

SLOVENSKA AKADEMIJA ZNANOSTI IN UMETNOSTI



# A KOT AMERIKA A AS AMERICA



LJUBLJANA  
2020

# A KOT AMERIKA *A AS AMERICA*

Sodelovanje članov SAZU  
z znanstvenimi in umetniškimi ustanovami v ZDA

*Cooperation of SASA Members with US Arts and  
Sciences Institutions*



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ki so poklicno ali študijsko sodelovali z ustanovami v ZDA

*Proceedings containing selected texts by members  
of the Slovenian Academy of Sciences and Arts  
about their professional and study experiences with US institutions*

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# **A KOT AMERIKA**



*V okviru sodelovanja med Nacionalno akademijo znanosti ZDA (National Academy of Sciences) in Svetom akademij znanosti in umetnosti Jugoslavije je leta 1974 obiskalo Slovenijo enajst znanstvenikov, štirje pa so obiskali Združene države Amerike. Med temi štirimi srečneži sem bil tudi sam, čeprav sem bil takrat šele na začetku svoje raziskovalne poti. Moj mentor akademik Lojze Vodovnik se je skozi vso svojo znanstveno kariero navduševal nad modeliranjem živčno-mišičnega sistema. Na laboratorijskih sestankih nas je večkrat spodbujal, da se lotimo kompleksnega modela gleženjskega sklepa z agonistično in antagonistično mišično skupino. Računalniške simulacije modela sem se lotil poleg svoje prednostne raziskovalne naloge zgraditi sistem za računalniško merjenje hoje. Profesor Vodovnik me je nagradil tako, da mi je omogočil poročanje o modelu na ameriški konferenci s področja biomedicinske tehnike, ki je tisto leto potekala v Filadelfiji. Dodatna finančna podpora s strani Nacionalne akademije znanosti ZDA pa mi je omogočila še obisk vrhunskih ameriških laboratorijev s področja rehabilitacijske tehnike v Columbusu, Los Angelesu, San Franciscu in New Yorku. Na Ohio State University, kjer me je sprejel profesor Robert Mc Ghee, sem imel tudi svoje prvo vabljenno predavanje o računalniškem merjenju hoje. Težko je danes opisati, kakšen pomen je imel ta obisk Združenih držav za nadaljnje delo tedaj petindvajsetletnega raziskovalca. Še vedno skrbno hranim vabilno pismo Nacionalne akademije znanosti ZDA (National Academy of Sciences, National Research Council, Commission of International Relations), ki ga je 1. oktobra 1974 podpisal Charles P. Trumbull, Section on USSR & Eastern Europe, ki se začne z naslednjim prijaznim stavkom: »The National Academy of Sciences welcomes you to the United States!«<sup>1</sup> in nadaljuje s še prijaznejšim stavkom: »It is clear that you will be a most welcome guest.«<sup>2</sup> Nacionalna akademija znanosti mi je zares pripravila odličen načrt potovanja, v hotelu v Filadelfiji so me čakale letalske vozovnice, v vseh*

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<sup>1</sup> »Nacionalna akademija znanosti vam izreka dobrodošlico v Združenih državah!«

<sup>2</sup> »Seveda boste nadvse dobrodošel gost.«

mestih, ki sem jih obiskal, so bili rezervirani hoteli in prejel sem še per diem za prehranjevanje.

Profesor Lojze Vodovnik s strani Sveta akademij znanosti in umetnosti Jugoslavije in profesor Robert Mc Ghee v imenu Nacionalne akademije znanosti sta leta 1982 organizirala srečanje Gibanje pri človeku in stroju (Movement in Man and Machine). Potekalo je med 24. in 28. majem v Portorožu. Dogodek, ki so se ga udeležili najuglednejši ameriški in jugoslovanski robotiki in biokibernetiki, je pomembno vplival na nadaljnji razvoj slovenske robotike. Posebej pomembno je bilo predavanje enega izmed najbolj uglednih robotikov, profesorja Richarda Paula. Profesor Paul je leta 1981 z izdajo svojega odličnega učbenika vplival na poučevanje robotike po vsem svetu. Pomemben vpliv je imel tudi na poučevanje na Univerzi v Ljubljani. Prvi slovenski robotski učbenik je izšel že leta 1985. Danes se Slovenci lahko pohvalimo z vrsto robotskih učbenikov v slovenščini in angleščini. Angleški so izšli pri ugledni mednarodni založbi Springer. Imenitno je bilo tudi predavanje enako uglednega ameriškega robotika profesorja Bernarda Rotha. Profesor Roth se je kasneje še večkrat vrnil v Slovenijo. Razlog za njegove obiske je bilo prijateljstvo s profesorjem Jadranom Lenarčičem, ki je pobudnik in voditelj serije simpozijev ARK – Advances in Robot Kinematics, ki so osrednji znanstveni dogodek s tega področja v svetu. Tedanji predsednik Slovenske akademije znanosti in umetnosti profesor Janez Milčinski je srečanje Movement in Man and Machine pospremil z naslednjimi besedami: »Ko bom naslednjič obiskal judovsko pokopališče v Pragi, bom položil kamenček na grob rabina Löweja, ki je ustvaril humanoida Golema. Tedaj bom mislil na ameriške in jugoslovanske znanstvenike in jim zaželel, da bi njihovo znanstveno delo vselej koristilo sreči človeka in človeštva.«

Skoraj vse članice in člani Slovenske akademije znanosti in umetnosti so kdaj v svoji karieri sodelovali z ameriškimi znanstveniki ali umetniki. Nekateri so tam študirali, drugi so bili prejemniki katere izmed ameriških štipendij, nekateri so za krajši ali daljši čas raziskovali na ameriških

*univerzah ali inštitutih. Njihove pripovedi smo zbrali v pričujoči knjigi, katere cilj je ponovno oživiti sodelovanje med Nacionalno akademijo znanosti ZDA in Slovensko akademijo znanosti in umetnosti.*

*Tadej Bajd,  
predsednik Slovenske akademije znanosti in umetnosti*

## TADEJ BAJD

### *Merjenje spastičnosti z nihajnim testom*

V letu 1980 sem raziskoval na Oddelku za ortopedijo Medicinske fakultete na Univerzi v Južni Kaliforniji (University of Southern California) v Los Angelesu. Moje raziskovalno delo je potekalo na področju rehabilitacijskega inženiringa pod mentorstvom profesorjev Jamesa Reswicka in Georga Bekeya. Slednji je, tako kot jaz, pozneje prešel na področje robotike. Večino časa sem prebil v rehabilitacijskem centru Rancho Los Amigos v Downeyu, ki je bil tedaj največja rehabilitacijska ustanova v ZDA. Moje podoktorsko raziskovalno delo je financiral National Institute of Handicapped Research, Department of Education, Washington, D.C. Ta agencija je financirala tudi Rehabilitacijski inženirski center v Ljubljani.

V ZDA sem želel nadaljevati svoje raziskovalno delo na področju funkcionalne električne stimulacije (FES). FES je rehabilitacijska metoda, kjer električni impulzi, privedeni do perifernih živcev ekstremitet, vzbudijo akcijske potenciale, ki povzročijo krčenje mišic in tako gibe ohromelih ekstremitet. V tistem času so v bolnici Rancho uporabljali FES pri bolnikih po možganski kapi. V Ljubljani pa smo začeli z uporabo FES omogočati preprost vzorec hoje pri paraplegičnih osebah. Zdravniki in fizioterapevti na Ranchu so bili mnjenja, da FES lahko poveča spastičnost pri bolnikih s spinalno poškodbo. Tako je postal cilj mojega raziskovalnega dela pokazati vpliv FES na spastičnost ohromelih mišic.

Spastičnost je gibalna okvara, za katero je značilno povečanje toničnega refleksa na nateg, ki je odvisno od hitrosti giba. V kliničnem okolju je spastičnost opisana kot upor, ki ga čuti terapevt ob ročno vsiljenem pasivnem gibu. Kot inženir sem želel stopnjo spastičnosti objektivno meriti in se nisem zadovoljil z zgolj subjektivnim ocenjevanjem, ki je značilno za klinično okolje. Zato sem dopolnil Wartenbergov nihajni test, s tem da sem dodal merjenje kota v kolenu s paralelogramskim

goniometrom. Spastičnost v ekstenzorjih kolena smo merili, medtem ko je bolnik na hrbtu ležal na mizi za testiranje. Obe nogi sta bili upognjeni v kolenskem sklepu na robu mize in sta prosto viseli. Terapevt je prijel eno nogo za gleženj in jo dvignil v horizontalni položaj. Potem je nogo izpustil, da je prosto zanihala. Ob tem smo merili kot v kolenu (goniogram) in elektromiografski signal (EMG) ekstenzorjev kolena (slika 1). Pri zdravi poskusni osebi noga niha okrog mirovnega položaja in pri sproščeni osebi ne izmerimo nobenega EMG-signala. Pri bolniku z majhno stopnjo spastičnosti se pojavi nepravilnost le v prvem nihaju noge. Pred njo pa nastopi nizka EMG-aktivnost. Pri zmerni spastičnosti kolenski goniogram ne doseže mirovnega položaja, EMG-signal pa se pojavi pri vsakem negativnem nagibu kolenskega goniograma. V primeru močne spastičnosti je v kolenskem sklepu še manj oscilacij, medtem ko je EMG-aktivnost prisotna skozi ves merilni čas. Pri ekstremni spastičnosti se noga sploh ne premakne iz začetne horizontalne lege [1].



1. Fizioterapevtka dr. Patricia Winchester izvaja nihajni test pri bolniku po spinalni poškodbi. / Fig. 1: Physiotherapist Dr. Patricia Winchester while performing the pendulum test in a spinal cord injured subject.



Mojemu obisku bolnice Rancho Los Amigos Hospital je sledil obisk profesorja Lojzeta Vodovnika, ki je bil tedaj že član Slovenske akademije znanosti in umetnosti. V ZDA je prišel predvsem zato, ker je potreboval »znanstveno osvežitev«, potem ko je bil dekan Fakultete za elektrotehniko na Univerzi v Ljubljani. Profesor Vodovnik je nadaljeval z raziskovanjem spastičnosti ob uporabi merjenja z nihajnim testom. Predlagal je kombinirani biomehanski in nevrofiziološki model, ki naj bi omogočil kvalitativno diskusijo fenomenov spastičnosti, opaženih med nihajnim testom [2]. Obema pa je tudi uspelo pokazati, da FES ne povečuje spastičnosti pri osebah po spinalni poškodbi. Dokazala sva celo, da je mogoče z električno stimulacijo dermatoma, ki pripada istemu nivoju hrbtenjače, iz katerega je oživčena spastična mišica, učinkovito znižati stopnjo spastičnosti. Vpliv FES na spastičnost pri bolnikih po spinalni poškodbi in po kapi je opisan v več najinih člankih.

S profesorjem Vodovnikom sva nazadnje napisala še članek, da bi preprosto in poceni instrumentacijo, ki je potrebna za merjenje spastičnosti z nihajnim testom, približala kliničnemu okolju [3]. V časovnem poteku kolenskega kota in hitrosti sva izbrala osem parametrov, za katere sva menila, da so zanimivi za kvantitativno ocenjevanje spastičnosti. Z rigorozno statistično analizo sva potem določila tiste parametre, ki so statistično pomembni. Zgodilo se je, da je ta članek moj največkrat citirani članek. Že leta 2002 so Le Cavorzin et al. opazili, da je »nihajni test v mednarodni literaturi najbolje dokumentirana metoda za merjenje spastičnosti« [4]. Še več citatov pa se je pojavilo v zadnjih letih, torej kar trideset let po objavi članka [3].

V sklepnem delu še kratko pogledjmo vsebino člankov, ki citirajo naš članek. Razdelimo jih lahko v pet skupin:

- uporaba nihajnega testa pri različnih etiologijah,
- novi senzorji za merjenje z nihajnim testom,
- izpopolnjeno modeliranje spastičnosti, izmerjene z nihajnim testom,
- evalvacija različnih terapevtskih pristopov za zmanjšanje spastičnosti,

- uporaba nihajnega testa pri zgornjih ekstremitetah.

Nihajni test spastičnosti je bil, poleg bolnikov po spinalni poškodbi ali kapi, uporabljen še pri bolnikih po cerebralni paralizi, Parkinsonovi bolezni, multipli sklerozi, možganskih poškodbah in revmatoidnem artritisu. Uporabili so ga celo pri raziskavah na kadavru. Preproste elektrogoniometre so zamenjali z optičnimi, inercialskimi (akcelerometri in žiroskopi) in ultrazvočnimi senzorji. Preverjali so tudi variabilnost in zanesljivost nihajnega testa. Naš biomehanski in nevrofiziološki model je bil dopolnjen z nelinearnim in časovno spremenljivim modeliranjem. Predlagan je bil model, osnovan na ravnotežni točki in neodvisni analizi komponent. Preučevali so učinke fizikalnih terapij (Bobathova gimnastika, terapija za mišično moč, vibracija vsega telesa), kirurških posegov (dorzalna rizotomija) in farmakoloških pristopov (terapija z baklofenom, tizanidinom, tetrazepamom, botulin toksinom in nabilonom). Nihajni test so uporabili tudi pri zgornjih ekstremitetah, s tem da so merili gibanje v komolcu.

Na mojem podoktorskem izpopolnjevanju me je spremljala soproga dr. Barbara Bajd. Sicer biologinja je med našim bivanjem v Kaliforniji poslušala predavanja na slavnem Gledališkem in filmskem inštitutu Leeja Strasberga v Hollywoodu. Večino časa pa je prebila z najinim dveletnim sinom Blažem (slika 2, gl. str 123). Ob koncih tedna pa smo z našim starim avtomobilom, chevroletom vego, obiskali številne kraje od San Diega do San Francisca in nacionalne parke od parka Joshua Tree do parka Yosemite.

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4. Le Cavorzin P, Hernot X, Bartier O, Carrault G, Chagneau F, Gallien P, Alain H in Rochcongar P. 2002 Evaluation de la mesure de la spasticité par le pendulum test, *Annales de Réadaptation et de Médecine Physique*, 45: 510-516.

## BOJAN ČERČEK

### *Moje sodelovanje s slovenskimi znanstveniki/zdravniki:*

Član razreda za Medicinske vede pri Slovenski akademiji znanosti in umetnosti sem od leta 2016. Diplomiral sem iz medicine na Univerzi v Ljubljani leta 1974 in doktoriral na Univerzi Karolinska v Stockholmu leta 1996. Sem nosilec certifikatov Ameriškega odbora za internistično medicino (ABIM) za interno medicino, srčno-žilne bolezni, medicino kritične nege in srčno ehokardiografijo.

Sem direktor oddelka za intenzivno kardiologijo na Cedars-Sinai Medical Center, redni profesor na oddelku za medicino na David Geffen School of Medicine na Univerzi v Kaliforniji v Los Angelesu (UCLA) in v bolnišnici Cedars-Sinai.

Moje sodelovanje s slovenskimi znanstveniki/zdravniki:

#### **A) Sodelovanje na strokovnih sestankih, vabljeni predavanja in občasni učni obiski na Kliničnem centru v Ljubljani:**

Izbor:

- 1) Sindrom reperfuzije. Univerza v Ljubljani, Ljubljana, Slovenija, 1987.
- 2) Rutinska obravnava AMI. Združenje kardiologov Slovenije, Radenci, Slovenija, 1994.
- 3) Predbolnišnična obravnava akutnega miokardnega infarkta. Tretji mednarodni simpozij medicine za intenzivno nego. Bled, Slovenija, 1994.
- 4) Reperfuzija pacientov s kardiogenim šokom. Tretji mednarodni simpozij medicine za intenzivno nego. Bled, Slovenija, 1994.

- 5) Vloga troponinov pri obravnavi akutnih koronarnih sindromov. 6. Mednarodni simpozij medicine za intenzivno nego. Bled, Slovenija, 1998.
- 6) Koronarni bypass pri akutnem mikrokardnem infarktu. 6. Mednarodni simpozij medicine za intenzivno nego. Bled, Slovenija, 1998.
- 7) Akutne rupture septalnih in papilarnih mišic pri akutnem mikrokardnem infarktu. 6. Mednarodni simpozij medicine za intenzivno nego. Bled, Slovenija, 1998.
- 8) Patofiziologija nestabilnega plaka. Akutni koronarni sindrom v Sloveniji. Simpozij. Bled, Slovenija, 2001.
- 9) Terapevtske možnosti pri povišanem ST pri MI. Akutni koronarni sindrom v Sloveniji. Simpozij. Bled, Slovenija, 2002.
- 10) Zdravljenje akutnega koronarnega sindroma z antibiotiki. Akutni koronarni sindrom v Sloveniji. Simpozij. Bled, Slovenija, 2002.
- 11) Novosti v zdravljenju ateroskleroze. Mednarodna zdravstvena konferenca, Radenci, Slovenija, 2002.
- 12) Srčne bolezni, predstavitev primerov in razprave. Gostujoči profesor, Medicinska fakulteta Univerze v Ljubljani, Slovenija, 2008.

## **B) Doktorski študenti z Univerze v Ljubljani:**

Dr. Konia in dr. Čerček sta uspešno zagovarjala svoje doktorske disertacije; dr. Mihailović je trenutno moj doktorski študent.

Dr. **Mojca Remškar Konia**, dr. med., MACM, je bila sodelavka v laboratoriju Centra za raziskovanje ateroskleroze bolnišnice Cedars-Sinai med letoma 2001 in 2002, v času doktorskega študija, s pomočjo Javne agencije za raziskovalno dejavnost Republike Slovenije. Dodiplomski študij medicine je končala na Univerzi v Ljubljani leta 1996. Doktorirala je leta 2002.

Tema njenega doktorata je bila zadebelitev arterijske stene po poškodbi. V procesu jo je zanimal učinek signalizacije CD40. Izsledki so objavljeni v *Circulation Research* (88: 390-4, 2001).

Po dokončanem obdobju dela rezidenčne zdravnice internistične medicine in končanem doktorskem študiju dr. Konia nadaljuje delo v ZDA. Leta 2002 je bila kirurška pripravnica v bolnišnici Jackson Memorial Medical Center na Univerzi v Miamiju in rezidentka anesteziologije v bolnišnici Davis Medical Center Univerze v Kaliforniji. Pozneje se je pridružila ekipi omenjene bolnišnice na oddelku za anesteziologijo in opravila specializacijo iz anesteziologije v letih 2006 in 2007. Leta 2008 se je zaposlila na Univerzi v Minnesoti, kjer trenutno deluje kot izredna profesorica za anesteziologijo in namestnica vodje za izobraževanje na Oddelku za anesteziologijo. Aktivno je vključena v klinično delo in zdravstveno izpopolnjevanje na oddelku. V obdobju, ki ga je preživela na Univerzi v Kaliforniji v Davisu in na Univerzi v Minnesoti, je prejela številne nagrade za pedagoško delo. Objavljala je na področju kliničnega dela v anesteziologiji in zdravstvenem izobraževanju. Do danes ima 28 strokovno pregledanih objav.

Dr. **Miha Čerček**, dr. med., se mi je v laboratoriju Centra za aterosklerozo v Cedars-Sinai (2004–2005) pridružil med doktorskim študijem na Univerzi v Ljubljani s podporo Javne agencije za raziskovalno dejavnost Republike Slovenije.

Raziskoval je avtokrino vlogo interleukina 15 na intimalno zadebelitev po poškodbi arterijske stene. Rezultati raziskave so objavljeni v *Biochem Biophys Res Commun* (13, 618-22, 2006).

Dr. Čerček je opravil pripravništvo interne medicine in kardiologije v Univerzitetnem kliničnem centru Univerze v Ljubljani. Trenutno je vodja Kliničnega oddelka za kardiologijo, UKC Ljubljana, ukvarja se tudi z ambulantnim spremljanjem pacientov na oddelku in deluje kot interventni kardiolog. Do danes ima šest strokovno pregledanih objav.

**Peter Mihailović**, dr. med., se mi je v laboratoriju Centra za aterosklerozo v Cedars-Sinai pridružil v času doktorskega študija na Univerzi

v Ljubljani (2016) s pomočjo sredstev iz sklada Foonberg Chair in Oddelka za intenzivno kardiološko nego bolnišnice Cedars Sinai.

