

Annual Report for Period: 11/2008 - 10/2009

Submitted on: 10/30/2009

Principal Investigator: Bohnemeyer, Juergen .

Award ID: 0723694

Organization: SUNY Buffalo

Submitted By:

Bohnemeyer, Juergen - Principal Investigator

Title:

Spatial Language and Cognition in Mesoamerica

Project Participants

Senior Personnel

Name: Bohnemeyer, Juergen

Worked for more than 160 Hours: Yes

Contribution to Project:

Name: Benedicto, Elena

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on the Sumu.

Name: Capistrán, Alejandra

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Purepecha (Tarasco).

Name: Gutierrez Morales, Salome

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Sotepanec (Sierra Popoluca).

Name: Mateo-Toledo, Eladio

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Q'anjob'al.

Name: Palancar, Enrique

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Otom'.

Name: Peralta, Valentín

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Pajapan Nawat.

Name: Polian, Gilles

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Tzeltal.

Name: Smythe-Kung, Susan

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Huehuetla Tepehua.

Name: V?zquez, Juan Jes?s

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Chol.

Name: V?zquez, Ver?nica

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Cora.

Name: Zavala, Roberto

Worked for more than 160 Hours: Yes

Contribution to Project:

Conducted fieldwork on Tecpat?n Zoque.

Post-doc

Graduate Student

Name: O'Meara, Carolyn

Worked for more than 160 Hours: Yes

Contribution to Project:

Research assistant for project from August 2008 - May 2009. Will conduct fieldwork on Seri.

Name: P?rez B?ez, Gabriela

Worked for more than 160 Hours: Yes

Contribution to Project:

Research assistant for project from March 28, 2008 - August 29, 2008. Will conduct fieldwork on Zapotec.

Name: Romero Mendez, Rodrigo

Worked for more than 160 Hours: Yes

Contribution to Project:

Research assistant for project from November 1, 2007 - March 26, 2008. Will conduct fieldwork on Ayutla Mixe and Mexican Spanish.

Name: Eggleston, Alyson

Worked for more than 160 Hours: Yes

Contribution to Project:

Graduate student to Elena Benedicto at Purdue University

Name: Hernandez Green, Nestor

Worked for more than 160 Hours: Yes

Contribution to Project:

Graduate student to Enrique Palancar

Name: Hernandez Gomez, Maria de Jesus

Worked for more than 160 Hours: Yes

Contribution to Project:

Graduate student to Enrique Palancar

Undergraduate Student

Name: Herrera, Samuel

Worked for more than 160 Hours: Yes

Contribution to Project:

Unfunded collaborator who is collecting data for the project on Huave, spoken in San Mateo del Mar, Oaxaca, Mexico. He is affiliated with the Laboratorio de Lingüística Instituto de Investigaciones Antropológicas Universidad Nacional Autónoma de México.

Technician, Programmer

Other Participant

Research Experience for Undergraduates

Organizational Partners

Max Planck Institute For Psycholinguisti

Several senior members of the Language and Cognition Group at the Max Planck Institute for Psycholinguistics met with the PI and Carolyn O'Meara in March 2008 to discuss the development and piloting of the tasks used in the project. The meeting was hosted by the Max Planck Institute.

CIESAS

The MesoSpace project has a collaborative agreement with the Centro de Investigaciones y Estudios Superiores en Antropología Social (CIESAS) in Mexico. CIESAS Sureste in San Cristobal de las Casas, Chiapas hosted two week-long workshops in June 2008 and in October 2009 dedicated to the training of project members by the PI in the use of the research tools and the analysis of the data collected with them, respectively. CIESAS DF in Mexico City hosted a meeting of the PI with 8 project members in June 2009 dedicated to the coding, analysis and dissemination of data concerning the use of frames of reference.

Spatial Intelligence and Learning Center

SILC will provide MesoSpace with advice on aspects of quantitative research methodology. MesoSpace will provide SILC with data on which to base follow-up experimental research. The PI presented his preliminary Yucatec findings to a SILC audience at Northwestern University on October 6, 2008. Talks about a possible future personnel exchange are underway. SILC is an NSF Science of Learning Center.

