do not address the women of color who (1) already work to support themselves, and (2) would not be hired for high-paying jobs because of racial and class prejudice.
- Proponents of women of color feminism offer the varying experiences of women of color (and especially their "self-defined standpoint on their own oppression" (Collins 1989:877)) as a methodological tool for examining patriarchy, and privilege in general. Shared experience and constructive dialogue are preferred methods of inquiry, as the traditional knowledge validation process is seen as Eurocentric and patriarchal. "[T]he master's tools will never dismantle the master's house" (Lorde 1980:123)

Just as a prototypical pet fish is neither a prototypical pet nor a prototypical fish, a black woman may be more than the sum of a prototypical black (man) and a prototypical (white) woman. And, in fact, women of color often criticize the racism in academic feminism as loudly as they decry the sexism in their own culture (as well as white culture). For these women, feminism is often "a movement to end sexist oppression within a broader social protest movement" (Garcia 1990:419)

The failure of many feminisms, and particularly of the exemplars of feminism (the Woman Suffrage movement and the Women's Rights movement of the early 1960's) to include racial issues

(or, in the case of the Woman Suffrage movement, to use racial prejudice as a tool for organizing support), as well as the prevailing view of feminists as liberal, white, and middle-class, has frequently caused women of color to disavow the term "feminism", and use alternate terms (cf 'womanism" as used by Walker 1979:100), reserving "feminism" to be used derisively to refer to the white, middle-class movement.

Feminist Methodologies

The central oversimplified model of feminism is not only contested along the axis of the nature of women's oppression and its solution, but along that of methodological approach. There are a number of methodologies by which feminists attempt to understand and explain the situation of women in society, and these methodologies are also based on independent systems of thought which cut across the belief systems discussed above. Some major methodological approaches include dialectics, consciousness-raising, psychoanalysis, and poststructuralism.

Dialecical analysis, and historical analysis in general, examines the situation of women by tracing its historical development as a dynamic process. While most of the forms of feminism discussed above make use of some form of historical analysis, true dialetical analysis goes hand-in-hand with Marxist feminism

Consciousness-raising activities make women aware of their common experiences of oppression as women. While it too may be used in any of the forms of feminism, it is particularly focused on by radical, cultural, and multicultural feminisms as a nonpatriarchal mode of analysis.

Psychoanalytic theory, particularly Lacanian and object-relations theory, is popular with radical feminists. Psychoanalytic theory focuses on the role of childhood development and family dynamics in reproducing the institutions of patriarchy. This tends to make psychoanalysis incompatible with liberal theories which stress the individual as well as with multicultural theories

which focus on the larger culture and point out the variation between family forms.

Poststructuralist theory has also been taken up largely by radical feminists, and is very compatible with the assumptions of radicalism. The poststructuralist argument that our categories are arranged in power hierarchies, along with the program of continual questioning of these categories by deconstruction is a powerful tool under the DOMAINS ARE POLITICAL DOMAINS metaphor.

While some of these methods are thus more suited to certain forms of feminism as defined above (based on their contested *ontological* features), the methods comprise a second axis of contestedness which is to some degree independent of questions about the nature of patriarchy. Laying out a taxonomy of feminisms on this axis (based on contested *epistemological* features) accounts for instantiations of dialectical feminism, consciousness-raising feminism, psychoanalytic feminism, and poststructuralist feminism.

Feminisms and Feminists

Having discussed a number of major instantiations of feminism it is instructive to ask who holds these positions. Who typifies liberal feminism? Who Marxist feminism, radical feminism, etc?

A review of the literature in women's studies will reveal that nobody holds any of these positions exactly as stated. Even when fully specified, these models are still idealized. Moreover, they are not mutually exclusive in all respects, and even where they are, the ability to maintain conflicting belief systems simultaneously is a familiar phenomenon. Individual feminists may hold parts of one or more models, further specified by their individual belief systems, possibly along with heuristics or principles to allow them to resolve conflicting entailments.