V prehodni raziskavi preučuje imune mehanizme ateroskleroze in učinke avtoimunosti na lasten antigen hCAP. Mehanistična študija transgenih miši z eksperimentalnim akutnim mikrokardnim infarktom se osredotoča na CD 8 T celice, pri ljudeh pa preučuje paciente z akutnim koronarnim sindromom. Rezultate je predstavil na dveh strokovnih raziskovalnih srečanjih, *American Heart Association and Vascular Biology (AHA Scientific Sessions 2016* v New Orleansu, *NAVBO 2016* v Bostonu).

Dr. Mihailović želi kariero nadaljevati v Sloveniji. Po končanem raziskovalnem delu na Cedars bo opravljal specializacijo iz kardiologije v UKC Ljubljana. Njegov poklicni cilj je postati akademski raziskovalec za oskrbo pacientov z akutnimi srčnimi stanji in interventni kardiolog. Načrt znanstvenega sodelovanja na področju avtoimunosti pri boleznih koronarnih arterij po njegovi vrnitvi v Slovenijo je že sestavljen.

### **C) Postdoktorski raziskovalci:**

Prof. dr. **Marko Noč** je leto dni preživel kot postdoktorski raziskovalec na Centru za intervencijsko kardiologijo in intenzivno kardiologijo bolnišnice Cedars Sinai. Med njegovim obiskom sem mu bil vodja in mentor pri delu s pacienti z akutnimi srčnimi boleznimi na Oddelku za intenzivno kardiološko nego. Za mentorja v kardiovaskularnem intervencijskem centru je imel enega izmed njegovih direktorjev, Francka Litvacka, dr. med.

Njegovo bivanje v ZDA je omogočil program za Fulbrightove znanstvenike v letih 1999–2000. Med delovanjem v bolnišnici Cedars-Sinai je Marko intenzivno sodeloval na Oddelku za intenzivno kardiološko nego in opravljal vse diagnostične in terapevtske koronarne posege. S pridobljenimi veščinami in poglobljenim poznavanjem zdravljenja akutnega koronarnega sindroma je v Sloveniji vzpostavil vsedržavni sistem oskrbe bolnikov z akutnim miokardnim infarktom z elevacijo veznice. Sistem je bil ocenjen kot eden najboljših v Evropi in reši življenje več

kot 50 bolnikom na leto v primerjavi s prejšnjim sistemom nujnega transferja pacientov v klinične centre, usposobljene za opravljanje invazivnih kardioloških posegov po Sloveniji.

Trenutno deluje kot vodja Centra za intenzivno interno medicino UKC Ljubljana in profesor na Medicinski fakulteti Univerze v Ljubljani.

Dr. Noč nadaljuje z raziskavami akutnih koronarnih posegov pri pacientih, ki so doživeli zastoj srca zunaj bolnišnice. Je eden izmed treh najboljših strokovnjakov in raziskovalcev vloge akutne koronarne angiografije pri pacientih, ki so preživeli akutni zastoj srca. Je iskan predavatelj in član delovne skupine European Working Group. Je avtor številnih prispevkov in navodil za organizacijo European Heart Society. Dr. Noč je član medicinskega razreda Evropske akademije znanosti in umetnosti od leta 2012 in član Izvršnega odbora društva Stent for Life, ESC/EAPCI. Je sopredsedujoči v organizaciji EASPCI National Cardiac Societies & International Affairs Committee. Leta 2017 je bil dr. Noč izvoljen za izrednega člana Slovenske akademije znanosti in umetnosti. Je avtor 103 strokovno pregledanih publikacij.

#### **D) Gostujoči profesor:**

Prof. **Igor Kranjec**, dr. med., poučuje na Medicinski fakulteti Univerze v Ljubljani in je vodja Oddelka za intenzivno kardiologijo UKC Ljubljana. Leta 2001 je bil na trimesečnem obisku na Oddelku za kardiologijo bolnišnice Cedars Sinai s pomočjo programa za Fulbrightove znanstvenike.

Opravil je primerjalno študijo zdravljenja bolnikov z akutnim koronarnim sindromom v svoji matični ustanovi in v bolnišnici Cedars Sinai Medical Center, kjer je rezultate v Grand Rounds tudi predstavil.

Po vrnitvi je pod okriljem Evropskega kardiološkega društva (European Society of Cardiology; Euroheart Survey, ACS Snapshot Registry 2005 do 2009) sodeloval v številnih raziskavah na področju srčnih obolenj.



## IGOR GRABEC

### ***Sodelovanja med Fakulteto za strojništvo Univerze v Ljubljani in Cornell University, Ithaca, NY, ZDA***

V Laboratoriju za sinergetiko Fakultete za strojništvo Univerze v Ljubljani smo začeli v obdobju 1970–1980 raziskovati pojav akustične emisije (AE) pri deformacijah materialov in možnosti izkoriščanja tega pojava pri testiranju tehniških konstrukcij ter industrijskih procesov. Ko sem leta 1979 predstavil rezultate našega dela na Mednarodni konferenci o AE v Anaheimu v Kaliforniji, me je profesor Wolfgang Sachse z Oddelka za teoretično in uporabno mehaniko na Univerzi Cornell povabil na ogled svojega laboratorija, kjer so opravljali podobne raziskave AE in drugih ultrazvočnih pojavov. Tedaj smo pripravili plan sodelovanja, v skladu s katerim sem leta 1988 prebil pri njih tri mesece. Med tem obiskom smo začeli razvijati sistem s strukturo nevronske mreže za procesiranje AE-signalov. S tem smo odprli novo področje v okviru raziskav AE in razvoja inštrumentov za ta namen, kar nam je v naslednjem desetletju omogočilo zelo intenzivno publiciranje naših raziskovalnih dosežkov v vodilni znanstveni in tehniški literaturi s tega področja [1–13]. Hkrati s tem smo rezultate našega dela tudi neposredno predstavili strokovni javnosti v seriji referatov na mednarodnih konferencah [14–33]. Izvirno delo na novo odprtem področju nam je omogočilo tudi pripravo patenta in inovacije [34, 35]. Na osnovi uspešnega sodelovanja me je Univerza Cornell leta 1994 izvolila v naziv »Adjunct Professor of Theoretical and Applied Mechanics«. V času sodelovanja s tujimi znanstvenimi ustanovami je bilo naše delo z Univerzo Cornell najuspešnejše.

Na pobudo urednika Springer Series in Synergetics smo nato v obdobju od 1993 do 1997 napisali za to serijo knjigo *Synergetics of Measurement, Prediction and Control*, ki predstavlja precej izčrpen pregled

rezultatov našega skupnega dela [36]. Po izdaji knjige se je naše sodelovanje zaradi finančnih težav omejilo predvsem na intenzivno izmenjavo znanstvenih informacij.

Ob izvajanju skupnih raziskav in pripravi publikacij smo opravili vrsto medsebojnih obiskov, v katero smo vključili tudi obiske naših diplomantov in mladih raziskovalcev. Na Univerzi Cornell je dr. Edvard Govekar prebil tri mesece podoktorskega izpopolnjevanja, Rok Šribar pa je tam opravil doktorski študij. Poleg tega je Samo Božič opravil magisterij in doktorat na Polytechnic Institute of New York University, dr. Kornelija Zgonc pa je opravila podoktorsko izpopolnjevanje na več znanstvenih ustanovah v ZDA.

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V laboratoriju profesorja Sachseja na Univerzi Cornell je tudi slovenska zastava /  
*The Slovenian flag is a permanent fixture at Professor Sachse's laboratory at Cornell.*

## MARC L. GREENBERG

### *Slovenistika prek luže*

#### *Prekoatlantski pogled*

Moje rojstno mesto Los Angeles šteje približno petkrat toliko prebivalcev kot Slovenija. Iz Hollywooda, kjer sem se rodil leta 1961, se je moja družina dve leti pozneje preselila najprej v homogeno »belo« sososko srednjega razreda Whittier, ob rojstvu mojega brata Phillipa, leta 1968, pa v zahodni Los Angeles, ki je bil veliko bolj mednarodni: vrstniki iz soseščine so bili Nisei (prva v ZDA rojena generacija Japoncev) in njihovi starši so se še živo spominjali trpljenja iz časa internacije v ameriških taboriščih in ga podoživljali; tu so bili tisti, ki so preživel holokavst na Poljskem, v Nemčiji in Estoniji; le kratek sprehod smo bili oddaljeni od kulturološko polne mehiško-ameriške sososke, tako sem imel več kot dovolj priložnosti, da sem se seznanil z ameriškim talilnim loncem: v moji ulici je stanoval poročen par, mož Kitajec, žena Švedinja, sporazumevala pa sta se v nemščini. Sosedje levo in desno od nas so bili rojeni na Japonskem, razen gospoda, ki se je med drugo svetovno vojno rodil v vojnem preselitvenem centru v Arkansasu. Oče je imel trgovino s pohištvom v delu Los Angelesa, ki je videl že boljše dni, in v njej sem preživel precej časa v dolgih pogovorih z enim njegovih dobaviteljev, nemško-rusko govorečim priseljencem iz Nemčije, ki je preživel vojno kot tolmač in novinar in mi pripovedoval zgodbe o srečanjih z oficirji in političnimi funkcionarji z obeh sprtih strani.

Biti Kalifornijec lahko pomeni mnogo stvari, po ustaljenem prepričanju pa življenje v zgodovinski, monokulturni, v prihodnost usmerjeni materialistični kulturi domišljavosti in zagledanosti vase. Vendar so na voljo neskončni viri za alternativno oblikovanje novega jaza. Moje preoblikovanje je bila moja radovednost. Materinščina mojih starih star-

šev, nekaj jih je dočakalo moja odrasla leta, je bil jidiš, a po potrebi so hitro spregovorili v jeziku rojstne države: v ruščini, ukrajinščini, romunščini in madžarščini. To je bila generacija, ki je emigrirala med letom 1890 in prvimi leti 20. stoletja. Sprejeli so talilni lonec v dobro svojih otrok, ki so jim zaupali le malo podrobnosti o svojih koreninah, tudi o svojem maternem jeziku. Jidiš je postal jezik »skrivnosti« in zakladnica ljubkovalnih izrazov. To je v meni zbudilo radovednost in nenehno sem jih, sicer brez haska, prosil, naj mi povedo več o življenju v stari domovini. Postregli so mi z majhnimi, a slikovitimi zgodbicami, kakršna je na primer ta, ki mi jo je zaupala moja v Bukarešti rojena prababica o tem, kako je videla kralja Karla II., ko se je mimo peljal v kočiji. Večino spominov pa so odnesli s seboj v grob. V najstniških letih sem zanimanje razširil malo dlje po svetu. Brez sredstev za potovanja sem zbiral znamke in obsedeno bral o ameriški zgodovini in literaturo o daljnih deželah; očaran s posnetki klasične kitare Andréa Segovie sem se naučil igrati kitaro in njeno sorodnico, lutnjo, da sem si lahko privoščil glasbena potovanja v Anglijo 16. stoletja, Italijo in Nemčijo 18. stoletja ter Španijo 19. stoletja. Srečanja z izseljenci so mi razširila obzorja in dala moč za učenje jezikov in sam sem se naučil nemško in rusko. S prijateljem iz soseščine sva iskala kratkovalovne frekvence radijskih postaj iz Albanije, Kitajske, Sovjetske zveze, Vatikana itn.

Na UCLA sem se vpisal leta 1979 in tedaj mi je, kot pravi slovenski pregovor, padla sekira v med. Vpisal sem se na tečaje ruščine in odkril, da ima UCLA izreden študijski program slovanskih jezikov, s poudarkom hkrati na književnosti in jezikoslovju. Zagnano sem se učil ruščine, češčine in srbohrvaščine, vzporedno pa še obiskoval predavanja o zgodovini in strukturi jezikov, poleg tega pa sem se preizkušal še v latinščini, grščini, sanskrtu, albanščini, madžarščini in finščini. Sredstva, ki so bila med hladno vojno na voljo študentom za študijska potovanja, so mi omogočila obisk univerz v Sovjetski zvezi, Jugoslaviji, na Češkem in Madžarskem. Leta 1982 sem se odpravil na prvi študijski obisk na državno univerzo v Leningradu. Pozno obdobje Brežnjeva je bila hkrati očarljiva in poučna

izkušnja, hkrati pa tudi deprimirajoča zaradi neprijetnosti, s katerimi so se dnevno soočali domačini. Naslednje poletje sem preživel Karlovi univerzi, kjer sem spoznal svojo bodočo ženo Marto. Njen materni jezik, slovenščina, me je pritegnila k spoznavanju še enega jezika in kulture. Za nekaj let je bil najin sporazumevalni jezik češčina, dokler ni najina komunikacija spontano prerasla v kombinacijo izmenjave misli v slovenščini in ameriški angleščini, ko jo deliva s svojima dvojezičnima otrokoma.

V drugi polovici osemdesetih let prejšnjega stoletja me je Jugoslavija pritegnila zaradi možnosti, da izkusim različne poglede na svet, jezike in kulture. Po dolgem in počez sem jo prepotoval s prijateljem, v Beogradu šolanim arheologom, in tudi z Marto (od Triglava do Gevgelije). Izkušnje z ljudmi in kraji so bili v prijetnem nasprotju s sovjetskim življenjskim pesimizmom, in tedaj sem vedel, da si želim biti stalno delovno povezan z Jugoslavijo. Med bivanjem v Jugoslaviji, ki mi ga je omogočila Fulbrightova štipendija (1988–90), sva se z Marto poročila in si ustvarila družino. Benjamin se je rodil v ljubljanskem Kliničnem centru le malo pred dogodki s konca leta 1989. Medtem ko se je v državi kahal konflikt, sva se morala pred mojim zagovorom disertacije leta 1990 odločiti, ali naj ostaneva ali odideva. Z majhnim otrokom in negotovo prihodnostjo glede Evrope sva odšla, sreča pa je hotela, da so me zaposlili kot rednega profesorja na Univerzi v Kansasu, na Oddelku za slovansko jezikoslovje, enem zadnjih te vrste.

V času doktorskega študija na UCLA sem imel čast sodelovati s pokojnim jugoslovanskim dialektologom profesorjem Pavlom Ivićem. Leta 1985 sem sodeloval na njegovih seminarjih o jugoslovanski dialektologiji in besednih prozodičnih sistemih zahodnih južnoslovanskih jezikov. Moje zanimanje za slovenščino mu je bilo znano, zato mi je predlagal, naj se lotim pisanja doktorata o prozodičnih možnostih slovenskih narečij po vzoru njegove metode za omenjeno v srbohrvaških narečjih. S podiplomsko raziskovalno štipendijo UCLA sem preživel poletje 1986 v arhivih Dialektološke sekcije ZRC SAZU in se posvetoval



s slovenskimi dialektologi in profesorjem Jožetom Toporiščem z Univerze v Ljubljani. Plod tega dela je bila moja prva objava o slovenski dialektologiji (Greenberg 1987). Prof. Ivič mi je prav tako predlagal, naj preberem delo Avgusta Pavla o prekmurskem narečju, kar me je napeljalo, da sem zaprosil za Fulbrightovo štipendijo za doktorske študente, da bi lahko šel na terensko delo v Prekmurje in Porabje (zagovor: UCLA 1990); material za disertacijo je bil objavljen v vrsti člankov (Greenberg 1989, 1993, 1994).

Kot Fulbrightov štipendist sem se posvetoval ali plodno sodeloval z veliko strokovnjaki tako mlajše kakor starejše generacije, od Velemirja Gjurina, Marka Snoja, Alenke Šivic - Dular do profesorjev Tineta Logarja, Jožeta Toporišča, Zinke Zorko in drugih. Moje vezi s slovenskimi ustanovami so se poglobile tako po strokovni plati (ZRC SAZU, Univerza v Ljubljani, Univerza v Mariboru, Regionalna in študijska knjižnica Murska Sobota) kakor v zasebnih stikih s posameznimi strokovnjaki, ki so mi pomagali pri terenskem delu, npr. s pokojnim profesorjem Vilkom Novakom, p. Lojzetom Kuharjem in čudovitimi družinami iz Prekmurja in Porabja, ki so mi odprle vrata v svoje domove, da bi me »načile« svoje domače govorice. Tedanji direktor murskosoboške knjižnice Jože Vugrinec mi je prijazno podaril fotokopijo rokopisa Avgusta Pavla *Vendnyelvtan*, neprecenljivega neobjavljenega vira zadnje velike kodifikacije prekmurskega narečja kot književnega standarda. Moja prisotnost v poslednjih dneh obstoja Jugoslavije mi je omogočila, da sem raziskal problematiko jezika in njegove simbolne pomembnosti pri oblikovanju nacionalnega narativa in narodne identitete. Bil sem priča procesa proti četverici in protestom podpornikov obtožencev, ki so sprožili niz dogodkov, ne samo po Jugoslaviji, ampak tudi v Sovjetski zvezi in sovjetskem bloku, ter mi omogočili globlji vpogled v družbene in politične funkcije jezika.

Sodelovanje z Markom Snojem je bilo eno najplodnejših. Profesor Snoj me je v zgodnjih devetdesetih povabil k skupni oživitvi že dolgo

mirujoče revije *Slovenski jezik*, ki sva jo prekrstila v dvojezično *Slovenski jezik / Slovene Linguistic Studies (SJ/SLS)*, da bi vzpostavila mednarodni forum za dialog in napredek jezikoslovne analize slovenskega jezika. Ugotovila sva, da je najino skupno delo učinkovito, še posebej ker sva uporabljala prav v tem času rojeno elektronsko pošto za premostitev Atlantika (tudi osebno sva se srečevala v času naših poletnih družinskih obiskov v Sloveniji). Markove zgodnje kritike moje knjige iz leta 2000, še posebej njegovo podrobno poznavanje akcentologije in etimologije, so vodile do pomembnih izboljšav. Prijazno mi je dovolil tudi vpogled v osnutek njegovega etimološkega slovarja slovenskih toponimov še pred objavo.

Knjigo (Greenberg 2000) je Ameriška zveza učiteljev slovanskih in vzhodnoevropskih jezikov leta 2002 v New Yorku nagradila kot najboljšo knjigo za slovansko jezikoslovje. Marko je s svojimi nasveti in spodbujanjem ogromno prispeval k tej nagradi. Sodelovanje pri reviji *SJ/SLS* se je še naprej razvijalo. K sodelovanju nam je uspelo pritegniti odlične avtorje z obeh strani Atlantika in ob deseti obletnici izhajanja v letu 2007 smo bili v prestižni mednarodni slavistični publikaciji prepoznani kot revija ključnega pomena za slovensko jezikoslovje. Od leta 2005 je revija na voljo v tiskani in digitalni, javno dostopni obliki (*platinum open-access*) kot stalno oskrbovan institucionalni digitalni arhiv, s čimer smo pridobili ogromno število bralcev in premaknili kulturo objavljanja del iz slovanskega jezikoslovja k bolj odprtemu standardu znanstvenega sporazumevanja.

Bil sem tudi soustanovitelj pozneje osnovane slavistične revije *Slavia Centralis* s centrom delovanja v Mariboru. Ta naslov sem predlagal na enem zgodnejših ustanovitvenih sestankov. Revija, ki se osredotoča na stike slovanskih jezikov Srednje in Južne Evrope z neslovanskimi, s tem zapolnjuje posebno nišo. Revija, pri kateri glavno vlogo igra kolega in glavni urednik Marko Jesenšek, je v samem začetku postala javno dostopna digitalna revija, in si tako zagotovila velik krog mednarodnih bralcev.

Odkar sva z Markom Snojem souredništvo revije *SJ/SLS* predala mlajšima in zelo sposobnima kolegoma Kozmi Ahačiču in Grantu Lundbergu, sodelovanje in skupne aktivnosti nadaljujeva na številnih področjih, od raziskovalnega dela (npr. Snaj in Greenberg 2012), aktivizma za javni dostop (npr. Bonaccorso, et al. 2014) do poslovanja ustanov, ki jih vodiva s prof. Snojem, on kot vodja Inštituta Frana Ramovša za slovenski jezik ZRC SAZU, jaz pa kot ustanovni direktor Šole za jezike, književnosti in kulture na Univerzi v Kansasu. Administrativno delo in razvoj ustanov, ki jih zastopava, sta po svoje zadovoljujoča, a odgovornost je lahko, kot se včasih izrazimo slavisti, težka kot Monomahova krona. Čezatlantsko sodelovanje, ki ga vzdržujeva že tako rekoč ves čas najine znanstvene kariere, mi je v moralno in vsakršno oporo in pomoč, da krono nosim nekoliko lažje.

