# CURRICULUM VITAE Bülent ARIKAN

March 2014

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### **DEGREES RECEIVED AND INSTITUTIONS ATTENDED:**

- 2010 PhD in Anthropology, School of Human Evolution and Social Change, Arizona State University 85287–2402, Tempe–AZ, U.S.A.
- **Title:** "Reorganisation and Risk: Environmental Change and Tribal Land Use in Marginal Landscapes of Southern Jordan."
- **Committee:** Prof. C. Michael Barton (Chair), Prof. Geoffrey A. Clark, Prof. Sander van der Leeuw.
- **2000–2010** Doctoral Student, School of Human Evolution and Social Change, Arizona State University 85287–2402, Tempe–AZ, U.S.A.
- **1997–2000** MA, Department of Archaeology and History of Art, Bilkent University, Ankara TURKEY 06533.
- **Title:** "The Neolithic Period in Western and Northwestern Anatolia and Its Relations with Southeastern Europe and the Balkans." (Supervisor: Dr. Barbara Helwing)
- **1993–1997** BA, *Magna Cum Laude* Department of Archaeology and History of Art, Bilkent University TURKEY 06533.

#### AREAS OF SPECIALIZATION:

**Regional and Temporal Focus:** The archaeology of the Bronze and Iron Ages in Anatolia and the Levant: settlement systems, abandonment, environmental change, human impacts on environment, modelling of past land use and paleoclimate, social complexity, and collapse.

<u>Field Methods</u>: Geoarchaeology, Geographical Information Systems, Remote Sensing, and Palynology

<u>Anthropological Theories</u>: Cultural Ecology, Environmental Archaeology, Landscape Archaeology, and Social Organization and Complexity

ARIKAN-CV

#### **CURRENT POSITION:**

September 2013 – Assistant Professor, Department Ecology and Evolution, Eurasia Institute of Earth Sciences, Istanbul Technical University, Sariyer–Maslak, Istanbul, TURKEY 34469

#### **POST-DOCTORAL RESEARCH:**

**September 2011– June 2012** Senior Research Fellow at the Research Center for Anatolian Civilizations, Koç University, Istanbul–Turkey

<u>Project Title and Description:</u> Bronze Age Environmental and Social Dynamics in the Upper Euphrates and Tigris Basins. This project involves the computer—based modeling of changes in socio—economic organization and land use aspects of the Bronze Age (ca. 3,500–1,200 BC) societies in these basins in relation to changes in environmental parameters such as climate and land cover.

October 2010–September 2011 Postdoctoral Scholar at the Center for Social Dynamics and Complexity and, School of Human Evolution and Social Change, Arizona State University, Tempe–AZ, 85287–2402, U.S.A.

<u>Project Description:</u> Responsible for the statistical analyses of human behavioural and ecological modeling results of land use in Penaguila—Alcoi region of eastern Spain during the Neolithic Period (ca. 8<sup>th</sup>—7<sup>th</sup> mill. BC), under the MEDLAND Project (Director: Prof. C. Michael Barton).

### **ACADEMIC SERVICE:**

January 2014 – Assistant Director, Department of Ecology and Evolution, Eurasia Institute of Earth Sciences, Istanbul Technical University, Sariyer–Maslak, Istanbul, TURKEY 34469

## **ACADEMIC AND TEACHING EXPERIENCE:**

# Courses Taught at Istanbul Technical University (2013 –):

Fall 2013 YBS–505 Earth Information Systems

(graduate lecture)

Spring 2013 YBS–505 Earth Information Systems

(graduate lecture)

## Post–Doctoral Teaching (2011–2012):

Koç University HUMS–111 Human Impacts on Ancient Environments

(undergraduate lecture, Summer 2012, Summer 2013)

Northwestern University City and Civilization in the Eastern Mediterranean

(undergraduate lecture, Summer 2012, Summer 2013)

Bahçeşehir University CORE 5773 and CORE 5774 Advanced Technologies in

Documentation: Spatial Analysis and GIS Applications

(graduate seminar, Fall and Spring 2011-2012),

# **Pre-Doctoral Teaching (1998–2010):**

## Teaching at Arizona State University (2000–2010)

I was either the instructor or the teaching associate in 200 and 300 level undergraduate courses for ten semesters. The titles of these courses were: *Human Impacts on Ancient Environments, The Neolithic Revolution and Its Consequences, Buried Cities and Lost Tribes: Our Human Ancestor.* 

# Teaching at Bilkent University (Ankara-TURKEY, 1998-2000)

I was teaching assistant to introductory undergraduate courses on: Anatolian Art and Archaeology, Introduction to Archaeology, World Prehistory.