The belief systems which extend the central model liberalism, radicalism, Marxism, bioculturalism, and multiculturalism, exist and people are aware of them. Moreover, the various forms of feminism which these belief systems induce are known to feminist theorists, and it is these concepts of feminism which form the center of the conceptual debate.

The value of examining feminism as a contested concept is not listing all the possible usages of the concept, but motivating these usages by positing a conceptual structure which underlies them. Any account of feminism must be able to answer these questions:
1. Why do specialists disagree on whether a particular position is feminism or not?
2. What do users of the concept all agree on? Is this, by itself, enough to be a usable concept?

If not, what is its relationship to the actual usages?
3. How is it that specialists can identify positions which differ from theirs and understand them as feminism?

The contested concept analysis provides elegant answers:
1. Specialists disagree because they instantiate the central model with conflicting systems of belief.
2. Users of the concept all agree on the central model, which by itself is not enough for specialist use of the concept. Specialists must flesh out the model with their own belief system.
3. Because they share a central model with other feminists, and can understand other belief systems, feminists can identify other feminisms that do not contradict important tenets of their own instantiation.

Entailments in Conflict

How well does what I have said about feminism so far allow us to examine the conflicts between feminist positions which arise in regard to real-world issues? The contested concept account of feminism locates these conflicts in the *entailments* of the various instantiations of the concept.

I will conclude this discussion with three examples of issues in which the entailments of the positions conflict:

The draft

The proposed Equal Rights Amendment was criticized by both feminists and anti-feminists for suggesting that women might be subject to drafting into the military. Other feminists, however, fully supported this provision of the amendment. What can we learn about this conflict from our contested category formulation of feminism?

From the standpoint of liberal feminism, the exclusion of women from being drafted into the armed forces (and the subsequent exclusion of women from combat duty) is a violation of the responsibilities of women as liberal individuals and citizens. Even if military service is distasteful, women must not be treated differently than men because this undermines their status as individuals.

Cultural feminism, on the other hand, disapproves of war in general, especially for women, whose role is that of live-giver, not death-giver. Cultural feminists have often attacked the draft from their roles as mothers of potential soldiers.

Women of Color feminists, who know that nonwhite men are drafted in significantly higher numbers, also oppose drafting women, fearing the same treatment will result in yet another domain for racism.

Pornography

The period from 1976 - 1986 saw an incredible amount of feminist debate around pornography: how to define it and what to do about it. While there are a wide variety of feminist positions possible on this issue, three major positions developed in the debate (which I name using terms the group espouses):

Anti-pornography: Many radical feminists, of whom Catherine Mackinnon is an ideal example, believed that pornography was an act of violence against women as a class. Anti-pornography feminists proposed a series of civil rights ordinances which would allow women to sue pornographers for damages incurred as a result of pornography; the most radical of these laws also made provision for class-action suits on behalf of all women. Pornography was transformed from a social vice to a political issue, and these feminists felt that the rights of women to be free of pornography overshadowed the rights of the pornographers to produce it. Women of color often joined with white radical feminists in this position, noting the particularly violent and degrading nature of pornographic depictions of nonwhite women. Marxist feminists were also frequent supporters of this position, seeing pornography as a joint product of patriarchy and capitalism.

Anti-censorship: Other feminists, especially liberal feminists, feared the consequences of a restriction of individual freedoms of the First Amendment. While cognizant of the sexist depictions of women in pornography, they felt that individual rights were inviolate and had to be protected from government interference.

Sex-positive: Finally, some feminists felt that the solution to the problem of the depiction of women in pornography was to restructure these depictions. Former pornography actresses like Candida Royalle and Nina Hartley began to produce pornography for women, attempting to affect a revaluation of women in porn. This position can be seen as similar to the validation of women's roles espoused by cultural feminists, and indeed many of these women hold cultural feminist

opinions.

Maternity leave

Maternity leave is another issue which produces different responses from different forms of feminism. Once again, the gender-blindness which liberal feminism entails leads to arguments against maternity leave on the basis that, by providing special privileges to women (which are often subsidized by their employers), it make them less competitive as individuals in the job market. As a result some liberal feminists argue for a gender-blind policy of parental leave, while others offer nothing to replace maternity leave.