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## ALOJZ KRALJ

### *Izbrani spomini na številna bivanja v ZDA*

Ta zapis posvečam spominu na veliki osebnosti, znanstvenika in vizionarja, to sta akademik prof. dr. Lojze Vodovnik in ameriški profesor dr. James B. Reswick, moja velika prijatelja in mentorja. Zapis želim posvetiti tudi številnim raziskovalcem in prijateljem v zahvalo za sodelovanje in pristrčna srečanja in njihovo pristrčno gostoljubnost. Naj navedem le nekatere: prof. dr. Jacqueline Perry, prof. dr. A. Benneta Wilsona, Jr., prof. dr. P. Hunterja Peckhama, prof. dr. B. Bayrona Marsolaisa, prof. dr. Donalda McNeala in velikega družinskega prijatelja dr. Daniela J. Antonellija. Do leta 1973 leta sem bil na več potovanjih v ZDA na konferencah ali obiskih raziskovalnih centrov in sem že sodeloval z mnogimi raziskovalci.

V letu 1973 sem odpotoval v ZDA s štipendijo Fulbright-Hayse in postal »Visiting Assistant Professor« na University of Southern California (USC) v Los Angelesu v Kaliforniji. Tu sem predaval predmet Biomedical Engineering Approaches to Neuromuscular Disability (Medicinsko-tehnični pristopi obravnave nevromišičnih okvar; 3 krediti). Raziskovalno sem sodeloval s kolegi v Rehabilitation Engineering Center (REC), ki je deloval v Rancho Los Amigos Hospital v Downeyu v Kaliforniji; z njim je imel REC Ljubljana (ustanovljen leta 1972) dobre stike. Na USC sem imel nekajkrat razgovore z dekanom School of Engineering, prof. dr. Zohrabom A. Kaprielianom, in predstojnikom oddelka Biomedical Engineering, prof. dr. Fredom S. Grodinsom. Ti razgovori so bili izredno poučni, saj so mojo pozornost usmerili na problematiko zagotavljanja kakovosti izobraževanja in raziskovanja v univerzitetnem okolju. Bil sem ponosen, da je tu deloval tudi mednarodno priznani matematik prof. dr. Richard Bellman, ki je napisal znamenito knjigo *Dynamic Programming* (Princeton University Press, 1957), po kateri sem študiral

na magistrskem študiju. Na USC in na Rancho Los Amigos Hospital REC sem tedaj spoznal tudi znanega robotika prof. dr. Georgea A. Bekeya, ki sem ga z leti še srečeval na znamenitih ECHE-konferencah (*External Control of Human Extremities*) v Dubrovniku.

Bil sem počaščen in vesel, ko je v *Bulletin of Prosthetics Research*, BPR 10-20 FALL 1973, na straneh 75–102 (Library of Congress Catalog Card No. 66-60273), izšel članek o možnostih uporabe FES za restavracijo gibanja paraplegičnih oseb, ki sva ga v Ljubljani napisala z zdravnikom dr. Slobodanom Grobelnikom (*Functional Electrical Stimulation – A New Hope for Paraplegic Patients*). Članek navaja vrsto podatkov, metodologijo ojačevanja mišic s FES ter utrujanje in doseženo vstajanje in nakazuje možnost hoje paraplegičnega pacienta s FES. Zanimivo je,



Prikaz hoje pacienta za kongresnike in spremljevalce zaslišanja. V ozadju je viden napis *REC Ljubljana* in miza z razstavljenimi vidnejšimi raziskovalnimi publikacijami centra. / *FES experts and researchers' hearing before the Committee on Veterans' affairs, House of Representatives of the Ninety-Ninth Congress in Washington to demonstrate locomotion functions restoration by means of FES in paraplegic patients. The REC Ljubljana and the desk displaying prominent center publication is visible in the back.*

da sva bila tudi po objavi članka nekako do leta 1980 na konferencah deležna komentarjev raznih »ekspertov«, da vsebina članka zavaja, da predlagano nikoli ne bo mogoče. V REC – Rancho Los Amigos Hospital sem raziskoval možnosti uporabe FES za korekcijo stojne faze hemiplegičnih pacientov.

Leta 1974 sem postal gostujoči raziskovalec v Krusen Center for Research and Engineering, Moss Rehabilitation Hospital, v Filadelfiji. V centru Krusen so tedaj razvili računalniško merjenje hoje z možnostjo projiciranja vektorja podpornih sil na hodečo osebo. To sem uporabil za raziskovanje učinkov trikanalne FES v podporni fazi hoje hemiplegičnih bolnikov. Raziskave so vodile do šestkanalnega električnega stimulatorja (trije kanali za fazo zamaha in trije kanali za podporno fazo, referat v Sussexu 1971 in IEEE-članek 1979).

Leta 1981 sem predaval na dopolnilnem izobraževanju za zdravnike in biomedicinske eksperte na NATO Advanced Study Institute, ki je potekalo v Aylesburyju v Angliji od 11. do 23. maja. Predavanja in razprave so objavljene v zajetni knjigi (Dhanjoo N. Ghista in Hans L. Frankel, Ed., *Spinal Cord Injury Medical Engineering*, Charles C. Thomas, Publisher Spring Field Ill., USA, pp. 557). V poglavju 21, str. 439–509, sem opisal celotno metodologija FES za spodnje okončine paraplegičnih oseb. V Aylesburyju je predaval tudi prof. dr. Daniel Graupe, ki je deloval na Illinois Institute of Technology, IIT Chicago, Ill. Prof. Graupe me je povabil v Chicago. Tu sva začela raziskovati možnosti in uporabo razpoznavanja vzorcev EMG-mišic pacienta (EMG Signature Discrimination Analysis) za upravljanje FES vstajanja in hoje paraplegične osebe. Ponudba za sodelovanje za obdobje od 20. novembra 1981 do 19. julija 1982 je bila dobrodošla. Podpirala je mojo željo po prenosu znanja in diseminaciji celotne FES-metodologije v ZDA. Iz pisma o imenovanju za profesorja na IIT sem izvedel, da bom raziskovalno sodeloval na Fakulteti za elektrotehniko, kjer bom predaval predmet Functional Electrical Stimulation na magistrskem študiju. Raziskovalno smo sodelovali z znamenito

bolnišnico Michael Reese Hospital v Chicagu, kjer smo na oddelku za fizioterapijo usposabljali paciente za FES-stojo in preprosto hojo. Prenos znanja je tedaj dobro uspel. To je razvidno iz objavljene slike na 81. strani knjige *Chicago, The Next Frontier* Bozidarja Yovovicha (Windsor Publication Inc., Chicago, 1989). Tu vidimo tim prof. Graupeja, zdravnico dr. Kate H. Kohn in dva študenta, ki sta se usposabljala v delovni skupini že leta 1982.

Poleti 1982 sem se moral vrniti domov med drugim tudi zato, ker ne na IIT in ne na Michael Reese Hospital ni bilo laboratorija, ki bi bil opremljen za raziskave biomehanike hoje in gibanja. Na IIT, Pritzker Institute of Medical Engineering, sem v poznejših letih še gostoval kot gostujoči profesor s krajšimi prekinitvami do avgusta leta 1986. Tu smo uredili vse potrebno za biomehanske raziskave gibanja. Verjetno je bil to tedaj edini tak laboratorij v okrožju Chicaga. Glavni sodelavec na Pritzker Institute of Medical Engineering je bil prof. dr. Rober Jaeger, ki se je pozneje zaposlil na agenciji NIDRR. Z medicinskega in raziskovalnega vidika je bilo vzorno in uspešno sodelovanje s prof. dr. Paulom R. Mayerjem, ml., direktorjem Spine Injury Center, in kolegi v RIC – Rehabilitation Institute of Chicago. Kmalu sva z dr. P. Mayerjem postala dobra prijatelja, tako kot tudi s prof. dr. Dudleyem Childressom na RIC Chicago.

Leta 1986 sem bil kot gost povabljen v ZDA na zaslišanje ekspertov in raziskovalcev na področju FES v zvezi z dvema vprašanjema: pregledom dosežkov in prispevkov na področju FES-restavracije gibanja paraplegičnih oseb in s tem, kako to področje v ZDA financirajo različne agencije (glej Application of Functional Muscular Stimulation, Hearing Before the Subcommittee on Oversight and Investigations of the Committee on Veteran's Affairs, House of Representatives, Ninety-Ninth Congress, Second Session, February 19, 1986, Serial No. 99-42, U.S. Government Printing Office, Washington, 1986, pp. 142). Kolegi iz različnih centrov v ZDA so z izjavami navajali, ugovorov ni bilo, da sem v Ljubljani s sodelavci prvi uporabno in podrobno opisal in v revijal-



nem tisku v celoti dokumentiral stoji in preprosto hojo paraplegičnih oseb s FES. Te raziskave je sofinancirala agencija Social Rehabilitation Services, SRS in pozneje agencija National Institute of Handicapped Research, NIHR (nastala iz SRS), Dept. of Education and Welfare, Washington, D. C. Veselje zaradi tega priznanja je z menoj delil tudi vodja NIHR-programa na področju rehabilitacije, gospod Joseph Traub, ki je bil zelo strog ocenjevalec. Kmalu po kongresnem zaslišanju smo v REC Ljubljana dobili vabilo, da pred kongresniki demonstriramo paraplegično osebo, opremljeno s FES za stoji in hojo. Na prvi sliki je prikaz hoje pacienta na Capitol Hillu, Washington, D. C. v letu 1986, na drugi pa vidimo predsednika zasliševalne komisije kongresnika gospoda G. V. (Sonnyja) Montgomeryja iz Misipija, ko ob pogovoru čestita pacientu in se z njim rokuje.

Kmalu po tem dogodku v Washingtonu sva se s kolegom in dolgoletnim sodelavcem akad. prof. dr. Tadejem Bajdom odločila, da narediva FES-metodologijo paraplegičnih oseb široko dostopno in čim bolj v pomoč pacientom. Napisala sva monografijo, ki podaja naše tedanje celotno znanje na področju FES-stoje in FES-hoje paraplegičnih oseb. To delo na 198 straneh je izšlo 1989. leta pri založbi CRC Press, Inc. Boca Raton, Florida, USA. Delo ima naslov *Functional Electrical Stimulation: Standing and Walking After Spinal Cord Injury*. Monografijo sva s kolegom Bajdom posvetila sprogama Irini in Barbari. Zanimivo je, da je bila to prva mednarodna knjiga na tem področju. Založba CRC Press Inc. je monografijo označila in tržila kot uspešnico v letih 1989 in 1990. Za priznanje, da smo v Ljubljani prvi dokazali združljivost (feasibility) in dokumentirali možnost FES-stoje in preproste hoje paraplegične osebe, je bila pomembna in odločujoča objava v *Bulletin of Prosthetics Research PBR 10-20* jeseni 1973.

Leta 1985 so se pravila za financiranje raziskav v ZDA spremenila in REC Ljubljana ni mogel več kandidirati. Ostala je možnost za kandidiranje pri National Institute of Disability and Rehabilitation Research, NIDRR (nastala iz NIHR), Dept. of Education and Welfare, Washington,

D. C., za manjše »Innovative Grants«. S kolegom prof. dr. Bajdom sva v naslednjih letih redno in uspešno kandidirala za financiranje raziskav in pridobivala to financiranje vse do leta 1993. Tedaj smo začeli kandidirati za raziskovalno financiranje EU. Hvaležen in ponosen sem, da sem bil z krajšimi prekinitvami in v hudi konkurenci skupaj s kolegi več kot dvajset let, od leta 1968 do 1993, prejemnik raziskovalnega financiranja iz ZDA.

V letu 1989 sem se odločil, da organiziram ekskurzijo študentov biomedicinske tehnike in robotike iz Ljubljane v ZDA. Prva 18-dnevna ekskurzija z 19 študenti je bila oktobra 1990. Potovali smo z avtomobili in obiskali New York, Boston, Niagarske slapove, Detroit, Cleveland, Chicago, jeklarsko področje Garyja, Pittsburgh, Filadelfijo in Washington. Obiskali smo univerze, inštitute in tovarne, npr. Allen-Bradley Co. Milwaukee, Wisconsin, nato Universal Automatic Co. v Chicagu, Ill, in Hewlett-Packard v New Jerseyju. V letu 1993 sem spet organiziral 22-dnevno študentsko ekskurzijo s 27 udeleženci. Tudi tokrat sem vse obiske, hotele in rezervacije zavaroval s svojo kreditno kartico. Najlepši so spomini na pogovore študentov s kolegi v ZDA, profesorji, zdravniki in v tovarnah. Večinoma so bili pogovori zelo prisrčni in z našimi gostitelji smo se večkrat do solz nasmejali in nam skoraj niso pustili oditi. Pri tem so navajali, da je to prvi obisk študentov iz katere izmed (nekdanjih) socialističnih držav.

Leta 1991 sem bil pri največji mednarodni organizaciji inženirjev, Združenju inženirjev elektrotehnike in elektronike IEEE (International Society of Electrical and Electronic Engineers) s sedežem v ZDA, izvoljen v naziv »IEEE Fellow«. Listino o podelitvi so mi slovesno izročili v Parizu. Na Univerzi v Ljubljani sem kmalu po tem postal prorektor za znanstveno-raziskovalno področje. Leta 1995 sem bil izvoljen za rektorja Univerze v Ljubljani. Dopisni član Slovenske akademije znanosti in umetnosti (SAZU) sem postal 27. maja 1993, redni član 27. maja 1997 in sem deloval kot podpredsednik od 6. maja 1996 do 25. aprila 2002. Za rednega člana Evropske akademije znanosti in umetnosti, ki ima sedež v avstrijskem Salzburgu, sem bil izvoljen 7. marca 2009.

## JANEZ KRANJC

### *Stiki z Združenimi državami Amerike*

Moji strokovni stiki z Združenimi državami Amerike segajo na dve področji. Že od devetdesetih let prejšnjega stoletja s kolegom prof. dr. Franjem Štiblarjem soorganiziram študijske ekskurzije za študente ljubljanske Pravne fakultete v ZDA. Namen ekskurzij je, da bi se naši študenti seznanili z ameriškim pravnim sistemom in nekaterimi mednarodnimi organizacijami, ki imajo sedež v ZDA. Ekskurzije so omejene na mesti Washington in New York. Med ekskurzijami obiskujemo javne obravnave na sodiščih državne in zvezne pristojnosti, odvetniške pisarne in univerze (George Mason, NYU, Columbia in Fordham Uni-



Na Mednarodnem monetarnem skladu leta 2014 / *At the International Monetary Fund in 2014.*

versity). Študentje imajo na sodiščih po koncu razprav pogovore s sodniki in zastopniki strank, na univerzah pa se udeležijo enega od rednih predavanj. Na programu ekskurzije je redno obisk Svetovne banke in Mednarodnega monetarnega sklada ter sedeža Organizacije združenih narodov v New Yorku. Na vseh omenjenih institucijah imajo študentje srečanje z različnimi pravnimi strokovnjaki, ki obravnavajo nekatera trenutno aktualna vprašanja. Na več ekskurzijah smo obiskali tudi Zvezni raziskovalni in izobraževalni center ameriškega pravosodja (Federal Judicial Center).

Strokovne ekskurzije v ZDA so se izkazale kot izredno koristne, saj dajejo študentom konkreten vpogled v delovanje ameriškega pravosodja oziroma pravnega sistema in v delovanje najpomembnejših mednarodnih organizacij. Obiski na ameriških univerzah so več udeležencev ekskurzij spodbudili k podiplomskemu študiju na kateri od ameriških univerz. Glede na pomen, ki ga ima danes ameriško pravo v mednarodni trgovini in financah, predstavljajo ekskurzije študentov prava v ZDA dragoceno obogatitev za slovensko pravno znanje.

Drugo področje mojega sodelovanja z Združenimi državami je raziskovalno. V akademskem letu 2011/12 sem bil izbran za raziskovalca na Straus Institute newyorške univerze, ki ga je vodil eden najvidnejših svetovnih strokovnjakov za evropsko pravo, profesor Joseph H. H. Weiler. Delovni pogoji na inštitutu, na katerem je delovala vrsta ameriških in evropskih kolegov, so bili blizu idealnim. Poleg izrednih materialnih pogojev je bilo še posebej spodbudno izjemno akademsko ozračje, ki so ga oblikovala skupna srečanja, razprave o poteku dela, izmenjava mnenj in družabni dogodki.

Trenutno sem ponovno v ZDA, to pot gost The Jean Monnet Center for International and Regional Economic Law & Justice.



Kongresnik James Louis (Jim) Oberstar (1934–2014) je bil član ameriškega kongresa med letoma 1975 in 2011. Kot potomec slovenskih staršev je bil velik prijatelj Slovenije in Pravne fakultete v Ljubljani. V Kongresu je vsako leto sprejel udeležence strokovnih ekskurzij naših študentov v ZDA, se z njimi pogovarjal in jim pojasnil delovanje predstavniškega doma. Vedno jih je pozdravil po slovensko in nikoli ni pozabil povedati, da so bili njegovi predniki doma iz Slovenije. Kongresnik Oberstar je v kongresu nasledil svojega mentorja Johna A. Blatnika, ki je bil tudi slovenskega rodu. Oberstar je bil strokovnjak za letalstvo in letalsko varnost ter dolga leta član kongresnega odbora za promet. Kot navdušen kolesar se je zavzemal za gradnjo kolesarskih poti in varnost v cestnem prometu, za zdravo življenje in prehod od »pogona z ogljikovodiki na pogon z ogljikovimi hidrati«. Veliko je storil tudi na socialnem področju, kjer se je zavzemal za pravičnejšo delitev dobrin v družbi. / *Congressman James Louis "Jim" Oberstar (1934 – 2014), Member of US Congress from 1975 to 2001. As a child of Slovenian parents, Congressman Oberstar was a great friend of Slovenia and the Ljubljana Faculty of Law. He hosted Slovenian study visitors to the USA in the Congress annually, spent a lot of time in conversation with them and explained the workings of the House of Representatives to them. He always welcomed the groups in Slovenian and never failed to mention his ancestors came from Slovenia. Congressman Oberstar followed his mentor, John A. Blatnik, also of Slovenian descent, to Congress. Oberstar was an aviation and aviation safety expert and Member of the Transportation and Infrastructure Committee (the former Public Works Committee). As an avid cyclist, he endorsed the construction of bikeways and road safety, promoted healthy lifestyle and was a supporter of the transition from the »carbon to carbohydrate powered society«. He was heavily involved in the promotion of social justice and advocated for a more just distribution of wealth in society.*

## JOŽE KRAŠOVEC

### *Mejniki sodelovanja z ameriškimi raziskovalci*

Nisem bil Fulbrightov štipendist ali gostujoči profesor v ZDA, a so mojo akademsko pot najbolj zaznamovali trije mejniki sodelovanja z ameriškimi akademskimi ustanovami in posameznimi raziskovalci v Izraelu in Sloveniji. Prvi mejnik je bilo moje raziskovalno delo na Tantur Ecumenical Institute v Jeruzalemu, ki je bil ustanovljen leta 1972 kot moden medkonfesionalni raziskovalni inštitut na hribu Tantur, ki leži med Jeruzalemom in Betlehemom. Administracijo in finančno vzdrževanje inštituta je prevzela University of Notre Dame (Indiana). Po končanem doktoratu na Papeškem bibličnem inštitutu v Jeruzalemu leta 1976 me je leta 1977 takratni rektor inštituta prof. Walter Harrelson z Univerze Vanderbilt (Nashville, Tennessee) osebno povabil, naj dam vlogo za raziskovalno štipendijo v okviru programa Ekumenskega inštituta Tantur. Raziskovalna štipendija mi je omogočila dve leti raziskovalnega dela na Ekumenskem inštitutu Tantur in na Hebrejski univerzi v Jeruzalemu (1979–1980 in 1981–1982).