Other Collaborators or Contacts

Dr. Penelope Brown, researcher in the Language Acquisition Group at the Max Planck Institute for Psycholinguistics, participated in discussion related to the design of the stimuli and the experimental procedure for the project tasks during the meeting at the Max Planck Institute for Psycholinguistics in March 2008. Project member Gilles Polian has been consulting with her frequently on the analysis of frames of reference data in Tseltal.

Dr. Niclas Burenhult, research fellow in the Language and Cognition Group at the Max Planck Institute for Psycholinguistics, participated in discussion related to the design of the stimuli and the experimental procedure for the project tasks during the meeting at the Max Planck Institute for Psycholinguistics in March 2008.

Dr. Eve Danziger from the Department of Anthropology at the University of Virginia participated in discussions regarding the design and development of the stimuli and the piloting process. She also participated in the project workshop which took place in June 2008. She provided expertise in experimental design, as well as her knowledge of spatial language and cognition of Mopan Mayan speakers. She has agreed to be a commentator at the symposium at the 2010 Annual Winter Meeting of the Society for the Study of Indigenous Languages of the Americas (SSILA) in Baltimore, Maryland where 8 project members will present some of their results on frames of reference.

Dr. Dedre Gentner, professor in the Northwestern University Psychology Department, is a Co-PI on the Spatial Intelligence and Learning Center (SILC) NSF Science of Learning Center grant. Gentner has provided feedback on the PI's Yucatec findings and agreed to collaborate with the MesoSpace project on questions of quantitative research methodology. Gentner, the PI and project member Perez Baez have been intensively exploring future experimental studies focusing on possible cognitive effects of the language-specific differences in meronymy suggested by the preliminary results of the MesoSpace project.

Dr. Olivier Le Guen, a post-doctoral researcher at the Max Planck Institute for Psycholinguistics who works on Yucatec Maya, participated in discussion related to the design of the stimuli and the experimental procedure for the project tasks during the meeting at the Max Planck

Institute for Psycholinguistics in March 2008. Le Guen and the PI continue to consult on the analysis of spatial frames of reference in Yucatec.

Dr. Stephen C. Levinson, the current managing director of the Max Planck Institute for Psycholinguistics (MPI) and the head of the Language and Cognition Group at the MPI, contributed significantly to the design and implementation of the stimuli used in the project during the meeting that was held at the MPI in March 2008.

Dr. Paulette Levy, professor at the National University of Mexico (UNAM), participated in the project workshop which took place in June 2008 by sharing her expertise of spatial semantics of Totonac.

Dr. David Mark, professor in the Department of Geography at the University at Buffalo, attended numerous lab meetings during which he helped in the development and piloting of the stimuli used in the project.

Dr. Eric Pederson, Chair of the Linguistics Department at the University of Oregon, participated in discussions regarding the design and development of the stimuli and the piloting process. Eric provided assistance in the design process of the new tasks used in the project.

Dr. Mark Sicoli, a post-doctoral researcher at the Max Planck Institute for Psycholinguistics who works on Zapotec, participated in discussion related to the design of the stimuli and the experimental procedure for the project tasks during the meeting at the Max Planck Institute for Psycholinguistics in March 2008.

Dr. Angela Terrill, research fellow at the Centre for Language Studies at Radboud University in Nijmegen, participated in discussion related to the design of the stimuli and the experimental procedure for the project tasks during the meeting at the Max Planck Institute for Psycholinguistics in March 2008.

Activities and Findings

Research and Education Activities: (See PDF version submitted by PI at the end of the report)

During the spring of 2009 the PI, project member Perez Baez and Dedre Gentner intensively explored future experimental studies focusing on possible cognitive effects of the language-specific differences in meronymy suggested by the preliminary results of the MesoSpace project. These talks resulted in a draft of a supplemental proposal.

The semantic typology lab meetings continued on a weekly basis (during the semester) at the University at Buffalo. Lab meetings were regularly dedicated to discussions of project data and organizational matters.