The entailments of socialist feminism lead to quite different conclusions. Failure to provide pregnant women with maternity leave is seen as an attempt to extract the greatest amount of value from their labor. Maternity leave provides the worker with some protection against exploitation during their pregnancy, but most socialist feminists also see adequate communal childcare as a necessity for working mothers.

Radical feminist critiques of the institutions of motherhood and the nuclear family ask why it is the mother who is expected to leave her work to begin to raise a child. With the exception of the period just before and after the birth of the child, radical feminism suggests that there is no reason why the woman should be asked to retreat to the home. Radical feminists often favor sex-specific parental leave policies, which accord fathers and mothers periods of leave time to raise their children.

Cultural feminists might be expected to argue for maternity leave on the basis that women entering motherhood are fulfilling one of their highest and most important callings as women. However, because the jobs in question are often "male jobs" in the corporate sector, some cultural feminists question the need for women in these jobs at all. Women of color, while also often in favor of maternity leave, may feel that the issue is irrelevant to them, as they are less likely to find themselves in jobs where maternity leave might be offered.

Bibliography

Armstrong, Sharon Lee, Lila Gleitman, and Henry Gleitman. 1983. "What Some Concepts Might Not Be." *Cognition*. 13:263-308.

Austin, John L. 1961. *Philosophical Papers.* Oxford. Oxford University Press.

Beneke, Timothy. 1982. *Men on Rape.* New York: St. Martin's Press.

Berlin, Brent and Paul Kay. 1969. *Basic Color Terms: 7heir Universality and Evolution.* Berkeley: University of California Press.

Broverman, I., et al. 1970. "Sex-role Stereotypes and Clinical Judgments of Mental Health." *Journal of Consulting and Clinical Psychology. 34(l):167.*

Brugman, Claudia. 1981. 'The Story of *Over."* MA. Thesis. University of California, Berkeley. Available from the Indiana University Linguistics Club.

Collins, Patricia L. 1989. "The Social Construction of Black Feminist Thought." *Signs* 14(4):875-884.

Connolly, William E. 1983. "Essentially Contested Concepts." *The Terms of Political Discourse,* 2nd ed. Princeton: Princeton University Press.

DeBeauvoir, Simone. 1952. *The Second Sex.* New York: Vintage Books.

Descartes, Rene. 1641. *Meditations on First Philosophy.* [1980. Reprinted Hackett Publishing Company, Inc.]

Engels, Frederick. 1884. "The Origin of the Family, Private Property, and the State." [1985. Reprinted in Schneir, Miriam (ed.) *Feminism*: *The Essential Historical Writings.* New York: Vintage Press.]

Espenson, Jane. 1992. "Causation Metaphors." Doctoral Dissertation.

Fillmore, Charles. 1982. "Frame Semantics." Linguistic Society of Korea, ed., *Linguistics in the Morning Calm.* Seoul: Hanshin Publishing Company.

Gallie, W.B. 1956. "Essentially Contested Concepts." *Aristotelian Society.* London: Harrison and Sons.

Garcia, Alma. 1990. "The Development of Chicano Feminist Discourse 1970-1980." In Dubois, Ellen, Carol and Vicki L. Ruiz (eds.) *Unequal Sisters.* New York: Routledge, Chapman and Hall, Inc.

Gardner, Howard. 1985. *The Mind's New Science. A History of the Cognitive Revolution.* New York: Basic Books.

Gilligan, Carol. 1982. *In a Different Voice: Psychological theory and women's development.* Cambridge: Harvard University Press.

Hartmann, Heidi.1981. "The Unhappy Marriage of Marxism and Feminism: a debate of class and patriarchy." [1986 In: Sargent, Lydia (ed), (same title). London: Pluto Press.]

Jackson, Robert. 1984. "Ethnicity" In: Giovanni Sartori (ed.), 205-233.

Jung, Carl. 1925. "Marriage as a Psychological Relationship." [1972. Reprinted in: *The Portable Jung.* New York: Viking Press Inc.]