# **Teaching interests and Awards:**

Courses relevant to archaeology

Introduction to Archaeology	Anatolian Art and	The Archaeology of Syro–
	Archaeology	Palestine
The Neolithic Revolution	Prehistory of Southwest	The Archaeology of
and Its Consequences	Asia	Complex Societies
	Archaeology and Simple	
GIS in Archaeology	Modeling	Statistics in Archaeology
Archaeological Method and	Science in Archaeology	Environmental Archaeology
Theory	Science in Archaeology	and Field Methods

## Interdisciplinary coursework

History of Civilizations	City and Civilization	Human Impacts on Ancient Environments
Human Ecology and Complex Adaptive Systems	Statistics in Social Sciences	Cultural Ecology
GIS and Remote Sensing Methods	Spatial Analysis in Social Sciences	The History of Climate Change and Human Adaptation

**September 2006** "Certificate of Appreciation," Excellence in Teaching in Archaeology and Social Sciences, Elected by the Honors Disciplinary Faculty and Honors College Students, Barrett Honors College, ASU

# RESEARCH ASSISTANTSHIP (2001–2004):

I worked as research assistant at the Archaeological Research Institute of Arizona State University. During these three academic years, I worked on projects that involved: preparing the database for the pollen records of Arizona, digitizing satellite images and preparing database for the museum inventory, and preparing the database for publications.

# **ACADEMIC GRANTS, FELLOWSHIPS, AND AWARDS:**

## **Professional:**

April 2014 – April 2016 New Perspectives in Archaeology: The Socio–ecological Agent–based Modeling of the Early Bronze Age I (3,000–2,750 BC) Arslantepe in Malatya (eastern Anatolia). The Scientific and Technological Research Council of Turkey (TÜBİTAK) Grant # 113K826

## **Post-Doctoral (2011–2012):**

- **2011–12** Postdoctoral Fellowship, Research Center for Anatolian Civilizations, Koç University, Istanbul–Turkey,
- 2010–11 The Center for Social Dynamics and Complexity and, School of Human Evolution and Social Change, Arizona State University, Tempe–AZ, 85287–2402, U.S.A

### **Pre-Doctoral (2000–2010):**

- **2008 & 2009** Dean's Advanced Scholar Fellowship, College of Liberal Arts and Sciences, ASU.
- **April 2007** 2007–2008 Samuel H. Kress Fellowship, American Center of Oriental Research (Amman–Jordan).

2003 through 2005 Award of GCAT (Graduate College Assistantships) by the Graduate

College, Arizona State University.

**2000 through 2002** Graduate Academic Scholarship, Arizona State University.

**2000 through 2002** Wenner–Gren Foundation for Anthropological Research;

Developing Countries Training Fellowship, New York.

#### **COMPUTER LITERACY:**

<b>Operating Systems:</b>	Database:	Statistics:
Mac OS X, UNIX	FileMaker, OpenOffice	Systat, JMP, R
Office: MS Office	Geographical Information Systems: GRASS GIS, Quantum GIS	Modeling:
		NetLogo, Macrophysical
		Climate Modeling, MML
		(agent-based)

## FIELDWORK EXPERIENCE

**Survey Projects:** 

**December 2012** Geophysical Survey of the Old Prison Complex in Sinop in

northern Turkey.

October 2007 Director, archaeological site survey in the Wadi el–Hasa, Jordan.

**June 1998** Surveyor, Çataltepe (Elmalı–Antalya) Survey, conducted as a part

of the Choma Archaeological Expeditions, (Hacımusalar), Elmalı –

Antalya.

**September 1997** Surveyor in the Büyük Bedesten area, Survey project at the

Anastasian Walls (Byzantine) (Long Walls), Thrace, Turkey (Co-Directors Prof. James Crow of Newcastle Upon Tyne and Dott. Alessandra Ricci of Bilkent University, Ankara and University of

Rome, Italy).

**September 1996** Surveyor at the Anastasian Walls (Byzantine)

(Long Walls), Thrace, Turkey (Co-Directors Prof. James Crow of

Newcastle Upon Tyne and Dott. Alessandra Ricci of Bilkent

University, Ankara and University of Rome, Italy).

## **Excavations:**

2010 Bursa Archaeological Excavations and Cultural Heritage

Management Project (Director: Asst. Prof. Suna Çağaptay, Bahçeşehir

University Faculty of Architecture and Design, Istanbul-Turkey),

1994–2002 Trench and Area Supervisor, Choma (multi period mound),

(Hacımusalar), Elmalı – Antalya (Director: Assoc. Prof. İlknur Özgen,

Bilkent University, Ankara).

### Other Professional and Research Activities:

February 3-7, 2014 Open Source GIS Workshop. Co-organized and led this workshop

with the Institute of Informatics for a group of twenty—five graduate students and academicians from various fields of social and natural sciences, which was hosted at the National Center for High Performance Computing at Istanbul Technical University.

**September 2013**– Arslantepe (Malatya) Early Bronze Age paleoclimate and agent–

based land use modeling project

**September 2013** – Coordinator of the Middle and Late Bronze Age Volumes of

Turkey's Archaeological Settlements (Türkiye'nin Arkeolojik

Yerleşmeleri – TAY)

August 2013– Aşıklıhöyük (Aksaray) the pre–pottery Neolithic

paleoclimate and stochastic land use modeling Project,

**April 4–6, 2012** *GRASS GIS Workshop.* Organized and led this bilingual (Turkish

and English) workshop for a group of thirty academicians from various fields of social sciences, which was hosted at the National Center for High Performance Computing at Istanbul Technical

University.