Na Hebrejski univerzi sem vpisal drugi doktorat in ga končal julija leta 1982. Disertacija z naslovom *Antithetic Structure in Biblical Hebrew Poetry* je bila leta 1984 objavljena pri založbi Brill v Leidnu (Nizozemska). Predsednik doktorskega programa na Hebrejski univerzi je bil takrat znani in priljubljeni profesor semitskih jezikov in kumranskih rokopisov Jonas C. Grienfield iz New Yorka, ki se je nekaj let prej po delovanju na številnih ameriških univerzah preselil na Hebrejsko univerzo v Jeruzalem. Ob vsakokratnem srečanju se je spomnil slovenskega akademika prof. Viktorja Korošca, ki je postal mednarodno priznan raziskovalec rimskega in klinopisnega prava. Ko sva se s prof. Grienfieldom srečala po končanem doktoratu, mi je dejal: »Ko sva se prvič srečala ob Vašem

vpisu, sem vedel, da boste zastavljeno nalogo izpeljali. Vesel sem, da se nisem zmotil, ker je toliko drugih, ki začnejo, pa ne končajo.« Profesor Grienfield je pozneje postal član Izraelske akademije znanosti. Ko sem v letu 1994/95 bil raziskovalec na École Biblique v Jeruzalemu, sem 13. marca 1995 v obednici po zajtrku listal časopise. V prostoru sem bil sam, zato sem dvignil telefon, ki je zazvonil. Oglasil se je prof. Grienfield in je želel znanega francoskega raziskovalca kumranskih rokopisov, prof. Emila Puecha, ki pa takrat ni bil dosegljiv. Isti dan zvečer smo iz medijev izvedeli presenetljivo novico, da je prof. Grienfield umrl. Naključje s telefonom tisti usodni dan je razlog, da neverjetnega dogodka tudi tukaj ne morem zaobiti.

Ena izmed zanimivosti izredno intenzivnega dvoletnega raziskovalnega dela na Ekumenskem inštitutu v Jeruzalemu je bila, da sem imel za dnevno pavzo v glavnem samo igranje namiznega tenisa med *coffee breakom*, največkrat s kolegom iz Katalonije. Tako sem se te umetnosti tako navadil, da sem postal hišni prvak s finalno zmago nad kolegom iz ZDA. Za individualno raziskovalno delo je bilo odlično poskrbljeno, vsak pa je enkrat v letu imel priložnost, da je svoje rezultate predstavil na skupnem seminarju. Med prvim raziskovalnim letom sem imel še to srečo, da sem vsak dan med zajtrkom imel zelo ustvarjalne pogovore s takratnim rektorjem inštituta, prof. Georgem MacRaejem, ki je bil sicer profesor za biblične študije na Harvard University. Takrat so za rektorje inštituta izbirali večinoma za enoletni mandat med znanimi profesorji ZDA. Sobivanje z raziskovalci z vseh celin na inštitutu in koncentrirano individualno raziskovanje je bila edinstvena izkušnja.

Drugi mejnik sodelovanja z amerškimi akademskimi ustanovami in raziskovalci je bila moja organizacija simpozija o interpretaciji Svetega pisma, ki je od 17. do 20. septembra 1996 potekal v Cankarjevem domu v Ljubljani. S tem dogodkom smo obeležili izdajo prvega zares ekumenskega slovenskega prevoda Svetega pisma pod mojim vodstvom, udomačil pa se je kot »slovenski standardni prevod« (SSP). Začetna ideja je bila, da bi dogodek obeležili z znanstvenim simpozi-

jem manjšega števila raziskovalcev, toda zanimanje za načrt simpozija s poudarkom na tekstni kritiki in prevajanju Svetega pisma v razne jezike, s posebnim poudarkom na vzhodni (takrat komunistični) Evropi, je bilo tako veliko, da je simpozij prerasel v svetovni kongres, na katerem so nastopili najbolj priznani strokovnjaki biblične tekstne kritike sveta, največ iz ZDA (Bruce M. Metzger, Princeton University, itn.). Zelo kakovostne prispevke smo, delno še prispevke naknadno povabljenih avtorjev, izdali leta 1998 ob sodelovanju Slovenske akademije znanosti in umetnosti, Univerze v Ljubljani in Univerze v Mariboru v zborniku prispevkov v obsegu 1909 strani s štirijezičnim naslovom *Interpretacija Svetega pisma* (slovensko, angleško, nemško in francosko). Zbornik je še isto leto v celoti izdala založba Sheffield Academic Press v Angliji. Ta publikacija je v svetovnem merilu temeljno delo, ker med študijami hermenevtične narave prevladujejo prvi izvorni prispevki o zgodovini prevajanja Svetega pisma v večino jezikov vzhodne Evrope, ki je bila takrat za mednarodno akademsko sfero teže dostopna.

Tretji mejnik sodelovanja z ameriškim znanstveniki se je dejavno začel leta 2004, ko so me predstavniki ožjega odbora glavnega akademskega združenja International Organization of the Study of the Old Testament (IOSOT) na 18. kongresu IOSOT na Univerzi v Leidnu soglasno izvolili za predsednika IOSOT za obdobje 2004–2007 z nalogo, da v Ljubljani pod strokovnim pokroviteljstvom predsedstva SAZU, Univerze v Ljubljani in Univerze v Mariboru organiziram 19. kongres IOSOT, skupaj z manjšimi kongresi: International Organization for Targumic Studies (IOTS), International Organization for Septuagint and Cognate Studies (IOSCS), International Organization for Qumran Studies (IOQS), International Organization for Masoretic Studies (IOMS), The Bible of Edessa Project, Leiden Peshitta Institute, Netherlands (BEP), International Syriac Language project, University of Melbourne, Australia (ISLP). V okviru vseh navedenih področij so vodilni raziskovalci ZDA. Devetnajsti IOSOT-kongres je potekal v Ljubljani od 15. do 20. julija 2007 v prostorih Pravne fakultete ob sodelovanju z bibličnim združenjem Society of



Biblical Literature (SBL), ki ima svoj sedež v Atlanti (Georgia, ZDA) in ozko sodeluje z American Academy of Religion (AAR). Na slovesni otvoritvi IOSOT 17. septembra 2007 je v imenu SBL imel slavnostni nagovor nekdanji predsednik združenja prof. David L. Petersen.

V okviru 19. kongresa IOSOT smo 16. julija 2007 slovesno predstavili tudi faksimile najstarejših slovenskih prevodov Svetega pisma iz obdobja pred izdajo Dalmatinove Biblije leta 1584 v okviru edinstvene zbirke *Biblia Slavica*, ki jo je takrat urejal akad. prof. dr. Hans Rothe z Univerze v Bonnu in Akademije znanosti Nordrhein-Westfalen v Düsseldorfu. Faksimile in spremne študije za obsežen komentar k slovenski izdaji faksimilov najstarejših slovenskih prevodov Svetega pisma pa smo pripravili v okviru posebnega raziskovalnega projekta na ZRC SAZU pod vodstvom prof. dr. Majde Merše. Vabljeni predavanja 19. kongresa IOSOT so bila objavljena v *Congress Volume Ljubljana 2007* v obsegu 639 strani pri založbi Brill (Leiden, Nizozemska) leta 2010. Vsi drugi referenti na omenjenih kongresih so svoje prispevke objavili v raznih drugih zbornikih in revijah.

Sodelovanje z ameriški raziskovalci je vodilo do tega, da sem leta 2009 dobil vabilo uredništva *The Oxford Encyclopedia of the Bible and Ethics*, ki ga je v dveh zvezkih leta 2011 izdala založba Oxford University Press v New Yorku, da za to delo napišem daljši prispevek »Punishment«. Ta tematika je bila takrat del mojega načrtnega raziskovanja razsežnosti pravičnosti v antiki in poznejših pravnih in filozofskih interpretacijah. Glavnina takratnega raziskovanja je izšla v zelo obsežni dvojezični študiji *Nagrada, kazen in odpuščanje* (Založba SAZU, Ljubljana 1999); *Reward, Punishment and Forgiveness* (Založba Brill, Leiden 1999). Drugo pomembnejše delo, ki je izšlo v ZDA, je jezikoslovna monografija *The Transformation of Biblical Proper Names* (New Yorku in London: T&T Clark International, 2010).

Sklepna ocena dolgoletnega sodelovanja z ameriški znanstveniki je, da je intenzivno sodelovanje z ameriški akademskimi ustanovami in znanstveniki za našo državo iz različnih razlogov zelo pomemb-

no. Sodelovanje na osebni in meddržavni ravni vedno poteka v okviru mednarodne, danes kar svetovne mreže povezav in sodelovanja. Duh Svetega pisma, ki ima v ZDA še prav posebno častno mesto, odpira duha za sodelovanje iz najboljših motivov, ki pomagajo graditi edinost med narodi, kulturami in religijami. Geopolitična pozicija Slovenije med Vzhodom in Zahodom pa nam daje možnosti, da kaj prispevamo h graditvi mostov med obema svetovoma. To je bil poglavitni duhovni simbol obeh navedenih bibličnih kongresov v Ljubljani, na katerem so številčno in strokovno prevladovali znanstveniki iz ZDA in Izraela, ki je pomembna zaveznica ZDA. Sodelovanje na strokovni in znanstveni ravni ne daje slutiti, da normalno politično in kulturno izmenjavo zelo boleče zavira nerazumljiv, kar neracionalen odnos ameriške politike do Rusije. Raziskovalci smo še posebej poklicani, da gradimo mostove in odločno zavračamo umetne pregrade, ki z duhovno in kulturno stvarnostjo nimajo nič opraviti.

## IGOR MAVER

### *Moji kalifornijski znanstveni dnevi*

V ameriško zvezno državo Kalifornijo sem doslej potoval že večkrat, včasih za dalj časa, včasih na krajši obisk znanstvene konference ali prijateljev, vselej pa z velikim veseljem in visokimi pričakovanji, navkljub časovni razliki, ki človeka prikuje v posteljo še kak dan po prihodu. Daljši gostovanji na dveh kalifornijskih univerzah sta mi izjemno pomagali pri znanstvenoraziskovalnem delu in pri pridobivanju potrebnih pedagoških izkušenj v tujini, v nekoliko drugačnem univerzitetnem okolju od slovenskega.

Sredi devetdesetih let prejšnjega stoletja sem kot mlad izredni profesor predaval na kalifornijski univerzi v Davisu pri Sacramentu (University of California at Davis), kamor me je povabil tedanji predstojnik Oddelka za anglistiko profesor Karl F. Zender, od takrat že leta dober družinski prijatelj in raziskovalni mentor, specialist za sodobno ameriško književnost (posebej za pisatelja Williama Faulknerja z ameriškega Juga, saj je med najbolj znanimi literarnimi kritiki njegovega dela) in dramatika Williama Shakespeara. Čeprav je zdaj zaslužni profesor, je nedavno izdal knjigo o medgeneracijskem branju Shakespeareovih dram. Z ženo Lynn sta odtlej večkrat obiskala Slovenijo uradno in zasebno in postala prava navdušenca predvsem nad našimi gorami. Poleg raziskovanja in predavanj je bil rezultat tega daljšega obiska tudi poznejša objava moje knjige pri založbi v ZDA o postkolonialnih književnostih (*Revisioning Post-Colonial Studies*) v trdi in mehki vezavi (v večjem številu izvodov), za katero je profesor Zender napisal recenzijo, objavljeno v knjigi. Vse od tega za moj znanstveni razvoj pomembnega obiska oba sodelujeva tudi v Mednarodni zvezi rednih profesorjev anglistike, kjer imam trenutno pomembno izvršilno funkcijo.

Po prihodu na to univerzo v majhno univerzitetno mesto Davis čisto blizu kalifornijske prestolnice in središča »zlate mrzlice« v 19. stoletju, Sacramento, sem bil najprej navdušen nad pogoji dela, od univerzitetne knjižnice, značilnega ameriškega kampusa, kolegov, katerih vrata so bila tako rekoč ves čas odprta (tudi dobesedno), gostujočih znamenitih literatov in književnih kritikov, predvsem pa nad nekakšnim ustvarjalnim mirom in možnostjo poglobljenega študija, pisanja in predavanja. V svojih predavanjih sem skušal, med drugim, tudi čim bolje predstaviti Slovenijo in slovensko književnost, zato ne bom pozabil predavanja o vplivu ameriške dramatike na slovensko gledališče po drugi svetovni vojni, ki je bil precejšen, v smislu odpiranja neideološkemu vrednotenju književnosti, še posebej dramatike. Vprašanja so bila številna in dobrohotna in zanimivo je, da je na javno predavanje prišlo kar nekaj kritikov in kulturnikov ali čisto enostavno ljubiteljev literature, za katere verjamem, da so dobili dober vpogled v slovensko ustvarjalnost druge polovice 20. stoletja. Mnogi so dobro poznali slovenskega pesnika in tudi poznejšega člana SAZU Tomaža Šalamuna, ki je pogosto bral svojo poezijo na ameriških univerzah in dejansko vplival na mnoge ameriške pesnike mlajše generacije, kar mi mnogi kolegi brez zadržkov še danes priznavajo: o Tomažu sem takrat napisal več študij, ki so bile objavljene v ameriških literarnih revijah ali knjigah, in s tem promoviral ne le njega, ampak sodobno slovensko poezijo nasploh. V devetdesetih letih je bilo veliko tiskanih in rokopisnih materialov, na katerih sem delal v Davisu, že digitaliziranih, kar tedaj na Slovenskem in tudi širše na evropskih univerzah ni bilo povsem običajno oziroma vsaj ne v tolikšni meri.

V času bivanja v Davisu sem s kolegi, ki sem jih spoznal, obiskal številna lepe kraje v okolici, najbolj mi je ostal v spominu obisk jezera Tahoe, zaščitenega gozda sekvoj Muir Woods Redwood National Monument severno od San Francisca, univerzitetnega Berkeleyja, znamenitosti San Francisca z impresivnim mostom Golden Gate, starega Sacramento z replikami parnikov in stavb iz časa »zlate mrzlice« in pa

cifiškega dela s področjem malo južneje, kjer je živel in ustvarjal ter se navdihoval ameriški nobelovec, pisatelj John Steinbeck. Sicer pa so na vrtu hiše, kjer sem stanoval, rasle pomaranče – česa bi si še sploh lahko želel? San Francisco mi je ponujal kulturno raznolikost in zadovoljstvo, ki sem ga včasih pogrešal v Davisu, čeprav ima »San Fran« ali »Frisco« pogosto tudi meglo in neprijeten zahodni veter s Pacifika. Obiskoval sem koncerte v filharmoniji, si večkrat ogledal ogromen morski akvarij, pohajkoval po ribiškem pomolu (Fisherman's Wharf), obiskal muzej sodobne umetnosti, organiziral omizje na konferenci AAASS (Ameriške zveze za pospeševanje slovanskih študij), na katerem so sodelovali številni slovenski izseljenci v ZDA, in še kaj.

Pred nekaj leti sem na povabilo tedanjega predstojnika Oddelka za anglistiko kot vabljeni raziskovalec prišel na prestižno privatno Univerzo Stanford v Palu Altu v t. i. Silicijevi dolini, pozneje sta se mi pridružila tudi žena in sin, saj sem sinu pred odhodom vsekakor želel pokazati Silicijevo dolino, zato smo obiskali muzej računalniške zgodovine (Computer History Museum, Mountain View) blizu vplivnega Googlea in Applu v Cupertinu. Palo Alto in okoliška mesteca so prekrasno urejene enklave računalniških strokovnjakov in podjetnikov, nedaleč in le nekoliko južno od San Francisca, kake pol ure oddaljene z lokalnim vlakom Caltrain. O sami univerzi, ki je imela na voljo neverjetna sredstva, ne gre izgubljati besed, kakor tudi ne o subtropski klimi in vegetaciji, ki je vsaj v osrednjem delu kampusa urejena do popolnosti. Moja prva ugotovitev je bila, da sta praktično znanje in izkušensko učenje pomembni premisi na Stanfordu, ne le v naravoslovnih in drugih znanostih, ampak tudi v humanistiki in družboslovju. S kolegi smo se dobivali na skupnih kosilih v kampusu, ki so bili vedno tudi delovne narave. Rezultat mojega bivanja je bil tudi ta, da je moj dobri kolega, predstojnik anglistike profesor Gavin Jones, objavil svoj članek o Hermanu Melvillu v knjigi, ki je v mojem uredništvu kar nekaj let pozneje izšla s finančno podporo SAZU pri Znanstvenem inštitutu Filozofske fakultete v Ljubljani (*Stanonikov zbornik*), sodelovali pa smo tudi na področju doktoratov znanosti

iz ameriških študij, saj koordiniram tozadeven interdisciplinarni program na Filozofski fakulteti ljubljanske univerze.

Kot kaže, bom »svojo« Kalifornijo spet kmalu obiskal, saj sta me pred kratkim Univerza v Ljubljani in Evropski socialni sklad izbrala za trimesečno finančno podporo za semester vabljenih predavanj v letu 2020 na kalifornijski univerzi v Berkeleyju (University of California at Berkeley, v tem odličnem javnem sistemu kalifornijskih univerz je deset univerzitetnih lokacij, od San Francisca do San Diega) v okviru procesa internacionalizacije univerz. V javnih predavanjih nameravam, na primer, predstaviti tudi svoje izsledke o prvih raziskovanjih Kalifornije, v katerih je sodeloval tudi naš kranjski jezuit s konca 17. in začetka 18. stoletja, o sodobni slovenski literaturi (med katerimi bo kar nekaj članov SAZU), o transnacionalni paradigmi pri sodobnem raziskovanju diasporične književnosti, s čimer se trenutno ukvarjam, poleg tega pa še o trenutno zelo pereči temi, t. i. *fronteri*, porozni meji in literaturi oziroma kulturni semiozi med ZDA in Mehiko, nekoč in danes. V tem času sem povabljen še na nekaj predavanj na Univerzo Stanford v Palo Altu. Kot je pel Al Jolson leta 1924, lahko zdaj tudi jaz zamrmram napev »Kalifornija, prihajam!« (*California, Here I Come*).

## ZDRAVKO MLINAR

### *Sodelovanje z ameriškimi družboslovci*

*Družbeni kontekst in osebne izkušnje*

#### ***Profesionalna in ideološko-politična izhodišča***

Izhodiščni državni in družbeni kontekst našega povezovanja in vključevanja v ZDA ni bila (predvsem) Slovenija, ampak Jugoslavija. Ta je bila v mednarodnem merilu nekaj posebnega in je pritegovala pozornost družboslovcev in politikov, ki so cenili zunajblokovsko vlogo in inovativno uvajanje »sistema samoupravljanja«. Na takšni osnovi so se tudi – tedaj še maloštevilnim sociologom in politologom – odpirala vrata v svet. Največja koncentracija družboslovnega znanja je bila v ZDA, ki ga je uradna ideološka usmeritev kritično zavračala. Ob privrženosti dialektičnemu in zgodovinskemu materializmu je bila celo sociologija proglašena za »buržoazno znanost«.

Ravno v šestdesetih letih pa smo tudi pri nas aktivno uveljavljali empirično sociološko raziskovanje, ki je bilo sicer že najbolj razvito v ZDA, še posebej z metodološkega vidika. Ideološko-politični zadržki za povezovanje z ZDA so sicer ostajali še naprej in so se v sedemdesetih (»svinčenih«) letih še zaostriili. Vendar je na meddržavni ravni prišlo do institucionalizacije sodelovanja, še zlasti z uvedbo Fordovih in Fulbrightovih štipendij, ki so omogočale izpopolnjevanje v ZDA. Jugoslavija je bila v primerjavi z drugimi »socialističnimi« državami še relativno najbolj odprta.

Kljub temu so bili naši stiki z ameriškimi družboslovci v času Jugoslavije kar vseskozi podvrženi sumničanju in kontroli s strani organov za notranje zadeve. Tudi sodelovanje v institucionalno opredeljenih okvirih je bilo – še zlasti na področju sociologije in politologije – nenehno problematizirano. Še prav posebno je to veljalo za nas, ki smo delovali v okviru Fakultete za sociologijo, politične vede in novinarstvo. Delo-

vali smo pod velikimi političnimi pritiski in »administrativnimi posegi«, na primer z izključitvijo štirih kolegov zaradi ideoloških odstopanj, pri čemer je bil močno prisoten občutek, da so podlegli tujim vplivom, še zlasti iz ZDA. Ko me je obiskal kdo iz ZDA, je bilo težko najti kakšnega sogovornika na fakulteti, ki bi si upal izpostavljati se s tem, da ima stike z Američani.

