tations put stresses on the existing abilities of power generation. Thus, how do indigenous communities retain their unique cultures? How do they respond to new technologies while preserving the knowledge of time-tested indigenous technologies? How do we meet globalization with sustainable methods? The need to maintain indigenous cultures and values in a rapidly homogenizing world; assert indigenous control over local resources, science, and technology; and finally, explore all available options for sustainability call for the need to examine indigenous architectures in both a historical and contemporary sense. Indigenous values, culture, and governance systems are reflected and enforced by architecture. Indigenous architectures use regional, sustainable, and adaptive materials. Built environments reflect and influence the values and governance goals of an indigenous community, creating a buttress against the homogenizing influence of globalization, and in addition, support sustainable globalization through indigenous technologies.

CULTURAL SUSTAINABILITY

Alfred Waugh, Alfred Waugh Architects, West Vancouver, BC, Canada

This presentation will highlight architectural examples from Alfred Waugh Architects work to discuss a design process to create architecture that is a synthesis of cultural identity with sustainable principles rooted in the past. It is our strong belief that if indigenous peoples claim to maintain and have a close connection with the land their buildings must minimize their impact on earth and set a precedent for environmental responsibility.

ARCHITECTURE: AN INDIGENOUS CULTURAL BUTTRESS

Patrick Stewart, Patrick Stewart Architect, Chilliwack, BC, Canada

The Canadian residential school experience attempted to replace all physical forms of indigenaity including indigenous architectures. However, modern indigenous architects are reviving indigenous architecture in recognition of architecture as ceremony. Ceremony, for indigenous people is seen as a methodology of life, including science. Therefore, architecture must be seen as an expression of indigenous science.

INDIGENOUS ARCHITECTURE AND CULTURE IN TWO CANADIAN NATIONS, 1900–1930

Omeasoo Butt, University of Saskatchewan, Saskatoon, Canada

Examples from Sliammon, BC and Île à la Crosse SK will illustrate how indigenous nations in the early twentieth century conceived of their architecture as cultural conduits for both historical indigenous knowledge and the changes that their societies faced with the arrival of newcomers. Special attention will be paid to the educational aspects of architecture that were cultural, scientific and technological both historically and today.

Late Talkers in Any Language: Finding Children at Risk Worldwide

Organized by: Nan Bernstein Ratner, University of Maryland, College Park

A major public health need worldwide is early identification of toddlers who are slow to talk. Early child language delay often signals other developmental problems and may limit eventual educational and vocational achievement. Thus, developing efficient, easily administered, universal toddler language instruments is critical. However, this step is also challenging because of cross-linguistic and cultural diversity and cost barriers. This session will present international research conducted over the past two decades that has made impressive progress toward achieving this goal by using standardized parent reports. Topics include the challenges involved in adapting the MacArthur-Bates Communicative Development Inventory (CDI) for use in numerous cultures and languages, strategies that have been successfully used to address these challenges, and major cross-linguistic universals as well as differences that have emerged from CDI adaptations for 69 languages. The panel will offer findings regarding identification of late talkers in four countries using the Language Development Survey, how to detect the correlates of persistent or transient early language delay, and associations with behavioral and emotional problems. Also presented will be how bilingual children master two languages concurrently, and how vulnerable bilingual late-talkers such as immigrant toddlers may be at risk for later educational or vocational failure if not properly identified.

MACARTHUR-BATES CDI: LESSONS LEARNED FROM MAKING LANGUAGE-SPECIFIC VERSIONS

Philip Dale, University of New Mexico, Albuquerque

Despite differences across languages and cultures, CDI adaptations appear valid in exploring individual differences in language development across 69 spoken and signed languages/dialects. I explain under what conditions parent reports are valid; how we make linguistically appropriate adaptations; findings of differences in early "word" acquisition across languages, and theoretical and applied implications; and how gender differences across languages complicate identification of language delay.

HOW THE LANGUAGE DEVELOPMENT SURVEY IDENTIFIES LATE TALKERS: INTERNATIONAL EXAMPLES

Leslie Rescorla, Bryn Mawr College, PA

The Language Development Survey (LDS) is a vocabulary checklist that parents complete in about 10 minutes. Studies conducted in the U.S. indicate that the LDS is an effective screening tool for identifying late talkers (LTs) in general population samples of toddlers. Correlations with concurrently administered language tests were high, and decision statistics such as sensitivity and specificity indicated that the LDS differentiated well between young children with expressive language delays and those with typical language development. Late talkers identified with the LDS at 24 to 31 months of age had significantly lower language scores than children with typical language histories through age 17, although few LTs had diagnosable speech-language impairment after age 6. When the LDS was used to identify late talkers in Greece and Korea, the children identified look very similar to U.S. LTs in terms of their vocabulary development. That is, they were acquiring the same words as typically developing peers but at a much slower rate. In research conducted with a large and diverse Dutch general population sample, only 29% of children delayed on the MacArthur-Bates Communicative Development Inventory (CDI) at 18 months were still delayed on the LDS at 30 months. Additionally, only 30% of the children delayed on the LDS at 30 months had been delayed on the CDI at 18 months. Thus, many children changed language delay status between 18 and 30 months. Demographic factors and behavioral/emotional problems as measured by the Child Behavior Checklist for ages 1.5-5 had significant but guite small associations with LDS scores and with language delay status at 18 and 30 months. Conclusions of the research are: 1) late talkers can be reliably and validly identified using the LDS at 24 to 35 months of age; 2) language delay status at 18 months is not a good predictor of language delay status at 30 months; and 3) late-talking toddlers do not generally go on to manifest persistent language delay, but they do have weaker language skills through adolescence compared with typically developing peers. These international findings support a dimensional account rather than a categorical account of early language delay.

CROSSING BORDERS: THE LANGUAGE DEVELOPMENT OF BILINGUAL IMMIGRANT TODDLERS

Erika Hoff, Florida Atlantic University, Davie

Many, if not most, of the world's children grow up exposed to two or more languages. In order to identify those bilingually-developing children who are late talkers, it is necessary to know the normal time course of bilingual development. Using the MacArthur inventories, we assessed the early English and Spanish language development of children in the U.S. who were exposed to both languages from birth, and we compared the bilingual children's development of English to the English language development of a group of monolingual English learning children from similar socioeconomic backgrounds. We found that the rate at which the bilingual children developed vocabulary knowledge was virtually identical to the rate of vocabulary learning in monolingual children when the bilingual children's combined English and Spanish vocabularies were counted. However, when comparison was made of the bilingual children's English vocabulary to the monolingual children's English vocabulary, the bilingual children took significantly longer to achieve the same vocabulary size. The bilingual children also reached the milestone of producing word combinations at a later age than the monolingual children. This finding, that it takes longer to learn two language than one - even for young children, suggests that identification of late talkers among bilingual children requires an assessment procedure that takes into account the children's knowledge in both their languages.

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