The PI returned (unfunded) to Mexico City in June 2009 to meet with 7 project members (Capistran, Gutierrez Morales, Hernandez Gomez, Hernandez Green, Polian, Vazquez de Soto). The meeting was dedicated to the coding and analysis of data resulting from the Ball and Chair and New Animals tasks and the preparation of abstracts for a symposium of MesoSpace researchers at the 2010 Annual Winter Meeting of the Society for the Study of Indigenous Languages of the Americas. The five-day meeting was hosted by the Centro de Investigaciones y Estudios Superiores en Antropología Social (CIESAS) DF.

The PI was invited by the Instituto de Investigaciones Antropológicas (IIA) of the Universidad Nacional Autónoma de México (UNAM) to teach a course from June 17-28th 2009 in Mexico City on semantic typology. Part of the course was dedicated to the tools, methods and preliminary results of the MesoSpace project. Students were given the opportunity to collect data with some of the instruments developed for the project. The course was attended at capacity (60), including project members Vazquez de Soto and Hernandez Gomez. The course was organized by Samuel Herrera, the director of the Indigenous Language Lab at the IIA, who also attended it. Herrera has joined the project as a new member and will contribute data on Huave, a linguistic isolate spoken on the coast of Oaxaca.

A week-long workshop was hosted by the Centro de Investigaciones y Estudios Superiores en Antropología Social (CIESAS) Sureste in San Cristobal de las Casas, Chiapas, from October 12-17, 2009. The workshop was organized by the Buffalo MesoSpace team (the PI and O'Meara) and by the project members Mateo Toledo, Polian and Zavala Maldonado, who are affiliated with CIESAS Sureste. All of the project members as well as some of their graduate students were in attendance. The workshop was dedicated to the coding and analysis of the data collected by the project members and the planning of future publications and conference presentations.

To date, the 15 original collaborating field workers have completed their field trips, with the exception of the Mexican Spanish control data to be collected by Romero Mendez. The attached document provides information about where and when these field trips were conducted and how

many participants were recruited for each task. The analysis of the data collected so far has begun, but only the PI has presented preliminary findings from his field language to an outside audience (see below).

Project members O'Meara and Perez Baez have successfully submitted a proposal for a symposium at the 2010 Annual Winter Meeting for the Society for the Study of Indigenous Languages on the topic of spatial frames of reference in the languages of Mesoamerica. Ten project members will present data on selection preferences for spatial frames of reference in eight of the indigenous populations of the MesoSpace sample.

On October 29, 2009 the PI gave a keynote address at the Conference on Indigenous Languages of Latin America V (CILLA) titled 'Meronim? a y marcos de referencia: Evidencia a trav?s del maya yucateco'. The talk was based entirely on data collected as part of the MesoSpace project.

Findings:

At the time of writing of this report, the PI is the only member of the project who has nearly completed the coding of his collected data. All other team members can at present report only tendencies on the basis of already coded subsamples of their data. The corresponding preliminary results suggest that the use of relative frames of reference (FoRs) is dispreferred throughout Mesoamerica, as predicted in the project proposal submitted to NSF. This pattern appears to extend to the two indigenous control languages (Mayangna and Seri), suggesting that it may not be a feature of the Mesoamerican sprachbund. The Ball and Chair task newly developed for this project has produced evidence of pervasive use of intrinsic FoRs throughout the sample languages which was hitherto unattested. It appears that the intrinsic type of FoRs is the most frequent for locating the Ball with respect to the Chair in most of the languages of the sample (e.g., 'The ball is in front of/behind/beside the chair'). Topological descriptions - descriptions based on notions of contact, containment, and proximity, which do not involve FoRs - likewise play an important role here (e.g., 'The ball is between the legs of the chair/near the back rest of the chair'). In contrast, for the task of orienting the Chair, the dominant type of FoR in most languages appears to be what Danziger (in press) calls 'direct' FoRs. In this type, the body of an observer - particularly the speaker and/or addressee - serves as the 'anchor' or basis of the coordinate system, which however - unlike in relative FoRs - is not projected onto an external ground (e.g., 'The chair is facing us'). In Levinson's (1996) classification, direct FoRs constitute a subtype of intrinsic FoRs. Alongside direct FoRs, landmark-based ones, in which the location (rather than the geometry) of some reference entity serves to anchor the FoR, play an important role in descriptions of orientation (e.g., 'The chair is turned towards the door').