Vendar pa so bile pomembne izjeme tudi med vodilnimi politiki. Nekateri, ki so bili bolj liberalni, so prevzemali odgovornost za sodelovanje z Američani nase, in s tem nam raziskovalcem zagotavljali določeno kritje za delovanje v raziskovalnih projektih. Takšna je bila v šestdesetih letih vloga Antona Vratuše, ki je prej deloval v samem vrhu jugoslovanske politike (pomočnik Edvarda Kardelja) in opravljal tudi vlogo predstavnika države v OZN v New Yorku.

Medtem ko smo mi v ZDA iskali že pridobljeno družboslovno znanje, so ameriški kolegi v Jugoslaviji želeli predvsem raziskovati družbenopolitično inovativnost, ki je izstopala iz že znanih okvirov kapitalističnih in socialističnih držav.

### ***O vzpostavljanju stikov in razlikah v delovanju na univerzah***

Večina pobud z ameriške strani je prihajala z oddelkov za politične znanosti, sam pa sem močno razširjal stike s sociologi. Za nas v Sloveniji oziroma v Jugoslaviji je bilo posebej pomembno, da so bili vzpostavljeni uradni kanali povezovanja z znanostjo v ZDA. Pri tem mislim predvsem na Fordove in Fulbrightove štipendije in podporo pri vzpostavljanju stikov za strokovno izpopolnjevanje. Na tej podlagi se je največ naših znanstvenih delavcev, vsaj s področja družbenih znanosti, vključevalo v ustrezne institucije v ZDA.

Institucionalna baza tega povezovanja so bile univerze. Pri tem smo se takoj soočili z velikimi razlikami. V Sloveniji smo v začetku imeli eno samo univerzo, ki je delovala v dokaj togih in zamejenih okvirih s poudarjenimi disciplinarnimi in hierarhičnimi ločitvami, v uradnem času. Druženje na univerzi v Sloveniji je bilo pretežno formalizirano, na se-



stankih. V ZDA pa je bilo bolj sproščeno (npr. tudi pri kosilu v fakultetnem klubu, pa tudi sicer v osebnih stikih). To je verjetno sledilo različni tradiciji, pomembne pa so bile še druge razlike. Pri nas se je skrb politike, da ji ne bi karkoli ušlo izpod kontrole, izražala v nezaupanju in sumničavosti do zunajinstitucionalnega delovanja. Kolektivistična usmeritev, ki je negativno vrednotila notranjo diferenciacijo in individualnost, je *eo ipso* težila k množičnosti na račun razvejenega društvenega oziroma osebnega delovanja.

Presenetila me je odločnost zahteve, da se prepreči »inbreeding« znotraj same univerze, kar je seveda imelo tudi oporo v objektivnih možnostih. V Sloveniji pa v zgodnejšem obdobju posameznik ni imel alternativnih možnosti za delovanje na kakšni drugi univerzi. Hkrati s tem je bila za nas nekaj novega velika pozornost, posvečena profesionalnemu primerjanju in tekmovalnosti univerz med seboj. Npr. za sociološki oddelek na univerzi v Chapel Hillu se je vedelo, da je po rangi četrti najboljši v ZDA. Ob tem pa sem zaznaval tudi močno prizadevanje, da posamezne univerze ali strokovne organizacije pritegnejo posameznike iz drugih držav. Vodstvo oddelka ali univerze se je npr. pohvalilo s tem, da vključujejo večje število tujcev kakor pa druge univerze. Osebnost me je presenetilo, ko so me kot »neameriškega opazovalca« (non-american observer) povabili, da predstavim svoje poglede na »summit meeting« (of) International Studies Association, na Southern Illinois University v mestu Carbondale. Ko sem že predhodno, leta 1967, obiskal prof. A. L. Bertranda na Louisiana State University, Baton Rouge, pa se je sicer pokazalo veliko zanimanje za mojo državo, vendar s poenostavljenimi predstavami o komunizmu in blokovski delitvi sveta.

Velika fleksibilnost in mobilnost je izstopala tudi s tem, ko so študentje lahko izbirali predmete različnih disciplinarnih področij in niso bili omejeni v vnaprej opredeljene »bloke« predmetov kot pri nas. Eden od pogojev za večji izbor in kombiniranje predmetov pa je seveda prostorska strnjjenost, kakršno nudijo ameriški kampusi. Kampus sicer po eni strani predstavlja ločitev od kompleksnosti vsakdanjega življenja

ljudi v lokalni skupnosti, hkrati pa olajšuje (ali sploh omogoča) povezovanje raznovrstnosti prek meja posameznih fakultet/institucij, torej zamejenost, ki je še vedno navzoča v Sloveniji, tudi po uvedbi bolonjske reforme. Seveda pa to predpostavlja večjo individualno avtonomijo študentov in profesorjev, ki je značilna za ZDA. Presenetilo nas je, s kakšno lahkoto se je kolega lahko sam odločil, kaj in kako bo predaval naslednje leto ...

Po eni strani je v ZDA izstopala popolna profesionalna privrženost in celodnevna prisotnost na univerzi. Hkrati pa sem tu prepoznal tudi režim »sobotnega leta«, ko je bil profesor oproščen pedagoških obveznosti in mu je bila dana možnost umika z univerze, tudi v mednarodnem merilu. Kar več ameriških kolegov se je, ko se jim je bližal »sabbatical«, zanimalo za možnosti, da bi ga preživel v Sloveniji. Pri nas bi jim zagotovili le ustrezen prostor za delo. To bi bila – kot sem že večkrat opozarjal – tudi obogatitev za naše okolje; vendar je ta možnost ostala (večinoma) neizkoriščena.

### ***Na osnovi raziskovalnega in pedagoškega delovanja smo vstopali v svet***

Pomembnejša povezava z ameriški družboslovci, ki mi je hkrati odpirala poti v svetovnem merilu, je bila moja vključitev v komparativni raziskovalni projekt International studies of Values in Politics, predstavljena v knjigi *Values and the Active Community*, 1970. Zasnoval ga je Philip Jacob, profesor na oddelku za politične znanosti Pensilvanske univerze v Filadelfiji. To je bila obsežna mednarodna raziskava, ki je vključevala politologe, sociologe in druge družboslovce iz ZDA, Jugoslavije, Poljske in Indije. Jugoslavija, kot zunajblokavska država in država samoupravljanja, je bila (glede na kvekerske vrednote koordinatorja) še posebej relevantna. V marsičem, zlasti pa metodološko, je vodilno vlogo imel njegov kolega Henry Teune. Teune je bil široko razgledan družboslovec, ki je povezovalno deloval v sicer zelo heterogeni skupini raziskovalcev iz štirih držav in hkrati presegal horizonte konkretne em-

pirične raziskave. Tako sva se tudi osebno zelo zblížala in empirično raziskovanje nadgradila s teoretskim delom *Developmental Logic of Social Systems*, 1978, ki ga omenja tudi Encyclopedia Britannica. Svoje ideje pa sva uveljavljala tudi v okviru Mednarodne sociološke zveze, najprej v Research Committee for Social Ecology, ko smo na osnovi delavnice na FSPN v Ljubljani izdali knjigo *Social Ecology of Change* (1978).

Že po prvih korakih mojega vključevanja v ZDA so presenetljivo hitro sledili drugi. Najprej, že leta 1967, me je Robert Agger povabil k sodelovanju v komparativni raziskavi, ki je poizkušala ugotavljati možnosti za eksperimentalno spremembo stališč prebivalcev lokalne skupnosti do izobraževanja (*ATE – Attitudes toward education*). V zvezi s tem sem kot raziskovalec v prvem polletju 1968 deloval na University of Oregon v kraju Eugene. Študijo s področja ruralne sociologije sem napisal za Cornell University v Ithaci. Na University of North Carolina, Chapel Hill, sem se zblížal s Jackom Kasardo, s katerim sva skupaj delovala tudi v ISA; še zlasti pa s Craigom Calhounom, ki je pozneje postal predsednik Social Science Research Council (SSRC) v ZDA pa tudi direktor London School of Economics. S Fredom Riggsom z Univerze na Havajih sem sodeloval v posebnem mednarodnem omrežju, posvečenem globalizaciji. Predaval sem tudi na SUNY v Buffalu in nastopil v razpravah na tamkajšnji televiziji.

Paradoksalna se zdi ugotovitev, da smo dostikrat prav po ameriških povezavah vzpostavljali stike z evropskimi kolegi in mednarodnimi ustanovami. To je bilo v času, ko je bila sociologija v Evropi še nepovezana; šele postopoma se je ta povezanost krepila, ko je zaživela ESA (European Sociological Association).

Retrospektivno torej ocenjujem sodelovanje z ameriškimi družboslovci kot spodbudno za uveljavljanje sociologije pri nas. Njihova spoznanja so bila za nas bodisi neposredno uporabna bodisi so spodbujala kritične odzive in sociološko reflektivnost.

# MARKO MUŠIČ<sup>1</sup>

## *Pismo iz Amerike*

### ***V Muzeju moderne umetnosti***

Ali je to sploh mogoče – na enem mestu to, kar pomeni umetnost tega stoletja? Na enem mestu – kot oaza sredi brezimnosti, poslovnosti in špekulacije? Ne vem, kje naj začnem. Ali pri razstavi umetnosti »mašinskega veka«, kjer se ob imenitnih primerkih zgodovinskih izumov – med njimi je tudi slavni Fullerjev avto iz leta 1930, edini ohranjeni primerek, ki so ga letos slučajno odkrili – zvrstijo dela Légera, Picabia, Delaunaya itn.; lahko si predstavljáš, kako sem obstrmel pred Delaunayevim rdečim *Eiffelovim stolpom*, ki sem ga tolikokrat vpijal vase v reprodukcijah. Pa dalje: ob vsem tem še vsemogoči in nemogoči optični stroji, najboljši in zelo impresivni primerki kinetične in elektronske umetnosti, ki dajo misliti in ki jih prav gotovo ni mogoče zanikati; saj pomeni to, kar je bilo, denimo za Picabio vrteč se sistem kolesja ali za Delaunaya predrzna, nebo parajoča konstrukcija, nam mladim sistem elektronskih možganov ali odkritje fiziološke kemije. Nisem sanjal, da bom kdaj videl izvirne skice in model Tatlinovega spomenika Internacionala ali Corbusierov natečajni model za Centrosojuz v Moskvi iz leta 1931. Čeprav so ti modeli že časovno odmaknjeni, so vendar danes kar-seda aktualni. Zraven so skice Miesa van der Roheja iz leta 1920, dobro znan izbor pohištva Mackintosha, skice Guimarda, Rietvelde, Wrighta, Le Corbusiera idr. Vse to me je res pretreslo in sprašujem se, koliko smo napredovali od tistih časov in zakaj nismo bolj, kot smo.

Stalna zbirka slikarstva je takšna, da se le težko premakneš iz sobe v sobo. Predstavljen je najlepši izbor De Chirica, pa Dégasa, Gauguina in Van Gogha, in tudi Picassa; v posebni dvorani je razstavljena njegova

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<sup>1</sup> Akad. Mušič se je kot štipendist Fordove fundacije izpopolnjeval pri Louisu I. Kahnju v Filadelfiji.

*Guernica*, ki je bila zame danes eno najpretnesljivejših doživetij. Ob njej so razstavljene tudi delovne skice, fotografije itn. Kiparski del je morda nekoliko manj reprezentativno in skrbno zbran, so pa tu vendarle krasne Picassove, Dégasove in Modiglianijeve plastike, cela soba je posvečena Brancusiju, tu je tudi več Calderjevih in Pevsnerjevih del. Menda je najpomembnejši izbor del razstavljen v atriju, ki pa je danes na žalost zaprt. Vendar skozi steklo lahko razpoznam Rodinovega *Korakajočega moža* in *Balzaca* in slavno Picassovo *Kozo*, ob njej pa v višino desetih metrov povečan model Tatlinovega spomenika.

Pojmovanje in odnos Američana do umetnosti je vsekakor precej drugačen od tistega, ki ga ima Evropejec. Dopoldne – danes je prosta sobota – sta opera in teater polna mladih, tudi tu v muzeju je vse nabito polno. Res je, da se zelo sproščeno vedejo, jedó in se smeji, toda vsaj prišli so in moderni umetniki jih na vse mogoče načine skušajo zaposliti in pritegniti k razstavljenim delom. Rauchenberg na primer je uporabil mikrofone, ki registrirajo obiskovalčev glas, po njegovi jakosti in artikulaciji s posredovanjem luči osvetljujejo njegovo zadnjo transparentno tridimenzionalno »grafiko«. Ni nobenega dvoma o tem, da gre za velikianski premik v bistvu in značaju umetnosti. Od zaprtega kroga posvečenih, ki je dojel in zasnoval vsaktero fineso, je zdaj eksplodirala množica, za katero je treba delati; dati ji je treba umetnost, ki bo tudi njena.

### ***Spoznanja ob Kahnovi arhitekturi***

Kar je zame posebno presenetljivo, je to, da je učinek, če gledamo njegova dela, popolnoma drugačen od vtisa, ki ga dobimo, če gledamo skice, risbe ali celo modele. Vse to se zdi na prvi pogled okorno, pretirano preprosto, včasih skoraj naivno poenostavljeno, uklenjeno v simetrijo in osnovno geometrijo; v resnici pa gre za močno plastičnost in dinamičnost prostorskega doživetja. Simetrija in osnovna geometrija razpadeta in zapojeta v prostoru in merilu, navdata te z občutkom krepke mehke nesimetričnosti, včasih prav bogate in razigrane plastike. To je, tako se zdi, veliko mojstrstvo. Preprosta sredstva, ki jih uporablja, pa bogatija, ki

jo z njimi doseže, so dosti več vredni od tega, kar dosežejo tolikeri, ki z neznanškimi naporii naravnost krčevito hlastajo po plastičnosti, a v končnem izrazu ta vendarle ni nič polnejša in impresivnejša od Kahnove; manjkata pa ji vse trdno funkcionalno in formalno ozadje in predvsem preprostost.

Odnos do uporabljenega materiala je skrajno čist in pristen, detajli so kar se le da preprosti in fini, izvedba neoporečna. Izreden je njegov odnos do svetlobe. Občutljiv je za različne prehode in prelive ob vsakem trenutku dneva in sezone. S potjo sonca se zgradba spreminja zunaj in znotraj. Pri tem gre tudi za psihološki učinek, saj v preprostosti in jasnosti, ki ju je lahko dojeti, tudi laže opazimo vse te minljive spremembe kakor v preobloženi in komplicirani arhitekturi, pri kateri dolgo pogrešamo trdno oporno oblikovno točko.

Še dosti bolj prevzame dejstvo, da postanejo tako zelo enostavne stvari, ki bi bile drugod videti banalno otročje, v njegovih rokah umetnine. Mi si moramo tolikokrat pomagati z vso mogočo navlako, ker se nismo sposobni dokopati do tistega bistva, tiste osnovne resnice in globokega dojetja; pa tudi ne, da bi to tudi v vsej prvobitnosti izrazili arhaično čisto kot idejno izhodišče. Kakšno veliko delo je potrebno, da prideš tja, kjer je treba šele začeti. Nobenega zadovoljstva ne more biti vse dotlej, dokler ne prideš do rešitev in do sistema, kar se je njemu posrečilo šele skoraj pri šestdesetih letih. Doslej sem si lahko ogledal le njegov biološki laboratorij v Filadelfiji. To je res zgradba, kot se spodobi: plastična in enostavna hkrati, čisti proporci in jasen sistem. Nikakor ne mislim, da je treba vse jemati kot zapoved, še posebej ne po formalni plati, kolikor ne gre za totalnost sistema za odkritje ali ponovno odkritje osnovnega globokega spoznanja o bistvu človeške institucije. Zakaj lahko se zgodi, da zapadeš v malodušje in zdvomiš o tem, kar sam počenjaš. Malodušje premagaš le tako, da se znova zaženeš v delo in iščeš in se ne zadovoljiš že na začetku poti, kakor delajo tisti, ki jih prvi uspehi prevzamejo tako močno, da kasneje zastanejo v razvoju.

*Naši razgledi, 20. junija 1969*



## BORIS A. NOVAK

### *A kot Amerika*

Amerika mi je bila položena že v zibko, podedoval sem jo kot svoj genetski material. Navzven se ta veriga DNK kaže kot nenavadno dejstvo, da imam v Združenih državah približno sto sorodnikov, neprimerno več kot doma, v Sloveniji. To nesorazmerje je posledica velikega emigrant-skega vala, ki ga je sprožila ekonomska stiska na začetku 20. stoletja: moj ded po materini strani, Janez Lužar, se je skupaj s tremi brati izselil v ZDA. Njegovi bratje so našli nov dom v enem izmed največjih slovenskih mest, v Clevelandu v Ohio, Janez pa se je z ženo Angelo in dvema hčerkama, ki sta se tam rodili, vrnil v vas Žalna na Dolenjskem. Do konca svojih dni pa je s ponosom izjavljal, da je Američan, kar sem upesnil tudi v *Zemljevidih domotožja*, prvi knjigi epa *Vrata nepovrata* (založba Goga, 2014):

Naš ded Janez je bil Američan.

Skupaj s še tremi brati se je pred sto leti  
odpravil v Ameriko,

s parnikom iz Trsta, čez prostran,

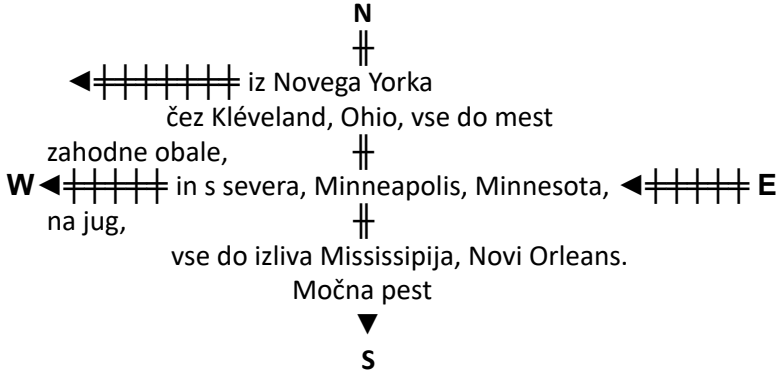
bleščeč prepad razvalovanega Atlantika,  
do vélikega cilja na Ellis Island. Vse odtlej  
ga je v srčnem žepu grela razglednica

Kipa svobode in izkaznica, ki ne priznava mej,  
kjer je bilo zapisano ime *John*.

*Go to the West,*

*young man, go to the West ...* In je šel naprej,





mu je prišla prav: tedaj so gradili hitra pota  
 železnih tirov, in tako je postal železničar.  
 Vseh garaških romanj nepresežni vrh in vsota

pa je bil kolodvor v Chattanooga, Tennessee – star  
 in pravljичno okičen ...

Osemdeset let pozneje  
 sem njegov vnuk pripotoval v ta južnjaški čar

na povabilo pesnika, prijatelja Ricka. Meje,  
 ki jih je zakoličila železna zavesa,  
 so se tedaj že krušile. In ravno tam me je

obsedla zgodba deda, ki ga nisem níkdar srečal,  
 ker je umrl tik po mojem rojstvu, v daljni Žalni ...  
 John se je vrnil v Slovenijo in spet postal Janez.