### RESEARCH PROJECTS PARTICIPATED IN ADVISORY ROLE:

December 2012 – Adaptation des économies méditerranéennes du passé aux

*changements hydroclimatiques* (Adaptation of the Mediterranean economies of the past to hydroclimatic changes) Project under Centre Européen de Recherche et d'Enseignement des Géosciences de l'Environnement (European Centre for Research and Teaching of Environmental Geosciences), Aix Marseille University, France.

June 2013 – Principal Investigator, *Understanding the Past, Recognizing the* 

Present, Shaping the Future: The Computational Modeling of

Socio-economic Behaviors and Decision-making Processes

Among the Nomadic Transhumant Pastoralists in Eastern Turkey, in collaboration with the Department of Economics, Hamilton College–NY, U.S.A.

## May 2013 – The Euphrates Project under the Digital

Humanities Initiative at the Hamilton College (NY–U.S.A.), led by Prof. Erol Balkan (Department of Economics), focusing on the history and the future of water–civilization relationships in the Middle East.

#### **PUBLISHED PAPERS:**

"Macrophysical Climate Modeling, Economy, and Social Organization in Early Bronze Age Anatolia."

**Journal of Archaeological Science** 43 (C): 38–54. [DOI: 10.1016/j.jas.2013.12.008] (peer–reviewed, printed)

"Don't Abhor Your Neighbor for He is a Pastoralist:

The GIS-based Modeling of the Past Human-Environment Interactions and Landscape Changes in the Wadi el-Hasa, west-central Jordan."

**Journal of Archaeological Science** 39 (9): 2906–2920. (peer–reviewed, printed)

"Cooperation and Competition: The Comparative Assessment of Tribal Dynamics in the Marginal Landscapes of the Wadi el-Hasa, in west-central Jordan in the Early Bronze and Iron ages."

(http://www.archaeologicaltraces.org/OJS/index.php/traces\_in\_time/article/view/4/22) **Archaeological Traces** (peer–reviewed, on–line)

## **FORTHCOMING PAPERS:**

"The Application of the Macrophysical Climate Model and GIS-based Spatial Interpolation of Precipitation and Temperature Data Between Late Chalcolithic and the Late Bronze Age (ca. 6,000–3,200 BP) in Eastern and Southeastern Anatolia."

American Antiquity (under review)

#### PAPERS PRESENTED AT PROFESSIONAL MEETINGS:

May 11, 2012

"Remaining Afloat in Times of Crisis: Similarities and Disparities Between the Northern Mesopotamian and the Southern Levantine Tribal Societies' Adaptations to Changing Climate in the Context of Fluid Social Organization." Presented at the Fellows' Symposium titled Geographical Boundaries and Cultural Frontiers: Fixed or Fluid Social Identities (Commentator: Prof. K. Aslihan Yener, Department of Archaeology, Koç University) Research Center for Anatolian Civilizations, Koç University, Istanbul, Turkey.

**April 25, 2009** 

"A New Approach In Site Mapping: GRASS GIS and Vector Re-Positioning." Presented at the Society for American Archaeology, 74<sup>th</sup> Annual Meeting, Atlanta– GA, U.S.A.

#### **PUBLIC LECTURES:**

**November 20, 2013** 

"Making the Past Come to Life: The Methods of Computational Modeling in Archaeology." Presented at the American Research Institute in Turkey, Ankara.

October 21, 2013

"The Best of Both Worlds: The Methods of Computational Modeling in Archaeology." Presented at the American Research Institute in Turkey, Istanbul.

May 24, 2012

"Bilinmeyen Tunç Çağını CBS Bilebilir mi? Arkeolojide CBS Uygulamaları & Çevresel Değişimlerin CBS Ortamında Modellenmesi." (Can GIS Reveal the Unknowns of the Bronze Age? GIS Applications in Archaeology & GIS-based Modeling of Environmental Changes) Presented in Turkish, at the Department of Prehistory, Istanbul University, Istanbul, Turkey.

May 17, 2012

"Environmental Changes in the Northern Mesopotamia and the Southern Levant During the Bronze Age (ca. 5,500–3,200 BP). Approaches in Dynamic Modeling of Human–Environment Interactions Using GRASS GIS." Presented at the Eurasia Institute of Earth Sciences, Istanbul Technical University, Istanbul, Turkey.

November 14, 2011

"Technology's Gift to Archaeology: Spatial Analysis and Computer-based Modeling in Geographical Information Systems."

Presented at the American Research Institute in Turkey, Istanbul.

October 12, 2011

"Bronze Age Environmental and Social Dynamics in the Upper Euphrates and Tigris Basins." Presented at the Research Center for Anatolian Civilizations, Koç University, Istanbul, Turkey.

**November 28, 2007** 

"The Settlement Patterns of the Wadi el-Hasa in the Bronze and Iron Ages. A Case of Adaptation Through Fluid Socio-political and Economic Organization." Presented at the American Center of Oriental Research, Amman (Jordan).

#### **REFERENCES:**

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