Another surprising finding that has emerged from the Yucatec Ball & Chair data is the routine intrinsic use of place functions in the vertical even when these applications clash with the actual orientation of the ground and the observer. An example is the ball resting on top of an inverted chair being described as 'under' the chair. All Yucatec speakers produce such locutions, although in terms of overall frequency, they are less common than absolute uses of vertical relators (meaning uses that align with the Earth's field of gravity). This suggests that the 'Principle of canonical orientation' proposed by Levelt (1984, 1996), which prohibits such intrinsic uses of vertical relators, may have to be relaxed for Yucatec from the status of an inviolable constraint to that of a mere preference. Several other members of the project have, on the basis of preliminary and impressionistic evidence, confirmed the intrinsic use of vertical relators in their field languages.

As for the second domain investigated by the MesoSpace team - productive terminologies for object mereologies - the following picture has begun to emerge based on the project members' first reports of data collected with the Novel Objects tasks: As predicted, meronyms appear to play a prominent role in identifying the parts of the Novel Objects throughout the MA sample. A similar distribution is shaping up for the southern control language Mayangna, but not for Seri spoken north of the MA area. However, it is not obvious that it is readily possible in any of the languages of the sample to extend meronyms to all parts of all of the Novel Objects. There does appear to be an element of conventionality in the use of Mesoamerican meronymies that neither the account of MacLaury 1989 nor that of Levinson 1994 predicts. For Yucatec, the critical distinction is that between volume meronyms, whose assignment appears to be subject to convention, and surface and curvature extreme meronyms, which are applied to arbitrary parts that satisfy their truth conditions (see the first-year report). It remains to be seen which factors limit productivity in the other languages.

An interesting finding that has emerged from the picture book tasks is that while human and animal body part terms are readily extended to parts of artifacts, their use with plant body parts tends to be rather more limited in most languages. Plant mereologies appear to be properly lexicalized throughout Mesoamerica - a finding predicted neither by MacLaury's (1989) nor by Levinson's (1994) accounts. Preliminary evidence suggests that this pattern extends to Seri, but not to Mayangna, where human/animal body part terms are more regularly applied to plant parts.

Training and Development:

The weekly meetings of the semantic typology lab provide an environment in which project members and University at Buffalo graduate students and faculty members have benefiting from discussion of methodological issues and preliminary findings of the MesoSpace project.

The research assistant has also become familiar with the process of administering a large-scale grant with multiple project members.

Two of the junior project members, O'Meara and Perez Baez, are organizing a symposium at the 2010 Annual Winter Meeting of the Society for the Study of Indigenous Languages of the Americas which is to feature 10 MesoSpace project members.

The PI met with 7 project members (Capistran, Gutierrez Morales, Hernandez Gomez, Hernandez Green, Polian, Vazquez de Soto) in Mexico City in June 2009 to assist them in the coding and analysis of project data. This meeting greatly enhanced their immersion in the methodology of semantic typology.

A two-week intensive course taught by the PI at the Universidad Nacional Autonoma de Mexico (UNAM) in June 2009, which was partly based on MesoSpace materials, offered another opportunity for 60 students to familiarize themselves with research questions and approaches in semantic typology.

The MesoSpace field trips were an invaluable opportunity for the participating researchers to gain experience in the techniques of linguistic data collection and enhance their expertise in their field languages.

As part of her research methods, project member Benedicto uses a model that she calls 'Participatory Research Action' (see Benedicto et al. 2007 for more information). This model involves the training of native speakers to be part of local technical indigenous linguistic teams, something that Benedicto is actively involved in. The linguistic research team includes Benedicto, her student Alyson Eggleston and seven members of the Mayangna Indigenous Linguistics Team, two of whom are members of the minority variant Tuahka and five of whom are women. In order to collect data for this project, Benedicto and Eggleston worked with the Mayangna Indigenous Linguistics Team to train them to collect data, as well as transcribe and translate the data that they collect.