Imel je smolo. Preostali bratje so ostali  
 in postali pravi Američani. Onstran luže imamo danes  
 več žlahte kot doma ... Za to rodbinsko kroniko

je pomenljiv apokrifni prizor, ko je amerikanstvo  
povratnika prišlo do neverjetnega izraza ...  
Pisalo se je leto štiriinštirideset. Domobranstvo

je vladalo v Žalni. Le tri hiše – blazna,  
pogumna odločitev – so bile partizanske,  
med njimi Janezova. Neko noč je tiha, jasna

jazz glasba z Radia London prebudila lanske,  
daljne spomine deda Janeza na čas,  
ko je bil še *young John*. Vsi šumi in nevihtne praske

niso mogli zadušiti ritma, ki ga je sunil pod pas,  
da je ponôrel: vojaška godba Glenna Millerja  
je igrala *Chattanooga choo-choo!* – Na ves glas

je navil radio, odprl okno in zakričal, da je temà  
odmevala do zvezd: *Slišite to glasbo, Žalci?!*  
*V tej vojni bo zmagala tista vojska, ki ima*

*tako močan ritem! ...*

Ga je kdo slišal? So si mislili: starci  
so nori ...? Čudno, da ni padla prav nikakršna ovadba.  
Človečnost? Ali to, da so bili drug drugemu talci,

kot mi je nekoč zaupala teta Nada?  
Janezov sin Janez je bil pri partizanih.  
Tudi Janezov zet Janez je bil pri partizanih.

Zet Tone pa takisto ...

Kakor koli že: v tisti blazni

noči je v starem Janezu spet vstal John, *so young and strong*,  
in je na ves glas pel in plesal, pel in plesal in vpil:

*Slišite, žalci?! Slišite, ta beli?!*

*Zmagali bomo mi, Američani!*

Ne da bi se sprva zavedal, Johnov vnuk že vse življenje ponavljam zgodbo svojega deda in njegove navezanosti na Ameriko. Ta fascinacija se je začela z mladostnim odkritjem ameriške literature in kulture ter se obrnila v kritiko z demonstracijami zoper intervencijo v Vietnamu in Iraku; doživela je izpolnitev z dvema daljšima bivanjema na ameriških univerzah v Minnesoti (Minneapolis) in Tennesseeju (Chattanooga) ter dramatičen vrhunec med vojno za Slovenijo, ko sem na sledi svojega deda klical Ameriko na pomoč. *Čas očetov*, druga knjiga epa *Vrata nepovrata* (2015), upesnjuje grozo 20. stoletja in se konča z razpadom Jugoslavije in neodvisnostjo Slovenije; tu kombiniram dramatične prizore odpora zoper agresijo t. i. Jugoslovanske ljudske armade in intimne prizore umiranja svojega očeta:

... V nedeljo zjutraj (sem) najprej šprintal k tašči, ki si je težko predstavljala, kaj se dogaja, in jo brž odpeljal v zaklonišče – in zajel me je srh antiutopije ...

Zamudniki smo tekli s ključovalnim smehom temnega veselja, saj so vsi radijski in TV-programi objavljali alarmantno vest, da so bombniki v zraku ... – mene pa je navdala želja,

da bi se zlagoma sprehajal skozi rastočo praznost cest ... – a mi je zmanjkovalo časa, tik pred deveto uro – koncem sveta, predvidenega bombardiranja Ljubljane – sem čez

center praznine pritekel do Gregorčičeve, zamolklo sonce  
se je še skrivalo za sivimi oblaki, kakor tudi bombniki,  
mama je že bila pripravljena, bledih lic, a mirnih živcev,

prepričevala sva očeta, naj se že obleče in ji sledi  
v zaklonišče, on pa se je le smehljal in naju miril:  
*Brez panike, ne bodo bombardirali*, njo s toplimi

očmi, ganjen nad njeno skrbjo, mene pa z ironičnimi  
pogledi starega bojevnika, ki ga spravlja v zadrego  
bezljanje neizkušenega sina, mama se je s sôlzami

odpravila v zaklonišče, jaz pa se nisem rešil z begom,  
kar je očeta vidno presenetilo, telefoniral  
sem sorodniku Dennisu, z ameriškim kongresnikom

in *speakerjem* Demokratov sem pogosto komuniciral  
v tistih negotovih dneh, *Kaj pa ti je dejal naš Dennis*,  
je oče posmehljivo vprašal, jaz pa sem mu, poln nemira,

razložil, da je bil naš Dennis čisto miren, *To je tenis*  
*vojaških groženj*, mi je rekel oče, *Dennis že ve*,  
*nič se ne bo zgodilo, danes že ne, nebo se peni*

*le od oblakov, ne od bombnikov, že čez tri mesece*  
*pa bo preklemano hudó, Hrvaška, Bosna, Kosovo,*  
*to me skrbi*, in mi je jel razlagati statistične

podatke o razpadu gospodarstva, ki da kliče vojno,  
molčé sem ga poslušal, kot zmeraj je tudi tokrat imel prav,  
ta urica mi je ostala vrezana v spomin s prosojno,

nestvarno avro zadnjega trenutka, preden je čas obstal  
in podivjal s hitrostjo, ki se je ni dalo več ustaviti,  
skadila sva pol škatlice, hvaležen mi je bil, da sem ostal

z njim, in nato sem mu rekel, in ta stavek je z utežmi  
preloma zaznamoval preostanek njegovega življenja:

*Vseeno pa bi se lahko oblekel in odšel v zaklonišče,*

*ne zaradi mene in ne zaradi sebe, ampak zaradi mame ...*

Pogledal me je presenečeno, kot da me prvič vidi

– morda se je najin odnos takrat dokončno spremenil,

morda sem sin takrat postal oče lastnemu očetu –,  
molčé je vstal in se čez pet minut spet pojavil, oblečen  
v svojo najboljšo obleko ... V tistem hipu je sirena

zatrobila konec zračnega alarma, mama se je vrnila  
iz zaklonišča, oče pa je tri naslednje mesece preždel  
v tej isti, najboljši obleki .....

..... oče pa je tri poslednje mesece kopnel  
iz te iste, najboljše obleke .....

nad katero so se večale njegove veke .....

Telefonski pogovori s kongresnikom Eckartom pa niso bili moj edini  
stik z ameriško politiko v tem zgodovinskem trenutku. V dolgem, vro-  
čem poletju 1991 sem bil član t. i. »vojne redakcije« Nove revije, ki  
je danonočno dežurala na Cankarjevi cesti in obveščala svet o resnici  
vojaške agresije; borili smo se na fronti »vojne za interpretacijo«. Spon-  
tano smo organizirali ožjo uredniško skupino, v kateri smo bili Niko  
Grafenauer, Drago Jančar, Jaroslav Skrušny, Tomaž Zalaznik, Gordana  
Vrabec in jaz. Poleg Slovenskega PEN-a in Mirovnega komiteja Med-

narodnega PEN-a, ki ga je ustanovil in vodil Miloš Mikeln, je bila Nova revija poglavitni informacijski center slovenske civilne družbe med vojno. Prav s sedeža Nove revije so šli v svet nekateri ključni pozivi, ki so jih nato povzemali mednarodni mediji. Obenem sem kot predsednik Slovenskega PEN-a napisal javno sožalje staršem vseh padlih vojakov, tako slovenskih kot jugoslovanskih, ter pozval Slovence, naj ščitijo svoje sosede drugih narodnosti. Del dokumentacije teh neskončnih, kratkih, neskončno kratkih dni in noči je bil nato zbran v angleški publikaciji *The Case of Slovenia*, pri kateri je uredniško pomagala tudi Alenka Puhar.

Mjuša Sever, tedaj novinarka CNN-a, mi je dala telefonsko številko dr. Chrisa Bugajskega, direktorja Republikanskega centra za strateške študije v ZDA. Poklical sem ga. Po našem času je bila ura dve ponoči. Kolegi so po nekaj dneh in nočeh nenehnega garanja izčrpani zadremali za uredniško mizo in po kotih. Po uvodnem preverjanju me je dr. Bugajski vprašal, ali bi imel kaj proti pogovoru s širšim krogom poslušalcev. Predlog sem sprejel. V nekaj minutah so uredili tehnične zveze. Nato me je seznanil, da me posluša približno 150 ljudi, da mi bo pa vprašanja zastavljala skupina petih, šestih sogovornikov. Najprej jih je seveda zanimalo, kdo da sem in v čigavem imenu kličem; predstavil sem delovanje Nove revije in Slovenskega PEN-a. Potipali so me, kakšne so moje zveze z ZDA. Ko sem razložil, da sem poldrugo leto gostoval na dveh ameriških univerzah in da je moj sorodnik kongresnik Dennis Eckart, sem začutil, da mi zaupajo kot verodostojni priči dogajanj v nekdanji Jugoslaviji. Morda so mi tako pozorno prisluhnili tudi zato, ker sem spričo beograjskega otroštva ter sorodniških in prijateljskih vezi po vsej Jugoslaviji natančno poznal vso kompleksnost vzrokov za krvavi konflikt; nisem govoril iz nacionalističnega sovraštva do drugih narodov, ampak iz skrbi za usodo Slovenije in ogorčenja spričo vojaške agresije. Pogovor je trajal dobro uro in pol, morda dve uri. Zavedal sem se, da gre za pomemben dogodek, ves njegov pomen pa sem spoznal šele nekaj let pozneje, ko je dr. Bugajski obiskal Slovenijo in v uradnem komuniqueju razgrnil, da je bil moj telefonski pogovor edini neposredni stik Slovenije

z Belo hišo med vojno, češ da ameriška diplomacija takrat ni zaupala uradnim slovenskim strukturam in je blokirala vse poskuse slovenske vlade za pogovor z najvišjim vodstvom ZDA; enako je ponovil na javnem pogovoru v Klubu Nove revije. Ta informacija je bila eksplozivna, a je noben medij ni objavil in nanjo nihče ni reagiral; edini telefonski pogovor z Belo hišo med vojno je postal žrtev zagrizenega boja politikov za zasluge pri osamosvojitvi Slovenije, meni pa je bilo pod častjo, da bi se javno hvalil z dejanjem, ki sem ga razumel kot svojo dolžnost.

Po zaslugi enoglasne volje in obrambe je slovensko ljudstvo doseglo neodvisnost; število smrtnih žrtev je bilo relativno majhno, a smo jih doživljali kot tragedijo in šok, šlo je za prvi oboroženi konflikt v Evropi po koncu druge svetovne vojne. Mednarodna skupnost, vključno z Združenimi državami Amerike, je hitro priznala Slovenijo kot neodvisno državo. Diplomati, ki so se zgrinjali v Ljubljano, prestolnico novoustanovljene države, pa so se soočali s praktičnim problemom, kje in kako najti zgradbe, primerne za ambasade in rezidence. Nekega jesenskega dne l. 1992, ko sem v Pisateljski hiši na Tomšičevi 12 organiziral humanitarno pomoč za begunce iz nekdanje Jugoslavije in pisatelje iz obleganega Sarajeva, je na obisk prišel g. Allan Wendt, prvi ameriški veleposlanik v Sloveniji. Bil sem presenečen. Po uvodni kavi me je prosil, naj mu razkažem hišo. Obraz se mu je razlezel v zadovoljen smehljaj; potrkal je na les elegantnega starinskega pohištva in vzkliknil: *»To je perfektno! V veliki sobi sestanki, v prvem nadstropju restavracija, na vrtu pa zabave za četrty julij!«* Z grozo sem doumel, da je njegova ekscelenca, gospod veleposlanik, prišel kupit našo Pisateljsko hišo za ameriško ambasado. In tedaj sem izrekel najboljši stavek svojega življenja: *»Z vsem dolžnim spoštovanjem, ekscelenca, ampak Združene države Amerike nimajo dovolj denarja, da bi kupile to hišo.«* Pogledal me je osuplo; očitno nikoli v življenju ni slišal takega stavka. *»Mene so drugače informirali,«* je vljudno odvrnil. A bil je gospod in profesionallec, zato sva se poslovila s stiskom roke in s prešernim smehom. In je z urnim korakom – bil je slok in atletsko grajen – odšel iskat drugo lokacijo za svojo ambasado. In jo

je kmalu našel, in zelo blizu, in še večjo, in še lepšo od naše Pisateljske hiše: vilo na drugi strani Prešernove ceste, kjer je svojčas domovala Tehniška knjižnica. Tako je ameriški ambasador postal naš sosed. Dalj-na Amerika je prišla blizu, zelo blizu.

Pravzaprav pa mi je bila Amerika zmeraj zelo blizu.

Danes mi je iz časovne distance jasno, da že vse življenje ponavljam zgodbo svojega deda Janeza, železničarja Johna, Američana. Resda sem večkrat demonstriral zoper politiko Združenih držav in pogumno branil Pisateljsko hišo, da ni postala ameriška ambasada, toda – toda – koga sem poklical v trenutku najhujše nevarnosti? Koga sem v trenutku najgloblje stiske poklical na pomoč? Američane!



Slovenski pesniki Boris A. Novak, Dane Zajc, Aleš Debeljak in Milan Dekleva (spodaj) v hiši ameriškega pesnika Richarda Jacksona, Chattanooga v Tennesseeju marca 1991 (iz osebnega arhiva Borisa A. Novaka) / *Slovenian poets Boris A. Novak, Dane Zajc, Aleš Debeljak and Milan Dekleva (below) at the home of American poet Richard Jackson, Chattanooga, Tennessee, March 1991*



## JANEZ OREŠNIK

### *Moji bivanji v ZDA*

Uvodna pripomba: morda je koristno vnaprej vedeti, da sem se med 1959 in 1987 posvečal predvsem skandinavskemu jezikoslovju.

#### ***Prvo bivanje***

Leta 1968 sem prejel eno izmed štipendij ameriške ustanove IREX (International Research and Exchanges), razpisanih v Jugoslaviji. Avgusta 1969 sva s soprogo stopila na ameriška tla v New Yorku. Tam smo vsi štipendisti IREX-a opravili enomesečni tečaj angleščine. Nato smo se udeleženci tečaja preselili na svoje izbrane univerze, v mojem primeru na Harvard (kot je bilo vnaprej dogovorjeno s pomočjo Einarja Haugea, profesorja skandinavistike na Harvardu). Po prihodu v Cambridge v Massachusettsu sem se vpisal na univerzo, dali so mi status *auditorja* in mi kot mentorja dodelili prof. Einarja Haugea. Brez omejitev sem smel obiskovati predavanja (to pravico so dali tudi moji soprogi) in uporabljati legendarno knjižnico Widener Library. Imel sem tudi dostop do predavanj na bližnjem M.I.T.

Moja vnema za udeležbo na predavanjih je hitro splahnela, kajti pouk je bil zvečine za dodiplomski študij, sam pa sem prišel v ZDA z doktoratom. Oba semestra sem poslušal samo predavanje prof. Noama Chomskega na M.I.T. Sicer pa sem se osredinil na znanstveno delo v Widener Library, kjer so mi uvidevno dodelili mizo zraven polic s publikacijami o islandskem jeziku (ki je bil glavni predmet mojega zanimanja). Nikoli nisem videl, da bi kdo razen mene uporabljal te knjige. Zbirka je bila sijajna; le redko sem kak naslov iskal zaman. Samo časopisi so bili drugje. Vrhu tega sem imel prost dostop do skoraj vseh polic knjižnice, ki je bila odprta noč in dan. V knjižnici sem preživel večino dni obeh semestrov.

Moj glavni namen je bil napisati podroben članek o neki morfološki posebnosti islandskega jezika, ki je islandoslovci dotlej še niso prepoznali: pojavljanje »šibkih« konjunktivov preteklika pri sicer »krepkih« glagolih. Potrebno gradivo sem bil zbral med bivanjem v Reykjaviku v 1965/66. Članek naj bi zajel filološke in opisne značilnosti ter poskus razlage pojava. Delo je trajalo do maja 1970. Takrat sem rokopis predal mentorju in on je svetoval objavo na Švedskem (Orešnik 1971).

Sicer pa je bilo priložnostnih dogodkov precej, tudi družabnih (v kampusu in zasebnih hišah), tako da sva s soprogo pridobila veliko novih znancev, predvsem med jezikoslovci, še zlasti med slavisti, ki so zaradi najine slovanske materinščine, slovenščine, potrebovali in cenili stik z nama. Z večino sem ohranil zvezo dolga leta, na začetku s pismi, pozneje po elektronski pošti, z nekaterimi pa sem se srečeval tudi na konferencah in kongresih. Nekateri so prihajali na obisk v Ljubljano kot turisti ali kot predavatelji na jezikovnih oddelkih univerze in v Lingvističnem krožku. Pred dokončnim umikom iz javnega življenja sta me v Sloveniji obiskala tudi moj mentor prof. Haugen in njegova soproga; ker je vladala poletna vročina, smo skupaj preživeli dneve v gorski dolini.

Bivanje v ZDA nama je bilo dovoljeno še tri mesece. Junija sva na avtobusih Greyhound, ki so vozili med večjimi mesti, prepotovala del ZDA. Najprej od Bostona prek Washingtona DC, Virginije, Severne Caroline in Georgije do New Orleansa, nato proti severu ob reki Misisipi tja do mesta Milwaukee, Wisconsin (kjer sva obiskala stare znance). Tu in tam sva potovanje prekinila zaradi ogleda znamenitosti. Vso pot sva varčevala, kar se je dalo. Prenočevala sva v t. i. five-dollar hotelih, kjer si je bilo treba rezervirati sobo daleč vnaprej, tako da so nama te rezervacije vsilile napet vozni red; uspelo nama je, da sva se ga držala celo potovanje.

Julija sva se udeležila poletne šole Ameriškega jezikoslovnega društva na univerzi države Ohio v mestu Columbus.

Najino bivanje v ZDA so zaokrožile priprave na vrnitev v domovino. Knjige in posebni odtisi, ki sva jih nabrala med letom (nekaj je bilo daril

kolegov, druge sva kupila), so napolnili devet večjih kosov prtljage. Na srečo sva lahko potovanje domov opravila z jugoslovansko tovorno ladjo, ki je plula na relaciji New York–Reka.

### ***Drugo bivanje***

Moje drugo in zadnje potovanje v ZDA se je zgodilo leta 1975 in je trajalo samo en teden. Nameraval sem se udeležiti mednarodne skandinavistične konference na državni univerzi Teksasa v mestu Austin. Žal sem dva meseca pred načrtovanim odhodom iz Ljubljane zbolel tako močno, da sem moral ostati v bolnišnici šest tednov, in še dolgo po tem bivanju sem moral jemati zdravilo, ki mi je povzročalo motečo zaspanost. Ker sem prispevek za konferenco pripravil že pred boleznijo, oddal pa tudi prijavo za konferenco (prijava je vključevala letalsko vozovnico in bivanje v Austinu), sem mesec dni po bolnišničnem zdravljenju sam opravil polet od Luksemburga prek Reykjavika do New Yorka. Tam sem prespal pri znancih in naslednje jutro z drugega letališča nadaljeval polet proti Austinu.

V Austinu sem večino časa prespal, na konferenco sem šel samo prebrat svoj prispevek (objava Orešnik 1978), udeležil sem se enodnevnega ogleda lokalnih znamenitosti (ogled so pripravili prireditelji konference) in bil na zasebnem obisku, a tam nisem mogel sodelovati v pogovoru, ker se zaradi zaspanosti nisem mogel spomniti nekaterih najbolj navadnih angleških besed. Po enem tednu sem z letalom odpoštoval v Evropo in se srečno vrnil v Ljubljano.

V gimnazijskih letih sem si izposojal jezikoslovne knjige v Ameriški knjižnici pri Generalnem konzulatu ZDA v Zagrebu. Poštno poslani knjigi je bibliotekarka Corinne Spencer včasih priložila pisemce z nekaj besedami spodbude, ki so mi takrat pomenile veliko. Ko sem bil (mного pozneje) v Austinu (glej tu pravkar), žal nisem vedel, da Corinne Spencer preživlja pokoj v Teksasu. Ko bi mi to bilo znano, bi ne glede na zaspanost prepotoval katero koli razdaljo do nje, da bi se ji zahvalil za prijaznost, ki sem je bil deležen od nje kot dijak.

## **Navedenki**

Orešnik 1971 = Orešnik, Janez. 1971. On some weak preterite subjunctives of otherwise strong verbs in Modern Icelandic. *Arkiv för nordisk filologi* 86, 139–78. Lund.

