The present analysisexamined historical trends in figurative usage as revealed in the coding of1,882 figures of speech derived from selections produced by 24 differentAmerican authors writing in the period from 1675 to 1975. Results indicatedthat different issues served as centres for metaphoric activity in each of thesix 50-year periods considered, and that these concerns could be related tosignificant issues and events in American history. Results also revealed thatdifferent vehicles were used to make these issues metaphorical therebysupporting the view that an analysis of figurative language provides insightsnot only into issues considered problematic but also into issues consideredwell-known in specific historical eras. Implications for a general theory ofmetaphor were also derived from present results, particularly insofar as theysuggest that metaphoric category-crossings defy logical analysis and can bestbe understood in terms of the psycholinguislic and historical situation of thespeaker or writer. Finally, present results were also discussed in terms ofUllmann's universal 'laws' of metaphoric transfer where they were seen asproviding reasonable support for two of these principles (anthropomorphizationand concretization) and lesser support for the remaining two (synaesthesia andanimal reference).

4 In the Kennedy-Nixon debates of 1960, John F. Kennedyconcluded his opening remarks by noting that The question is whether the world… will move in the direction of freedom … or … in the direction of slavery … Ithink it's time America started moving again.' Throughout all of his openingstatement Kennedy had contrasted 'moving forward' with 'standing still and, notsurprisingly, Richard Nixon began his response to Kennedy's remarks by notingThere is no question but… this nation cannot stand still because we are in adeadly competition … We're ahead in this competition as Senator Kennedy hasimplied,

but when yoif re in arace the only way to stay ahead is to move ahead. (Cited in Pollio, Barlow,Fine and Pollio, 1977: 14) While it is interesting to note that Kennedy usedthe concept of movement only in a very general sense, Nixon's use of a racemetaphor (in which movement is combined with competition) seems quite revealingin the light of what we now know about his subsequent actions as president. Themetaphor of a race not only reiterated Kennedy's concern for change; it alsointroduced Nixon's use of athletic metaphors for political actions, and throughthem, his implicit concerns about Opponents' and "winning and losing'. Althoughother information could be gleaned from an analysis of figurative language inthe Kennedy-Nixon debates, a more crucial point for the study of metaphor wouldseem to be that the specific metaphoric vehicle (race) used to capture aparticular idea (international relations) tells a good deal of what Nixon sawas an important issue in the campaign and how he chose to express it. While itmay be going too far to see a race metaphor as projective of Nixon's generalview of the world, it does not seem to be going too far to feel that uniqueinsights about a speaker may be had by considering the specific images used toconvey a difficult or emotional idea. Politics, however, is not the only domainin which metaphors express important ideas in a linguistically innovative way.Within more highly

specialised domains, such as literature or science, metaphors not only name (or rename) pre-existing events or objects, they often serve to create new concepts as well. In poetry, for example, metaphors have been described as creating imaginary worlds (Ricoeur, 1977) whereas in science they have been conceptualized as leading to the development of a new theoretical orientation or model (Cassirer, 1946; Schon, 1963). In both domains the use of poetic language frequently signals the opening moments of a new orchanged concept of reality brought about by a unique blending of the possibilities and ambiguities inherent in language. The hypothesis that metaphor and other figures of speech occur in the creating and/or describing phase of a new idea or concept is not a new one. Sperber, as long ago as 1930, noted that topics which produce intense feelings or in some sense are problematic become 'centers of metaphoric attraction'. When this occurs, concepts and terminology from fields or domains thought to be more familiar or better understood are used to clarify the newly problematic subject. Alternatively, new topics or events, when experienced as sufficiently well understood, may themselves come to serve as metaphoric vehicles for areas still considered problematic. Sperber's Law, as this insight has come to be called, thus suggests that Metaphor as intellectual history 913 the dominant concerns of an era may be reflected in its major metaphors and that these metaphors direct and constrain the course of intellectual analysis in that and subsequent historical periods. Indeed, Schon (1963) has gone so far as to propose that one way in which to understand the implicit intellectual forces shaping concepts in a particular historical period is to examine the metaphors used to express such concepts in the first place. On this basis, an analysis of metaphors may provide the ingredients for an intellectual history of a particular era or, more narrowly, of a particular group of concepts. To pursue this possibility in an empirically rigorous way two issues, one conceptual and one methodological, must be confronted. Conceptually, it is necessary to describe the nature of linguistic constraint operating on metaphoric activity. Although this issue has not been dealt with extensively, Ullmann (1962) has suggested metaphor follows one or more of four universal laws of semantic transfer: anthropomorphization; from abstract to concrete; from animals to other objects, events and/or people; and, finally, synaesthesia. Each of these tendencies is seen as significant in all language families and, therefore, must serve to constrain specific metaphoric transfers predicted on the basis of more concept-oriented analyses such as those suggested by Sperber and Schon. In our earlier example derived from the Kennedy-Nixon debates, Ullmann most likely would suggest that the abstract notion of 'international relations' was made metaphorically concrete through the vehicle of a race\ Methodologically, to come now to the second critical issue, it is necessary to develop a reasonably extensive corpus of novel metaphoric exemplars (covering a sufficiently extensive segment of history) and then code these exemplars into relatively explicit and reliable conceptual categories before meaningful statements can be made about the relationship of metaphoric topics to their instantiating vehicles. For purposes of the present analysis, an attempt was made to select representative figures used by major American writers in six different 50-year periods of U.S. history beginning in 1675 and ending in 1975. Once this collection was assembled, individual figures were analysed in

terms of the specific subjects dealt withmetaphorically as well as in terms of the specific vehicles us.ed to representthem. Within the context of this analysis, four specific questions wereconsidered: 1. Could a classification system be developed that was sufficientlycomprehensive as to encompass the variety of figurative subjects and vehiclessampled, and would this system relate to more traditional taxonomies (such asUllmann's) used in accounting for semantic change based on metaphoric transfer?914 M. K. Smith, H. R. Pol Ho and M. K. Pitts 2. Would the occurrence ofspecific vehicle domains show systematic variations across different historicalperiods thereby permitting an evaluation of the role played by implicitmetaphors in shaping thought? 3. Would the occurrence of specific topicdomains, i.e. subjects, show systematic changes across various historicalperiods thereby permitting an evaluation of Sperber's Law? 4. Wouldregularities occur in the specific vehicle and topic categories paired so as tosupport the hypothesis of universal rules for metaphoric transfer such as thoseproposed by Ullmann (1962)?

METAPHOR AS INTELLECTUAL HISTORY: CONCEPTUAL CATEGORIES UNDERLYING FIGURATIVE USAGE IN AMERICAN ENGLISH FROM 1675-1975