Randi Tucker, the University at Buffalo graduate student who will serve as the new research assistant for Spring 2010, attended the 2009 project workshop held at CIESAS in San Cristobal de las Casas, Chiapas, Mexico. During the course of the workshop she was able to meet all of the project members, learn more about the goals of the project and the preliminary results from the individual researchers. She also worked closely with the current research assistant, project member O'Meara, during the workshop to find out more about the administrative components of the project.

Outreach Activities:

The course taught by the PI in June 2009 at the Instituto de Investigaciones Antropologicas (IIA) of the Universidad Nacional Autonoma de Mexico (UNAM) was attended by 60 participants, half of whom came from various specializations within linguistics and the other half from other disciplines, primarily from anthropology and philosophy. The course served to familiarize the participants with approaches and insights in the field of semantic typology and with the study of spatial language and cognition in Mesoamerica.

Journal Publications

Books or Other One-time Publications

Web/Internet Site

URL(s):

<http://www.acsu.buffalo.edu/~jb77/Mesospace.htm>

Description:

Other Specific Products

Product Type:

Field Manual

Product Description:

This product is the 2008 Field Manual for the project. It was designed as a resource for project members regarding the objectives of the project and it provides guidelines on how to run the tasks and analyze the data.

Sharing Information:

The 2008 Field Manual is available on the project website:

<http://www.acsu.buffalo.edu/~jb77/MesoSpaceManual2008.pdf>

Contributions

Contributions within Discipline:

The data collected with the Ball & Chair (B&C) stimulus, even though it has so far only been fully coded and analyzed for two of the languages of the sample - Seri and Yucatec - has already given rise to an observation with important implications for the theory of spatial frames of reference (FoRs). B&C comprises four sets of 12 photographs each, all featuring a ball and a chair and differing from one another only in the orientation and disposition of the chair and the location of the ball. Responses from Seri and Yucatec speakers suggest that representations of the location of the ball by preference use intrinsic FoRs (e.g., 'The ball is in front/left of the chair') or encode the location of the ball in topological (= FoR-free) terms (e.g., 'The ball is between the legs/near the backrest of the chair'). In contrast, the orientation of the chair is preferred to be encoded in a FoR that uses either the body of an observer (a 'direct' FoR in the terminology of Danziger in press; e.g., 'The chair is facing us') or some impromptu landmark (e.g., 'The chair is turned towards the door') as both anchor (the basis for the definition of the FoR in Levinson's 1996 terms) and referential ground (the reference entity that marks the origin of the FoR). Data from most of the other languages of the MesoSpace sample, to the extent they have been analyzed, confirm this asymmetry.

This pattern has three important theoretical implications. First, the literature on FoRs in linguistics, cognitive psychology, and anthropology has so far almost exclusively focused on FoRs used to identify locations of entities. The MesoSpace data suggest that FoRs play an equally important role in representations of the orientation of entities and of the direction in which entities move during particular subintervals of motion events. Secondly, in order to appropriately capture and account for the differences between the FoRs preferred in representations of locations and in representations of orientation and direction of motion, it is necessary to take into account a dichotomy of FoRs in terms of how they relate to their 'anchor' (in terms of Levinson 1996; the entity after which an FoR is modeled - e.g., the referential ground in intrinsic FoRs, the body of the observer in relative FoR, and the river in 'upriver'/'downriver' systems): there are FoRs whose axes are derived from the geometry of the anchor (e.g., 'front'/'back'/'left'/'right' systems, whether they are used intrinsically or relatively); and there is a second class of FoRs whose 'quadrants' are defined in terms of containing the location of the anchor instead (e.g., cardinal direction and landmark-based systems). Both anchoring types occur with all major types of FoR distinguished by Levinson 1996 and Danziger in press. However, axes-anchored FoRs appear to systematically play a more important role in representations of locations, whereas place-anchored FoRs appear to play a more important role in representations of orientation and direction of motion.