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## GREGOR SERŠA

### *Fulbrightova štipendija je zagotovila zgodnji razvoj moje kariere*

Kot diplomant s področja biologije sem se zaposlil na Onkološkem inštitutu Ljubljana v Imunološkem laboratoriju pod vodstvom prof. S. Plesničarja. To je zaznamovalo začetek moje kariere, saj sem odtlej zaposlen na tej ustanovi. Že od začetka sem bil uveden v raziskovalno smer, hkrati pa sem opravljal rutinsko laboratorijsko delo. Svoj magistrski študij sem končal na Medicinski fakulteti Univerze v Ljubljani in nato nadaljeval izobrazbo na doktorskem študiju.

Na Onkološkem inštitutu Ljubljana so bila raziskovana številna področja, večinoma na kliničnem in diagnostičnem nivoju. Raziskovanje na predkliničnem nivoju je bilo še v zgodnjih fazah razvoja, zato primeren doktorski program ni bil na voljo in kot mladi raziskovalec še nisem bil kvalificiran za iskanje primernih znanstvenih vprašanj. Poleg tega so bili tehnološki pristopi in raziskovalna oprema še zelo osnovni, zato so bile priložnosti omejene.

V iskanju ustreznega usposabljanja na področju eksperimentalne onkologije sem iskal priložnost, da dobim štipendijo v tujini. V časopisu sem našel oglas za Fulbrightove štipendije doktorskega programa. Prijavil sem se in že med prvim razgovorom je bilo jasno, da bo konkurenca huda. Prvi razgovor je bil na Univerzi v Ljubljani in očitno sem prestal prvo oviro, saj sem bil kasneje povabljen v Beograd, da opravim izpita TOEFL (Test of English as a Foreign Language) in GRE (Graduate Record Exam). To je bila izjemna izkušnja; teh izpitov se je udeležilo veliko študentov iz vseh delov republike Jugoslavije. Rečeno mi je bilo, da bom opravljal GRE-test iz vseh predmetov diplomskega študija biologije, in ker se nisem imel časa učiti, sem se odločil opravljati izpit le z že osvojenim znanjem. Prepričan sem bil, da izpita ne bom opravil. Vendar sem

med izpitom ugotovil, da je bil naš diplomski program tako dober, da sem se spomnil večine snovi, ki jo je zajemal izpit. Vseeno se na žalost nisem spomnil vseh odgovorov. Po izpitu sem se vrnil v Ljubljano. Minilo je nekaj časa in dobil sem novo povabilo. Tokrat za sestanek v Beogradu, kjer so prisotnim 20–30 študentom na moje veliko presenečenje povedali, da smo bili izbrani za doktorski študij v ZDA. Le dva sva bila iz Slovenije. Ko sem se vrnil domov, sem povedal, da sem dobil štipendijo in da bom najverjetneje moral iti v ZDA. Vendar sem še zmerom dvomil, da je to to, in upal, da ni resnično. Ponovno sem bil presenečen in šokiran, ko je v moj poštni nabiralnik prispela letalska vozovnica za ZDA.

Zdaj je bila na vrsti odločitev, kam iti! Takrat še ni bilo interneta, in ko sem iskal univerze je moj mentor prof. Plesničar predlagal: »Poznam prof. Luko Milasa v M.D. Anderson Hospital v Houstonu. Poklical ga bom in vprašal, ali bi te bil pripravljen sprejeti pod svoje okrilje.« Po pogovoru me je bil prof. Luka Milas pripravljen sprejeti v svoj laboratorij Eksperimentalne radioterapije na Oddelku za radioterapijo. Bil je vodja laboratorija in imel je svojo skupino raziskovalcev. Ko sem prišel, mi je povedal, da bom delal na vlogi TNF- $\alpha$  (Tumor Necrosis Factor alfa) in njegovi radisenzibilizaciji. Ni se mi sanjalo, kaj to pomeni. O TNF- $\alpha$  nisem vedel ničesar, pa tudi izkušenj na področju radiobiologije nisem imel. In tako se je vse začelo s temo, ki je nekako še vedno vključena v naše današnje delo.

Usposabljanje je bilo intenzivno, z veliko eksperimenti in trdim delom od jutra do večera. Sodelavci so me kmalu sprejeli medse in mi pomagali vsakič, ko sem potreboval pomoč. Posebno se spomnim tehničarke Nancy. Imela je izkušnje z vsemi laboratorijskimi tehnikami in je znala izvesti kakršenkoli eksperiment, ki ga je Luka načrtoval. Spomnim se dni, ki sem jih preživel v živalskem laboratoriju, kjer sem zdravil in obseval miši. Kadarkoli sem srečal Luko v laboratoriju, me je vprašal po rezultatih. Odgovoril sem mu, da eksperiment še ni zaključen, zato me je vprašal po vmesnih rezultatih. In tako sem skoraj vsak večer računal rezultate, na osnovi katerih me je Luka ponovno poklical in rekel:

»Zdaj lahko načrtujeva naslednji eksperiment.« Tako sem se naučil, da s poskusi vedno nadaljuješ, ko si prepričan, da tvoj prvi eksperiment podpira tvojo hipotezo. Še ena lekcija, ki sem se je naučil in jo še vedno uporabljam, je, da je treba skrbno nadzorovati svoje študente, in kadarkoli se zdi, da imajo manj dela, z njimi načrtovati nov eksperiment.

Luki sem hvaležen za vse izkušnje in predvsem usposabljanje, ki mi je pomagalo skozi mojo kariero. Poleg profesionalnih izkušenj sem se od njega naučil tudi vodenja in o tem, kako se usmerjati skozi želeno znanstveno področje. Odpeljal me je na poslovna srečanja, ocenjevalna zaslišanja programa njegovega laboratorija in celo na poslovna kosila. Skozi vse to sem se veliko naučil o tem, kako voditi laboratorij, in vzpostavil poslovna poznanstva, tudi z ljudmi, ki so bili v tistem času vodilni na tem področju. Kadarkoli sem jih pozneje kontaktiral, so se me spomnili in mi vedno pomagali.

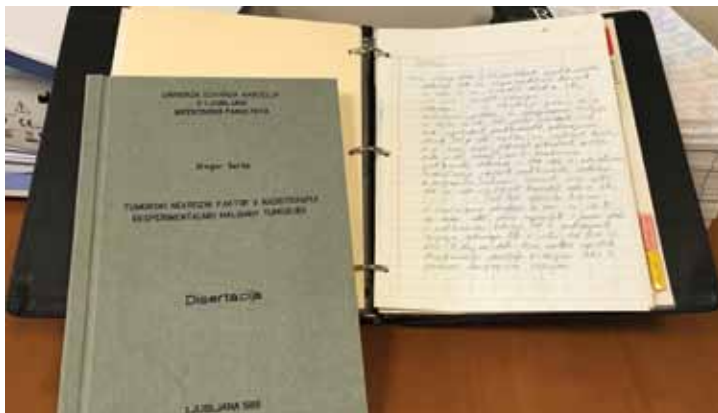
Ker sem se udeležil doktorskega programa samo za izvajanje eksperimentov, se je štipendija končala po enem letu. Nameraval sem izvesti vse eksperimente v ZDA in se nato vrniti v Slovenijo na zagovor doktorata. Razloga sta bila, da me je v Ljubljani čakalo delovno mesto in sem bil že precej star za polni doktorski program.

Vendar sem bil po enem letu še vedno sredi poskusov, ki sem jih seveda pridno opravljal, zato mi je bolnišnica M.D. Anderson podaljšala čas za izvajanje eksperimentov; te sem nato končal v naslednjih sedmih mesecih. Poleg dela na svoji doktorski temi sem dobil še dodatno temo, ki sem jo končal tudi v tem času. Po težkem dnevnem delu sem zvečer ročno pisal doktorsko delo, saj sem vedel, da bom po vrnitvi v Slovenijo izgubil zagon za pisanje (gl. sliko). Rezultati tega dela so bili objavljeni v dveh pomembnih mednarodnih revijah: *International Journal of Cancer* in *Cancer Research*.

Vzdušje v laboratoriju je bilo dobro, prijateljsko, pa tudi tekmovalno. Trdo smo delali, a se skupaj tudi zabavali – igrali ragbi ali šli plavat. Sodelavci so na domu prirejali zabave za različne dogodke in tudi Luka me je pogosto povabil domov. Postala sva dobra prijatelja.

Tako sem bil navdušen nad delom, ki sem ga opravljal v Houstonu, da sem razmišljal o tem, da bi se po končanem doktorskem študiju v Sloveniji vrnil. Tudi Luka me je večkrat poskušal prepričati, naj se vrnem, a se je življenje obrnilo drugače. Svojih odločitev ne obžalujem, saj mi je izkušnja v Houstonu dala moč, me vodila k vzpostavitvi lastne laboratorijske skupine na Onkološkem inštitutu v Ljubljani in uporabi prejetega znanja za razvoj našega raziskovalnega področja. Zdaj, v poznejši fazi moje kariere, bi rad rekel, da vedno bolj cenim pridobljene izkušnje, saj jih še vedno uporabljam pri načrtovanju in ocenjevanju današnjih eksperimentov.

Drugo leto v Houstonu sem bil povabljen na večerjo ob zahvalnem dnevu pri prof. Billu Brocku. Tam se je razvila debata o programu Fulbrightovega štipendiranja, pri tem pa je imel eden izmed gostov močne argumente proti ameriški vladi. Menil je, da ZDA nespametno trošijo denar za pridobivanje znanja tujih študentov, ki ga potem odnesejo domov in postanejo tekmeči ZDA. Vendar so po mojem mnenju le-ti njeni zavezniki in ambasadorji znanja, pridobljenega v ZDA.



Osnutek ročno napisane doktorske disertacije v ZDA in disertacija, ki sem jo zagovarjal v Sloveniji. / *The draft of the Ph.D. thesis written in the USA and the dissertation I defended in Slovenia.*



## UROŠ SKALERIČ

### *Moje izkušnje z delom in bivanjem v ZDA*

Leta 1972 sem se po enoletnem delu na zasebni kliniki v Palermu odločil za nadaljevanje študija na tretji stopnji magistrskega študija na MF v Ljubljani. Po opravljenih izpitih sem iskal temo za magistrsko delo. Ker me je že med dodiplomskim študijem prof. dr. Lojze Brenčič navdušil za parodontologijo, sem odšel k prof. dr. Janku Mullerju in ga prosil za pomoč pri izbiri teme. Prof. Muller je poklical dr. Milana Scharo na Institut Jožef Stefan (IJS) in ga vprašal, ali me sprejme v svoj laboratorij. Prof. Schara je pristal, in tako se je začelo moje »Stefanovo obdobje«. V Laboratoriju za elektronsko paramagnetno resonanco (EPR) sem tako leta 1975 magistriral in leta 1979 doktoriral iz biofizikalnih lastnosti zobne sklenine.

Glede na dejstvo, da je večina sodelavcev IJS po doktoratu odšla na podoktorski študij v tujino, sem se odločil, da tudi sam zaprosim za Fulbrightovo štipendijo. Spominjam se, da je bila ena sama podoktorska štipendija za vse naravoslovne vede v Sloveniji na leto. Štipendijo sem dobil za akademsko leto 1980/1981, ki sem ga preživel na oddelku za parodontologijo Stomatološke fakultete univerze Emory v Atlanti. Prof. dr. Michael Fritz me je vključil v projekt, v katerem smo poskušali prekriti razgaljene zobne korenine s prostimi presadki. Navdušili so me tudi stalni tedenski seminarji in pregled aktualne strokovne literature. Poudarek je bil na sprotne delu specializantov, tako da na koncu specializacije sploh ni bilo zaključnega specialističnega izpita. Sodelavci so me lepo sprejeli, še posebej prof. dr. Steven Offenbacher, s katerim sva razpravljala o možnosti vpliva parodontalne bolezni na zaplete med nosečnostjo in prezgodnji porod. Prof. Offenbacher mi je ponudil službo in kar ni mogel verjeti, da se želim vrniti v domovino, čeprav so bile z menoj tudi žena in obe hčeri. Zato sva se s prof. Offenbacherjem odločila, da bo on projekt nadaljeval na eksperimentalnih živalih, jaz

pa naj bi v Ljubljani poskusil z raziskavami na ljudeh. Po enoletnem bivanju v Atlanti sem se vrnil v Ljubljano, kjer sem z uglednimi ginekologi začel raziskavo o stanju obzobnih tkiv pri ženskah s habitualnimi abortusi. Habitualni abortusi predstavljajo stanje, ko ženska splavi trikrat zapored in zdravniki ne najdejo vzroka za ponavljajoče se splave. Po enem letu je znani profesor ginekologije v recenziji projekta napisal, da so ženske s habitualnimi abortusi nevrotične osebnosti in si zato tudi manj čistijo zobe, in tako je projekt ugasnil. Prof. Offenbacher pa je nadaljeval z delom in nekaj let pozneje objavil, da je pri nosečnicah z vnetjem obzobnih tkiv kar sedemkrat večja verjetnost, da rodijo otroke prezgodaj in z nizko poporodno težo.

V ZDA sem se tudi spoznal s profilom ustnega higienika, ki jih izobražujejo od leta 1913. Tako imajo v ZDA kakih 200.000 stomatologov in prav toliko ustnih higienikov. Zato sem po vrnitvi iz ZDA začel z akcijo za začetek šolanja ustnih higienikov v Sloveniji. Toda strokovne organizacije in oblast še niso dozoreli za začetek šolanja, in tako je ideja propadla. Uresničili smo jo lahko šele čez dvajset let! Več sreče sem imel pri postavljanju interdisciplinarnega Centra za stomatološke raziskave, ki sta ga leta 1987 ustanovila Stomatološka klinika in IJS. Namen je bil na enem mestu združiti zobozdravnike in naravoslovne strokovnjake s področja biofizike in biokemije pri temeljnih raziskavah. Teden dni po ustanovitvi Centra sem z družino spet odšel v ZDA, tudi to pot s Fulbrightovo štipendijo. Drugič sem pristal v Laboratoriju za mikrobiologijo in imunologijo Nacionalnega Instituta za stomatološke raziskave NIH v Bethesdi v Marylandu. Tu je sledilo presenečenje, saj sta moja šefa dr. Stephen Mergenhagen in dr. Sharon Wahl spraševala, kaj bi sploh želel delati. Ker me je zanimalo delovanje prostih kisikovih radikalov, so me vključili v projekt eksperimentalnega artritisa pri podganah. Imel sem dva seva podgan, od katerih je ena razvila artritis po intraperitonealnem vbrizganju celičnih sten streptokokov, druga pa ne. V raziskavi sem ugotovil, da imajo obolele podgane monocite, ki v pogojih *in vitro* sproščajo višje koncentracije kisikovih radikalov, in tako prispevajo k vnetju

sklepov. Povezavo smo potrdili tako, da smo v sklepe injicirali encime, ki odstranjujejo proste radikale, in tako preprečili vnetje, nastanek in razvoj artritisa. Po devetih mesecih bivanja v Bethesdi me je šef prosil, naj pripravim seminar o opravljenem delu. Predavanje sem dobro preстал in približno čez teden dni mi je ponudil delovno mesto na Institutu. Po odobritvi moje matične ustanove MF v Ljubljani sem podaljšal bivanje za eno leto in nato še za eno. Leta 1988 je bila v Washingtonu 40. obletnica obstoja Fulbrightovega programa. Prišel je tudi senator William Fulbright, ki nam je pripovedoval o nastanku programa. Senator je bil predsednik zunanjepolitičnega odbora v Senatu ZDA. Leta 1945 je dobil na mizo fotografije ameriškega bombardiranja Hirošime in Nagasaki. Dejal je, da so ga fotografije pretresle, in verjel je, da je bil ugled ZDA s tem dejanjem prizadet. Zato se je odločil, da sproži akcijo za zakon v kongresu, s katerim bi raziskovalcem in umetnikom omogočili izpopolnjevanje v ZDA in Američanom izpopolnjevanje v tujini. Očitni so mu, da je imel predsedniške ambicije, kar je zanikal. Nadaljnje vprašanje je bilo, koliko bo program stal. Povedal je, da je v 40 letih programa (1948–1988) na izmenjavi sodelovalo približno 200.000 znanstvenikov in umetnikov, kar je ameriško administracijo stalo eno četrtno atomske podmornice. S tem programom se je senator Fulbright zapisal kot eden najbolj svetlih likov v ZDA in v svetu (gl. sliko na str. 194).

Delo na inštitutu je na običajen delovni dan potekalo od 8.30 do 20. ure, japonski raziskovalci pa so delali še dalj časa. Zato so posebno žene japonskih raziskovalcev doživljale travme zaradi osamljenosti. Ker sem bil tudi jaz večino časa na inštitutu, hčerki pa sta bili večino časa v šoli, se je moja žena Alenka odločila za dovoljenje za delo in ga je tudi dobila. Po končani gimnaziji je končala Višjo kozmetično šolo na Dunaju in sprejeli so jo v ugleden *spa* v Bethesdi, kjer je izvajala obrazno nego. Očitno je bila zelo uspešna, saj ji je lastnik po opravljenem nostrifikacijskem izpitu ponudil mesto vodje oddelka. Ženin zaslužek nam je omogočil lažje preživetje, kajti Fulbrightova štipendija je mišljena samo za nosilca, ne pa tudi za vzdrževanje družinskih članov. Kot zanimivost

naj povem, da je k ženi leta 1989 kot stranka prišla ena od direktoric v General Electrics. Rekla je, da je kósila z nekdanjim zunanjim ministrom ZDA Henryjem Kissingerjem, ki je dejal, da bo v Jugoslaviji v kratkem huda bratomorna vojna. Seveda se je takoj razvnela družinska razprava, ali se je varno vrniti v domovino.

Delo na inštitutu je lepo napredovalo predvsem zaradi odličnih raziskovalnih možnosti na NIH. Dnevni seminarji na inštitutih, predavanja Nobelovih nagrajencev in različna raziskovalna oprema omogočajo izvrstne raziskovalne rezultate. Bivanje v ZDA mi je omogočilo tudi nastope na več kongresih in vabljen predavanja na univerzah v New Orleansu, Atlanti, Morgantownu, Los Angelesu in San Franciscu. Interakcije z različnimi tujimi raziskovalci so rodile tudi različne ideje, od katerih so se nekatere tudi uresničile. Tako sem rezultate pri zaviranju artritis na podganah prenesel v Ljubljano, kjer je moj sodelavec dr. Milan Petelin napravil doktorsko disertacijo: v njej je pokazal, da se pri eksperimentalnem parodontitisu pri psih pasme beagle lahko s subgingivalno aplikacijo v liposome zavitih antioksidantnih encimov doseže obnovo obzobnih tkiv. Druga taka ideja, ki sem jo začel razvijati v Bethesdi, je bilo vprašanje, ali virus HIV najdemo tudi v gingivalni tekočini. Po vrnitvi v Ljubljano je na to temo doktorirala dr. Mojca Matičič, ki je ugotovila, da je gingivalna tekočina možen medij za prenos pri pacientih z aidsom.

Poleg raziskovalnih idej sem med bivanjem v ZDA spoznal veliko prijateljev, s katerimi smo se srečevali v tujini in Sloveniji in se srečujemo še danes. Po prihodu v Ljubljano leta 1990 sem za stomatologe na podiplomskem študiju na Centru za stomatološke raziskave organiziral tedenske seminarje v angleškem jeziku. Rezultati so večje število magistrskih del in doktorskih disertacij in izvolitve sodelavcev v učiteljske nazive. Delo v ZDA in poznavanje vodilnih svetovnih parodontologov mi je tudi omogočilo izvedbo skupnih kongresov in vodenje različnih mednarodnih organizacij. Naj sklenem z mislijo, da sta bili moje delo in bivanje v ZDA koristni in uspešni in sta pomembno vplivali na moj strokovni razvoj in posledično tudi na razvoj slovenske stomatologije.

## MARKO SNOJ

### *Slovenistika prek luže*

#### *Cisatlantski pogled*

Za primerjalnega jezikoslovca angleščina in angleško govoreče dežele vse do konca 20. stoletja niso bile pretirano zanimive. Glavni tok indoevropskeistične komparativistike je bil tradicionalno v Nemčiji in Avstriji, slovansko primerjalno jezikoslovje pa je bilo bolj razvito v središčih s kakim močnim etimološkim projektom, predvsem v Moskvi in Krakovu. Medtem ko je Britanija kljub dejstvu, da je utemeljitelj primerjalnega jezikoslovja William Jones (1746–1794) rojen Anglež, ostala na obrobju primerjalnojezikoslovnih prizadevanj, so nekatere univerze v ZDA po zaslugi prodornih posameznikov prav takrat začele pridobivati ugled tudi na tem področju.