Kahneman, Daniel, and Dale T. Miller. 1986. "Norm Theory: Comparing Reality to its Alternatives." *Psychological Review, 93*(2):136-153.

Kay, Paul, and Chad McDaniel. 1978. 'The Linguistic Significance of the Meanings of Basic Color Terms." *Language* 54(3):610-646.

Kotowski, Christoph M. 1984. "Revolution" in: Giovanni Sartori (ed.), 403-451.

Lakoff, George. 1987. *Women, Fire, and Dangerous Things: What Categories Reveal about the*

Mind. Chicago: University of Chicago Press.

Lakoff, George. 1991.   "Metaphor and War." [Circulated by Electronic Mail]

Lakoff, George. 1992. "The Contemporary Theory of Metaphor." in: Andrew Ortony (ed.),
   Metaphor and Thought (2nd ed.) Cambridge: University Press.

Lakoff, George, and Mark Johnson. 1980. *Metaphors We Live By.* Chicago: University of
   Chicago Press.

Lakoff, George, Espenson, J., & Schwartz, A.1992. *Master Metaphor List.* (2nd ed.)
   [Unpublished]

Lips, Hilary M. 1988. *Sex and Gender. An Introduction.* California: Mayfield Publishing
   Company.

MacKinnon, Catharine K. 1987. *Feminism Unmodified: Discourses on Life and Law.*
   Cambridge: Harvard University Press.

Mellers, Barbara, and Michael Birnbaum. 1983. "Contextual Effects in Social Judgment."
   Journal of Experimental Social Psychology 19:157-171.

Mervis, Carolyn and Eleanor Rosch. 1981. "Categorization of Natural Objects." *Annual Review
   of Psychology* 32:89-115.

Osherson, Daniel   and Edward Smith. 1981. "On the Adequacy of Prototype Theory as a
   Theory of Concepts." *Cognition, 9,* 1:35-38.

Ostiguy, Pierre. 1992. "Democracy: A Radial Category." [Unpublished]

Parsons, T. and R. F. Bales. 1955. *Family, socialization and interaction process.* Illinois: Free
   Press.

Rosch, Eleanor. 1973.   "Natural Categories." *Cognitive Psychology,* 4:328-350.

Rosch, Eleanor. 1975.   "Cognitive Representations of Semantic Categories.' *Cognitive
   Psychology,* 7:532-547.

Rosch, Eleanor, et al. 1976. "Basic Objects in Natural Categories." *Cognitive Psychology, 8*:382-
   439.

Rumelhart, David. 1975. "Notes on a Schema for Stories." In: Bobrow, D.G., and A.M. Collins
   (eds.) *Representation and Understanding Studies in Cognitive Science.* New York: Academic
   Press, 211-236.

Sartori, Giovanni (ed.) 1984. *Social Science Concepts: A Systematic Analysis.* Beverly Hills:
   Sage Publications.

Schank, R. C., and R. P. Abelson. 1977. *Scripts, Plans, Goals, and Understanding.* New Jersey:
   Lawrence Erlbaum Associates.

Schwartz, Alan. 1991. "The Mental Metaphor System." [Unpublished]

Sievers, Sharon. 1989. "Dialogue: Six (or More) Feminists in Search of a Historian." *Journal of
   Women's History, 1*(2): 135-141.

Spence, J. T., and L. L. Sawin. 1985. "Images of Masculinity and Femininity, A
   Reconceptualization." In 0'Leary, V.E. et al. (eds.) *Women, Gender, and Social Psychology.*
   New Jersey, Erlbaum.

Stoker, Laura. 1992. Harm Project. [Unpublished]

Tversky, A. and D. Kahneman. 1981. "The framing of decisions and the psychology of choice."
   Science 211.

Walker, Alice. 1979. "Coming Apart." In: Lederer, L. (ed.) *Take Back the Night: Women Against
   Pornography.* New York: William Morrow and Company, Inc.

Wittgenstein, Ludwig. 1952. *Philosophical Investigations.* New York: MacMillan.

Wollstonecraft, Mary. 1792. *Vindication of the Rights of Woman.* [1985 Reprinted London: Penguin Books].