Finally, thirdly, the fact that representations of orientation and direction of motion involve FoRs, just like representations of location, is evidence against the treatment of orientation and direction of motion as path functions proposed in Jackendoff 1983. This and the first two findings are explored in a joint paper by the PI and O'Meara, an abstract of which is being written up for submission to the STALDAC 2010 conference. The authors argue that representations of orientation and direction of motion involve 'vectors', a third primitive type of conceptual functions of spatial semantics in addition to place and path functions, following Bohnemeyer 2003.

Another surprising finding that has emerged from the Yucatec Ball & Chair data is the routine intrinsic use of place functions in the vertical even when these applications clash with the actual orientation of the ground and the observer. An example is the ball resting on top of an inverted chair being described as 'under' the chair. All Yucatec speakers produce such locutions, although in terms of overall frequency, they are less common than absolute uses of vertical relators (meaning uses that align with the Earth's field of gravity). This suggests that the 'Principle of canonical orientation' proposed by Levelt (1984, 1996), which prohibits such intrinsic uses of vertical relators, may have to be relaxed for Yucatec from the status of an inviolable constraint to that of a mere preference. Several other members of the project have on the basis of preliminary and impressionistic evidence confirmed the intrinsic use of vertical relators in their field languages.

Finally, the Yucatec data and the preliminary reports from the other team members confirm the two central predictions of the project proposal: relative frames of reference play no more than a marginal role in Mesoamerican languages, and all Mesoamerican languages have productive geometrically based meronym terminologies. These two predictions are the key prerequisites of the proposed meronymy-allocentrism pattern,

which suggests that the availability of productive shape-based meronymies is one factor that disfavors the use of relative FoRs. This puts the project on track towards discovering the first ever unimpeachable purely linguistic determinant of FoR selection. If corroborated by a comprehensive analysis of the data from the other languages in the project sample, this would have important implications for the Gleitman-Levinson controversy over language in particular vs. culture in general as the driving force behind the alignment of FoR selection in discourse and internal cognition.

Contributions to Other Disciplines:

The implications of the emerging findings mentioned above under 'Contributions Within the Discipline' regarding the asymmetric distribution of frames of reference across descriptions of location and orientation are relevant to all fields that study and theorize spatial frames of reference and representations of location, orientation, and direction. Aside from linguistics, these include cognitive psychology, anthropology, and artificial intelligence.

The hypothesis that productive geometrical meronymies disfavor the use of relative frames of reference ties in with one of the foundational questions of cognitive science, the language-and-thought complex. If confirmed, the meronymy-allocentrism pattern would suggest that the availability of productive geometrical meronymies is a purely linguistic factor driving biases in frames-of-reference usage in language and internal cognition. As mentioned above, the initial reports of the project members are in line with the predictions.

Contributions to Human Resource Development:

The project contributes to the training and academic advancement of five graduate students and four junior scholars who defended their dissertations within the two years since MesoSpace was launched. Six of these are Guatemalan or Mexican citizens; four of them are native speakers of indigenous languages; and three of them are women. In all, eight of the 19 members of the MesoSpace team are women and twelve are citizens of Mexico or Guatemala.

Contributions to Resources for Research and Education:

The project has inspired intensive collaboration between the University at Buffalo, the Max Planck Institute for Psycholinguistics, the Centro de Investigaciones y Estudios Superiores en Antropología Social (CIESAS) of Mexico, and the NSF-funded Spatial Intelligence and Learning Center. Collaboration has more recently begun with the Laboratorio de Lingüística of the Instituto de Investigaciones Antropológicas of the Universidad Nacional Autónoma de México (UNAM) in Mexico City.

