## PROJECT SUMMARY: Exploring boundary conditions on the theory of agreement through the comparative study of African languages - Ken Safir, PI – Rutgers University

The goal of this research is to understand the underlying structure of the human language capacity by exploring key features of human grammars and the means by which they come about. We propose to explore the relationship between morphological agreement and anaphoric relations in the languages of Africa by expanding the scope of the Afranaph Project. The central theoretical question this proposal addresses is whether or not the agreement phenomena that occur between nominals and non-nominals, such as subject-verb agreement are driven by the same principles that determine agreement between nominals in an antecedent-dependent relation, such as anaphor-binding (e.g. 'the boys saw themselves')or bound variable relations. The question is narrowed in this inquiry as to whether, or to what extent, the Agree relation/operation originally proposed and defined by Chomsky (1995), but formulated variously by others, also accounts for the agreement that accompanies antecedency. The intellectual merit of the work consists in the theoretically-driven empirical research that will help to delineate the boundaries between essential operations in grammar, particularly those that bring about agreement and anaphora. Whatever our results, the theories of agreement, anaphora and relations between them will rest on a much richer empirical foundation.

Some of the best evidence for distinguishing different kinds of agreement relations consists of mismatches where A agrees in one way with B and in a different way with C in the same sentence. English conjoined subjects act alike for both local anaphora and subject-verb agreement. In Lubukusu, a Bantu language, singular subject-verb agreement (SVA) can co-occur with plural antecedency for a reciprocal. The equivalent of "the hunter sees each other with the antelope", can mean, "the hunter and the antelope see each other" in Lubukusu (Baker, Safir and Sikuku, 2013). Bantu languages are particularly useful for testing antecedency of this kind because nominals that belong to different noun classes cannot straightforwardly be summed to provide for a plural SVA marker that satisfies the differing plural agreement classes of the conjuncts. How anaphors (reflexives and reciprocals) are anteceded by mixed conjuncts and whether they match their antecedents morphologically as well as semantically is just one of many antecedency vs. agreement puzzles that phenomena in African languages permit us to explore.

In a broad sense, the theoretical issues are relatively clear. The challenge for Agree-does-it-all theories is to show that the apparent mismatches are expected in certain syntactic environments and/or derived by independently necessary assumptions. On the other hand, if SVA and antecedent agreement arise from distinct mechanisms, what are those mechanisms and how are they independently motivated? The quest to bring empirical patterns to bear on these central theoretical issues and clarify what is at stake is the central intellectual merit lies.

There is no theoretical reason to limit such an inquiry to anaphora and agreement in African languages. However, by making them our focus, and using the infrastructure of the NSF-supported Afranaph Project to conduct our empirical research, we can build on resources that the Afranaph Project has already developed, including a network of researchers and language consultants, methods of elicitation and data handling, rich data already collected, a website and a flexible database for storage and public access, and organized research teams already in place. The broader impact of our work consists in effectiveness of the Afranaph Project in building a research community of those interested in the structure and comparison of African languages. Our website and database are at once resources and tools of organization for that community. The Afranaph Project provides training and mentoring for many who participate in it, including

many native speaker linguists who would otherwise be isolated from contact a broader research community. For our consultants, participating in Afranaph is also a productive way to expose the language(s) they speak (typically underreported or even endangered ones) to interested scholars, and in some cases, these contacts result in projects outside of Afranaph that serve their speech communities.