Scientific work

1. The study of meaning
My work focuses on the study of meaning and meaning relations. I am interested in the duality of language: its precision as revealed in logic and science, and its openness and creativity as expressed in the realm of literature and poetry. Studying meanings and meaning relations acknowledges this duality and attempts to understand it. My background in the philosophy of language and in literature has helped me in such undertaking mainly through the study of semantic fields and frames.

My work on semantic fields started with my Master’s thesis where I studied the concept of 'similarity' by analyzing meaning relations of cognate lexemes and idioms related to the concept of similarity. I wondered if they form a distinct semantic field or frame, and what can be learnt from their meaning relations. Semantic fields as a domain of inquiry lie at the crossroads of disciplines and ideas: They link the philosophical notion of conceptual analysis to the psychological notion of the 'cognitive-conceptual web', and associate both to the linguistic study of meaning relations and the study of semantic frames, and to issues in artificial intelligence. My Ph.D. thesis presented semantic fields as a theoretical philosophical idea grounded in empirical research in neurology, psychology, language acquisition and anthropology. I dealt with its methodological ramifications and implications and argued for its usefulness in linguistic semantics. Studying semantic fields, domains and frames made me aware of the modularity and contextuality of language: its dependency on age, culture, background, community and time. I also found the study of polysemy and metaphor within the context of semantic fields illuminating. Such study sheds light on the organization of the lexicon and on the interface between semantics and cognition. (See my books A1, A forthcoming, and my papers B4, B8, C1, C2, C9 in my list of publications)

2. The unique status of Hebrew
My research is based on data from all the historical layers of the Hebrew language. The rich documented history and traditions of the Hebrew language and the almost miraculous process of its return to full life over the last 150 years led me to conduct diachronic studies in semantic fields. I have explored theoretical and methodological issues concerning meaning relations both in synchronic and diachronic studies of several semantic fields. The combination of diachronic research with the analysis of
semantic fields of abstract notions contributes both to semantic theory and to the methodology of semantic research. An important part of my work is devoted to exploring structures and processes unique to Hebrew, due to its tri-consonant root morphology and its unique history (B11, B14, C6, C8, see more below).

3. Theoretical linguistics and cognitive semantics

My post-doctoral year at U.C. Berkeley, California played a crucial role in shifting my interest from the philosophy of language to cognitive linguistics in general and to cognitive semantics in particular. The California school of cognitive linguistics introduced me to a diversity of ideas and methodologies. This enriched my earlier awareness of the European (Saussurian) tradition of the study of meaning relations. It provided me with a new perspective on traditional questions, for instance as regards the difference and relations between sense and reference, or the gap between early (logical) Wittgenstein and his later notion of meaning as use. I was influenced by the work of Jackendoff, Lakoff and Johnson, Talmy, Sweetser, Fauconnier and Turner and others, and worked to resolve traditional philosophical questions using new ideas and methodologies developed in conceptual semantics and in cognitive linguistics. My work has expanded in the following directions: the study of metaphor; the study of semantic fields of abstract notions (such as 'negativity', 'difference' 'value' and 'truth') and the mechanisms of abstraction; the study of poetic language; the study of the revival of Modern Hebrew and the emergence of modern Hebrew style.

3.1 Metaphor

My papers concerning metaphors show my interest in all kind of metaphors: from everyday discourse metaphors to scientific metaphors to highly creative poetic ones. The main questions I ask concern meaningfulness and rules that govern metaphors of all types (B1, B2, B3, B5, B6, B10, C5). My first published paper (B1) was entitled: 'Do metaphors obey rules of meaning?' Since then I have researched the open ends as well as semantic rules I believe underlie even the most innovative creative poetic metaphors. My main idea (B7) about these rules is that they involve a process of ascending the scale of abstractness until a matching point between the metaphorical elements is reached. I argue that the meaningfulness of all kinds of metaphors is based on matching the abstract levels of the metaphor's constituents in a process that produces 'reconciliations' resolving their surface incompatibility. This is not far from the 'blending' theory in principle yet takes its own direction: I demonstrate that several cognitive functions are involved in this process of ascending the scale of abstractness.
These include the functions of quantification (QUAN), breaking (FRAC), intensification (INTENS), location (LOC), and tagging and naming (NOM). This line of thought calls for further research since it has implications beyond the study of metaphor. It concerns the general issue of abstraction and of the role of abstraction in concept formation, which is one of my main concerns at present.

I have conducted several studies of innovative creative poetic metaphors, in which I have studied their semantic as well as syntactic and pragmatic features, and searched for the rules which govern the production of metaphors, their comprehension, and their evaluation (C9 and C forthcoming). I have also shown how a poetic affect is achieved through the tension between colloquial and poetic language in modern Israeli poetry (C7), and I have attempted to characterize the 'limits of meaningfulness' by studying various poets' creative language (B17, C9).