Contributions Beyond Science and Engineering:

Conference Proceedings

Special Requirements

Special reporting requirements: None

Change in Objectives or Scope: None

Animal, Human Subjects, Biohazards: None

Categories for which nothing is reported:

Any Journal

Any Book

Contributions: To Any Beyond Science and Engineering

Any Conference

Researcher	Language	Field site	Duration of stay	Participants per task							Total		
				Picture book elicitation		Novel Objects matching tasks		Ball & Chair task	New Animals task	Male consultants (total)		Female consultants (total)	
				Part identification	Local-ization wrt. parts	Part identification	Local-ization wrt. parts						
Pilot Juergen Bohne Meyer	English Yucatec Maya	Buffalo, New York Yaxley, Quintana Roo, Mexico	Spring 2008 6/8/08-7/29/08	7		3	5 x 2	5 x 2	5 x 2	18	11	41	52
Alejandra Captistrán	P'orhépecha	Santa Fe de la Laguna, Municipio de Quiroga, Michoacán, Mexico	8/31/08-9/13/08	6		6	5 x 2	5 x 2	5 x 2	19	10	13	23
Susan Smythe Kung	Huehuetla Tepehua	Huehuetla, Hidalgo, Mexico	6/13/08-7/24/08	4		10	5 x 2	5 x 2	5 x 2	25	9	19	28
Juan Jesús Vázquez	Chol	Tila, Chiapas, Mexico	6/20/08-7/10/08	10		5	7 x 2	7 x 2	3 x 2	10			16
Salome Gutierrez Morales	Sierra Popoluca (Soteapanec)	Soteapan, Veracruz, Mexico	7/19/08-8/12/08	6		6	5 x 2	5 x 2	5 x 2	16	10	8	18
Elena Benedicto	Sumu/Mayangna	Rosita, Nicaragua	6/11/08-7/15/08	4		4	5 x 2	4 x 2	5 x 2	10	23	11	34
Carolyn O'Meara	Seri	El Desemboque del Rio San Ignacio, Sonora, Mexico	11/11/08-12/22/08	5		4	5 x 2	5 x 2	5 x 2	16	4	19	23
Valentin Peralta	Pajapan Nawat	Pajapan, Veracruz, Mexico	10/10/08-10/29/08	4		4	6x2	6x2	6x2		5	8	13
Veronica Vazquez	Cora	Presidio de los Reyes, Nayarit, Mexico	10/16/08-11/2/08	5		5	5x2	5x2	5x2	20	14	12	26
Roberto Zavala	Zoque	Tecpatan, Chiapas, Mexico	3/7/09-3/15/09	4		4	5 x 2	5 x 2	5 x 2	10	8	9	17
Gilles Polian	Tseltal	Mesbilja, Chiapas, Mexico	Feb-09			5	x2	5x2	7x2	27	19	8	27
Gilles Polian	Tseltal	Cabecera Tenejapa, Chiapas, Mexico	3/20/2009-4/2009			5	x2	5x2	5x2	19	4	15	19
Gilles Polian	Tseltal	Chacoma Tenejapa, Chiapas, Mexico	Sep-09					5x2		17	9	8	17
Enrique Palancar	Otomi	San Ildefonso Tultepec, Municipio de Amealco, Querétaro, Mexico	3/28/09-04/03/09	3		1	5 x 2	5 x 2	5 x 2	23	6	17	23
Gabriela Perez Baez	Juchiteco	La Ventosa, Juchitán de Zaragoza, Oaxaca, Mexico	May 20 - June 4 2009	12		12	6 x 2	6 x 2	6 x 2	27	12	15	27
Rodrigo Romero Mendez	Ayutla Mixe	Ayutla (San Pedro y San Pablo Ayutla), Oaxaca, Mexico	10/7/2008-11/3/2008, 7/17/2009-8/10/2009	5		5	5x2	5x2	5x2	16	5	15	20
Rodrigo Romero Mendez	Mexican Spanish	Santa Ines, Texcoco, Mexico	9/18/2009-present	6		0	6x2	6x2	6x2	9	4	9	13
Eladio Mateo Toledo	Q'anjob'al	Santa Eulalia, Huehuetenango, Guatemala	5/30/2009-6/25/2009	2		2	7x2	7x2	9x2	20	10	17	27
Total													423