3.2 Abstract concepts and mechanisms of abstraction

On the basis of works by Lehrer, Kittay, Fillmore, Lewandowska-Tomaszczyk and Jackendoff, I have focused on the mechanism of abstraction as found through the study of the semantic fields of concepts such as 'difference', 'negativity', 'properties', 'partiality', norm, etc. (My second book A2, and my papers B8, B9, C1, C2, C3, C4). These mechanisms emerge through the analysis of semantic relations between words in these content domains, groups and subgroups of meaning, visual schemas, models and metaphors, polysemy, constructions and idiomatic patterns. They all point to the infrastructure of a semantic domain, and help detect the conceptual and abstract relations that underlie it. Through a diachronic study of semantic fields and by studying the semantic function of the Hebrew root as a junction of meaning relations, I have argued that the notion of 'Frame contacts' should be added to Fillmore's Frame semantics (B16 C12). Studying semantic fields of abstract concepts reveals traits of the abstract infrastructure of the cognitive lexicon. It exposes the parallelism between space-time notions and logical notions such as between 'continuity' and 'identity', 'membership' and 'containment', and 'vectors' and 'values' (A2, C1, C3). I have shown how the tri-consonant root in Hebrew bridges meanings and lexemes over the history of the language by conceptual link that only the root related lexemes can reveal. This contributes to Traugott's diachronic study an additional unique angle provided by Hebrew root-morphology (D2, B16, C11, C4). I have continued to study the interface between morphology, semantics and syntax as revealed in semantic fields. My most recent book (A forthcoming: Language and Meaning: The Story of the Birth and
Growth of Cognitive Semantics) tells the story of how cognitive semantics became a legitimate branch of linguistics, and defines the place of my own work in this process.

4. Stages in the development of Modern Hebrew

After centuries of being the language of written texts and sacred rituals, modern Hebrew immersed in a new shape and form towards the end of the 18th century. This happened first by its return to secular literary life. The second stage was the acquisition of a full range of language use ranging from everyday speech, formal and non-formal registers, to poetic innovations and complexities. Teaching several courses on the various aspects of the immergence of Modern Hebrew, examining styles and directions in literary and poetics, helped me show in what ways the language functions as cultural tool preserving values and traditions (C6). I have also examined the intriguing process of the penetration of vernacular Hebrew into modern Israeli poetry (see my papers C5, C7, C9, and especially B16: 'Boundaries of meaningfulness – Poetic language from a linguistic-philosophical point of view, and C Forthcoming: 'The creative language of Agi Mish'ol')

5. Future plans

5.1 Abstraction

I intend to continue studying the semantic fields of additional abstract concepts in order to better understand the mechanisms of abstractions. I plan to add to my work on the concept of Norm (C forthcoming) by conducting studies in meaning relations, models and metaphors that constitute the semantic domains of Order, Inclusion, Identity, Possession, and more. Such semantic domains are not transparent and are not easily accessed, and do not constitute well-defined semantic frames or fields. Yet exploring their structures and meaning relation reveals their experiential-perceptual infrastructure, the mechanisms of abstraction, and the way these two are intertwined. Through such analyses I have been able to characterize the centrality of the primitive notion of 'continuity' and 'consequence' in constituting the concept of 'identity' (A2). Further such analyses should confirm the parallelism and relations between logic space-time orientation, emotions, and human needs (A2).

5.2 Polysemous tri-consonant Hebrew roots

I intend to continue the diachronic line of research of polysemous Hebrew roots (as shown in my papers B16, C11 C12, C4) and explore the diachronic evolvement of meaning relations of lexemes sharing the same root. This type of research points at cultural changes in beliefs and norms and reveals processes of abstraction and
grammaticalization. It adds the notion of 'frames in contact' to Filmore's 'frame semantics' (as I have started to show in my papers on Truth: B16 and on Grace: C12). This line of research calls for further contrastive studies confronting and comparing close as well as remote languages. (Hebrew and English as in my book-A1, or Hebrew and Chinese in my paper B14)

5.3 Ancient and modern discourse and poetic metaphors
I plan to go on exploring various types of metaphors, and developing my idea of reconciliation through abstractions and transition functions. I have submitted a research program to the Israel Academy of Science where I suggest creating an annotated online corpus of metaphors in Ancient Hebrew, from the Bible onward. Such a corpus could provide a variety of data from which a deeper and broader view of metaphor characteristics can be obtained.

5.4 The emergence of a modern Hebrew style
Until the mid 18th century, with the exception of the medieval 'golden age of Hebrew poetry in Arabic Spain, Hebrew was mainly a sacred language. The return of Hebrew to full life and the emergence of secular prose and poetic styles, and the semi-miraculous emergence of the vernacular, is a unique phenomenon whose various aspects call for research. I am mainly interested in depicting the stages of the emergence of style in secular prose, and in categorizing the changing norms in poetic language. The main issue I intend to address is the fine equilibrium between norms and fashions in a given historic period and personal individual creativity, both of which generate new styles and modes of expression.

June 2007