Univerza v Kansasu je bila za Slovence in slovenistiko opazna že v osemdesetih letih prejšnjega stoletja in celo pred tem, saj je bila to ena redkih ustanov v ZDA s slovenskim lektoratom in slavistiko sploh. Leta 1990 pa je postala dodatno zanimiva, ker je dobil tam profesorsko mesto mladi slavist Marc L. Greenberg, jezikoslovec prodornega duha s posebnim posluhom za slovenski jezik. Ta posluh ne temelji samo na njegovem nagnjenju k manjšim, raznolikim in živahnim jezikom, kjer je slovenščina v družbi drugih slovanskih jezikov, zlasti sosednje hrvaščine in njenih kajkavskih govorov, pa tudi madžarščine in albanščine, temveč je tudi bolj intimne narave, saj je njegova žena Marta Pirnat - Greenberg Slovenka in slovenistka, ki je kariero začela na ljubljanski Filozofski fakulteti, nadaljevala pa na kansaški univerzi.

Bilo je v začetku leta 1994, ko se je uredniški odbor revije *Slovenski jezik* v ustanavljanju, bolje rečeno v ponovnem oživiljanju, ogrel za zamisel, da bi bila nastajajoča revija mednarodna. V uredništvo sem povabil

kolega Marca Greenberga, ki je bil ta čas ravno na študijskem bivanju v Sloveniji, in s tem se je začelo plodno in prijetno čezatlantsko sodelovanje, ki traja že skoraj četrto stoletje. Starejši se bomo spomnili, da je bila sredina devetdesetih let prejšnjega stoletja čas vse bolj množične uporabe elektronske pošte, začetek razmaha interneta in drugih informacijsko-komunikacijskih tehnologij sploh, ki so omogočile vsakodnevno sporazumevanje na velike razdalje. Pri urejanju revije, še posebej prve številke, pri kateri je bilo treba domisliti in se dogovoriti o tisoč in eni podrobnosti, si skupnega podjetja brez te tehnološke inovacije ne bi bilo mogoče zamisliti. Marc je pozneje večkrat citiral menda mojo misel, da elektronska pošta omogoča kakovostnejše sporazumevanje čez lužo, kot jo lahko nudi sobivanje v isti ustanovi ali celo istem prostoru. In res, po treh letih je zamisel o skupni reviji dozorela do te mere, da je prva številka mednarodne slovenistične revije z dvojezičnim naslovom *Slovenski jezik / Slovene Linguistic Studies* prišla na svetlo spomladi 1997. Revija je bila jasno profilirana za objavo slovenističnih jezikoslovnih člankov ne glede na jezik objave in jezikoslovno usmeritev, s čimer se je njen program razlikoval od jezikoslovno-literarno in širše slavistično usmerjene *Slavistične revije*, vse bolj pedagoškega in didaktičnega *Jeziška in slovstva* ter *Jezikoslovnih zapiskov*, ki so takrat kazali znake internege glasila Inštituta za slovenski jezik Frana Ramovša ZRC SAZU.

Članek v reviji *Slovenski jezik / Slovene Linguistic Studies* je bil sprejet za objavo, če sta ga potrdila dva anonimna ocenjevalca, ki nista poznala avtorjeve identitete. Ta praksa, ki se zdi danes tako samoumevna, je bila v slovenskem prostoru tistega časa novost, prenesena iz severnoameriškega akademskega sveta, saj so pri drugih revijah, ne samo humanističnih, v uredništvo prispele članke tedaj prebirali in ocenjevali le člani uredniških odborov. Druga novost, ki sva jo uvedla po osmih letih izhajanja, je prosti dostop. Vse članke, tudi tiste za nazaj, sva z dovoljenjem avtorjev in primerno opremljene postavila v repozitorij Univerze v Kansasu, kjer naj bi bili pod istimi permalinki dostopni za vse večne digitalne čase. Tudi ta praksa je danes splošna, a je bila leta 2005

»najina« revija v jezikoslovnem slovanskem svetu prva, ki je ponujala tovrstno odprtost. Verjetno je revija tudi zato postala tako hitro prepoznavna in zanimiva za vse več tujih piscev. Do leta 2011 je *Slovenski jezik / Slovene Linguistic Studies* redno izhajal v Ljubljani in Lawrenceu, kjer je sedež Univerze v Kansasu, od tedaj, ko sva uredništvo prepustila mlajšim silam, namreč Kozmi Ahačiču in Grantu H. Lundbergu, pa je kansaški Lawrence zamenjal Provo v zvezni državi Utah. A odprto dostopna spletna izdaja se še vedno nahaja na strežniku kansaške univerze.

Seveda ni bilo mogoče, da bi se dobro čezatlantsko sodelovanje omejevalo zgolj na urejanje revije. V vsakodnevem dopisovanju po elektronski pošti sva odpirala in zapirala vrsto drugih strokovnih vprašanj predvsem diahronega jezikoslovja. To je bil namreč čas, ko je Marc pisal svoje *Zgodovinsko glasoslovje slovenskega jezika*, ki je leta 2000 pod naslovom *A Historical Phonology of the Slovene Language* izšlo pri heidelberški založbi Carl Winter, dve leti pozneje pa v slovenskem prevodu pri mariborskem Aristeju. Bil je čas, ko sem jaz sodeloval pri dokončanju Bezlajevega *Etimološkega slovarja slovenskega jezika* (1995, 2005, 2007), pripravljaj *Slovenski etimološki slovar* (<sup>1</sup>1997, <sup>2</sup>2003, <sup>3</sup>2016) in snoval *Etimološki slovar slovenskih zemljepisnih imen* (2009). Marc je potreboval moje še neobjavljeno gradivo in interpretacije, jaz pa njegove. S pomočjo dopisovanja se je na ta način marsikatero vprašanje razčistilo bolj, kot bi se, če bi ga vsak od naju premleval le sam zase. Sogovornikov, ki so o teh stvareh razmišljali in o njih nesebično govorili, je bilo v tistem času namreč še manj kot danes.

Marc je z družino domala vsako leto počitnikoval v Evropi in to so bile priložnosti za pogovore v živo. Seveda v slovenščini, saj je tudi najino dopisovanje skoraj ves čas potekalo v slovenščini. Sprva sva še pisala vsak v svojem jeziku, a že v prvem letu urednikovanja se je kolega odločil, da bo za vajo tudi on pisal po slovensko – konec koncev sva se oba ukvarjala s slovenščino in drugimi slovanskimi jeziki, ne pa z angleščino. Konferenc pri nas in drugje po slovanskem svetu se je Marc

udeleževal dokaj pogosto, kar nama je omogočilo marsikaj urediti tudi ob teh priložnostih. Jaz pa sem se v teh letih držal domače Ljubljane, saj sem želel čim prej dokončati dela, ki sem si jih bil zastavil v svojih mladih in zgodnjih srednjih letih. Šele leta 2008, kmalu po tem, ko sem iz proizvodnega slovarskega delavca postal inštitutski predstojnik, sem prvič obiskal ameriško celino, in sicer najprej Kanado, kjer sem se udeležil 16. Balkanske in južnoslovanske konference, potem pa še kansaško univerzo v Lawrenceu, kjer sem v tamkajšnjem Lingvističnem krožku predaval o temi, s katero sem se ukvarjal tisti čas, namreč o etimološkem raziskovanju slovenskih in drugih slovanskih nekonsolidiranih imenskih družin, tj. takih, pri katerih pripadajoči pridevnik in prebivalsko ime nista tvorjena iz iste osnove kot ime samo, npr. slovensko *Skaručna*, *skaruški* (in ne **\*\*skaručenski**), *Skaručan* (in ne **\*\*Skaručnjan**). Ob tem obisku sem opazil nekaj, kar pri nas deloma opažam šele v zadnjem času. Medtem ko so nekateri poslušalci tematiko razumeli zelo dobro in o njej po predavanju tudi diskutirali, so druge zanimala sila preprosta vprašanja, na katera si že takrat našel odgovore kar na Googlu. Razkorak med tistimi z zares zavidljivo stopnjo znanja in razumevanja ter onimi, ki v družbi prvih diskutirajo vsaj enako glasno, je bil tako očiten, da se mi je vtisnil v spomin – zgolj kot opazna razlika v življenju akademskih ustanov.

A svet smo ljudje, ki z vektorsko rezultanto določamo smer in hitrost razvoja posamezne identitetne skupnosti in s tem svojo sedanost, najsi bo to severnoameriška, zahodno-, srednje-, vzhodnoevropska ali pa zahodnobalkanska, v katero zadnje čase vse pogosteje umeščajo Slovenijo. Za alpski prostor velja še posebej, da se nam zdi sosedova trava bolj zelena od domače, zato Slovenci z malo nevoščljivosti gledamo na urejenost severnoameriškega in zahodnoevropskega sveta. Pa vendar ima vsaka palica dva konca in verjetno je vseeno, katerega občutiš na lastni koži. Če bi se moral pred četrto stoletje odločati med možnostma, ali naj najbolj plodna leta preživim v urejenem akademskem okolju, se



ukvarjam z lepimi rečmi, svoja dela objavljam v najprestižnejših svetovnih revijah in se udeležujem konferenc na vseh straneh neba, ali pa naj večino svojega življenja presedim doma in skrbim za nastanek temeljnih slovarjev enega najmanjših slovanskih jezikov, ne vem, katero prihodnost bi si izbral. Če pa bi enako možnost izbire dobil za nazaj, bi seveda izbral svojo dejansko usodo. Čeprav razlogi ne bi bili razumski.



Marc L. Greenberg in Marko Snoj pred zgradbo Hall Centra for the Humanities v kampusu Univerze v Kansasu, maj 2008 / *Marc L. Greenberg and Marko Snoj in front of the Hall Center for the Humanities at the KU campus, May 2008.*

## BRANKO STANOVNIK

### *Sodelovanje ZDA – Slovenija*

Leta 1973 sem bil povabljen kot plenarni predavatelj na 4. Mednarodni kongres za heterociklično kemijo v Salt Lake City (Utah). Na tem kongresu je Mednarodni znanstveni odbor izvolil prof. Miho Tišlerja za predsednika, mene pa za podpredsednika 5. Mednarodnega kongresa za heterociklično kemijo, ki naj bi ga leta 1975 organizirala v Ljubljani. Sledila je vrsta povabil na mnoge ameriške univerze in industrijske raziskovalne laboratorije. Na osnovi teh obiskov se je razvilo več znanstvenih sodelovanj in skupnih raziskovalnih projektov: s profesorjema R. N. Castlom, urednikom *Journal of Heterocyclic Chemistry*, in J. S. Bradshawom, ki je večkrat dalj časa bival v Ljubljani, z Brigham Young University v Provu (Utah), profesorico P. K. Kadaba s Kentuckyjske univerze v Lexingtonu (Kentucky), ki je »sobotno« leto preživela tudi v Ljubljani, ter profesorjem D. M. Grantom in dr. R. Pugmirejem, ki sta bila v tistem času vodilna na področju  $^{13}\text{C}$  NMR-spektroskopije, z univerze Utah v Salt Lake Cityju, če omenim samo nekatere.

Leta 1980 se je profesor A. R. Katritzky preselil z univerze v Norwichu (East Anglia, Velika Britanija) na University of Florida (Gainesville, Florida), kjer je ustanovil Center za heterociklične spojine in močno raziskovalno skupino. Intenzivna povezava s profesorjem Katritzkyjem se je ohranila tudi potem, ko se je preselil v ZDA. Leta 1998 sem bil izvoljen za inavguralnega častnega člana Floridskega centra za heterociklične spojine, leta 1999 za člana odbora in znanstvenega urednika elektronskega časopisa ARKIVOC, ki ga je ustanovil A. R. Katritzky, leta 2000 pa za člana svetovalnega odbora zbirke *Advances in Heterocyclic Chemistry*.

V letih 1983–1987 sem bil član svetovalnega odbora Mednarodnega društva za heterociklično kemijo, od leta 1997 pa član uredniškega odbora *Journal of Heterocyclic Chemistry*.

**Poglavja v knjigah in drugi pregledni članki, napisani na povabilo urednikov v ZDA in objavljeni v ZDA.**

**R. N. Castle, Editor, Bigham Young University, Provo, Utah**

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2. M. Tišler and B. Stanovnik, Sulfur Compounds of Pyridazine, in: Pyridazines, The Chemistry of Heterocyclic Compounds, Vol 28; R. N. Castle, Editor; John Wiley & Sons, New York 1973, pp. 755-837.
3. B. Stanovnik, Transformation of Azolopyridazines, Azinopyridazines and Related Systems. (Plenary lecture, , Fourth International Congress of Heterocyclic Chemistry, Salt Lake City 1973), Lectures in Heterocyclic Chemistry, vol VII, R. N. Castle and L. B. Townsend, Editors, Heterocorporation, Orem, Utah 1974, pp.S27-S43.
4. B. Stanovnik, B. Jelen, C. Turk, M. Žličar, J. Svete, 1,3-Dipolar Cycloaddition of Diazoalkanes to Pyridazines. Asymmetric 1,3-Dipolar Cycloaddition of Azomethine imines Derived from Diazoalkane-Pyridazine Cycloadducts. (Plenary Lecture, Sixth International Symposium on the Chemistry and Pharmacology of Pyridazines, Clearwater Beach, FL 1998), Lecture in Heterocyclic Chemistry, vol XIV, R. N. Castle, Editor, Heterocorporation, Odessa FL 1998, pp. 1187-1204.
5. B. Stanovnik, 2-Substituted 3-dimethylamino- and 3-Cyanopropenoates in the Synthesis of Heterocyclic Systems (Invited lecture, 17th International Congress of Heterocyclic Chemistry, Vienna, Austria, 1999); Lectures in Heterocyclic Chemistry, Vol XV, R. N. Castle, Editor, Heterocorporation, Odessa, FL, 1999; pp. 1581-1593.

**A. R. Katritzky, Editor, University of Florida, Gainesville, Florida**

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## Znanstveni članki, objavljeni v sodelovanju z ameriškimi univerzami

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### b) z University of Utah, Salt Lake City, Utah

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**c) z University of Kentucky, Lexington, Kentucky**

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**d) s Chemical Research Department, Hoffmann-La Roche, Inc., Nutley, New Jersey**

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**Plenarna in vabljena predavanja na kongresih in simpozijih v ZDA**

5th International Congress of Heterocyclic Chemistry, Salt lake City, Utah, 1975  
FloHet: Florida Heterocyclic and Synthetic Conferences, University of Florida, Gainesville, Florida  
FloHet II 2001 Plenary lecture  
FloHet X 2009 Invited lecture  
FloHet XII 2011 Invited lecture

## **Vabljena predavanja na univerzah v ZDA**

University of California, San Francisco 1974  
University of Alabama, Tuscaloosa 1974, 1980  
Ranselaer Polytechnic Institute, Troy, NY, 1974  
Eli Lilly Research Laboratories, Indianapolis, Indiana 1974  
Indiana State University, Bloomington, Indiana, 1974,1976, 1985  
University of Utah,, Salt Lake City, Utah, 1974, 1976  
Brigham Young University, Provo, Utah, 1976, 1991  
University of Kentucky, Lexington, Kentucky, 1976, 1985  
Lederle Laboratories, American Cyanamide Company, Pearl River, NY, 1979  
Texas Christian University, Forth Worth, Texas, 1979  
North Texas State University, Denton , Texas, 1979  
University of Michigan, Ann Arbor, Michigan, 1980  
Univerity of South Florida, Tampa, Florida, 1985  
Emory University, Atlanta, Georgia, 2009

## **Članstvo v uredniških odborih časopisov, ki izhajajo v ZDA**

Journal of Heterocyclic Chemistry  
Advances of Heterocyclic Chemistry  
ARKIVOC (Scientific Editor)  
Inaugural Honorary Member of Florida Center for Heterocyclic Compounds,  
Gainesville, Florida, USA

## ALENKA ŠELIH

### ***Države »Vzhodne Evrope« dobivajo identiteto***

*Kot Fulbrightova gostujoča znanstvenica sem pomladni semester študijskega leta 1989/1990 (od januarja do junija 1990) preživela na Pravni fakultete Univerze v Wisconsinu v kraju Madison. Predavala sem o evropskih sistemih sodne obravnave mladoletniškega prestopništva in raziskovala sodno odmero kazni po ameriškemu kazenskemu pravu.*

*Obisk v ZDA me je spodbudil k pisanju. Nastala je serija kratkih pisem, v katerih sem opisala svoje vtise o življenju v Madisonu za slovensko revijo Naši razgledi. Osem pisem je bilo objavljenih v omenjeni reviji junija in julija 1990. Tole je prvo objavljeno pismo.*

Ko sem sredi januarja prišla za pet mesecev v ZDA, se nisem mogla ubraniti vtisa, da je za povprečnega Američana Vzhodna Evropa tako rekoč šele začela nastajati. Morda je skoraj preveč, če rečem povprečnega Američana, saj – čeprav sem bila tu že večkrat, a vedno le za kratek čas – ne vem prav, kakšen naj bi ta bil. Toda doslej so bile države na vzhodu in jugovzhodu Evrope v zavesti tistih Američanov, ki sem jih poznala, nekakšen siv konglomerat. Ta podoba pa se je začela polagoma jasniiti. Češkoslovaška in Romunija danes nista več zamenljivi, pa tudi Jugoslavija in Češkoslovaška ne več.

In čeprav Jugoslavija sploh ni v središču zanimanja, saj ugotavljajo, da prihaja do sprememb prepočasi in da gospodarske spremembe prehitvevajo politične, se vendarle zgodi, da nekateri poznavalci delajo celo razlike znotraj države. Tako sem v prvih dneh bivanja na pravni fakulteti Univerze Wisconsin – na ameriškem srednjem zahodu – dvakrat odgovarjala na vprašanje, iz katerega dela Jugoslavije prihajam, in bilo je očitno, da spraševalca vesta, za kaj gre. Toda resnici na ljubo moram



priznati, da se nobeden od njiju ni mogel povsem otresti svoje evropske preteklosti: eden je bil Latvijec, ki je Latvijo zapustil kot mlad fant leta 1945, drugi pa je bil šlezijski Nемеc s podobno usodo.

Sredstva javnega obveščanja vestno skrbijo za to, da se je podoba o monolitni Vzhodni Evropi začela tako spreminjati. Vodilni časopisi posvečajo dogodkom v tem delu sveta več strani dnevno, eden med njimi z značilnim naslovom »Vrenje v Vzhodni Evropi«.

Televizija izbira zlasti konfliktne situacije in poroča o njih včasih tako, da lahko prizadetega gledalca resno vznemiri: komentar ob januarskem začetku kongresa ZKJ, ko je komentator (po priimku sodeč našega rodu) lahkotno omenil državljansko vojno, me je pognal naravnost k telefonu – zveza na srečo ni bila pretrgana.

V začetku mojega bivanja tu so se večini ljudi, s katerimi sem se srečala, zdeli dogodki v Vzhodni Evropi »vznemirljivi«. In čeprav ima ta beseda (»exciting«) v angleščini pozitiven in negativen predznak, se vendarle uporablja v pozitivnih zvezah. Ko sem jih poskušala prepričevati o tem, da za nas, ki smo prizadeti, niso samo vznemirljivi, namreč predvsem strašansko resni in težki, se mi je zdelo, da jih kljub prizadevanjem nisem prepričala. In najbrž je Američanu, ki je iz varne razdalje opazoval to vrenje in razmišljal o tem, da je bila njegova država tako vzburkana na podoben način pred približno sto leti, zares najbližja misel o tem, da gre za val demokratizacije, ki se bo kmalu in dobro končal.

Nenadna pozornost, ki smo je Vzhodnoevropejci deležni, se je konec januarja pokazala tudi na tipično ameriški, neposreden, pa po svoje malce naiven način. Univerza Wisconsin je pred kratkim (na osnovi sporazuma o izmenjavi) sprejela večjo skupino profesorjev moskovske Univerze Lomonosova, in tako se je skupina podiplomskih študentov, doktorandov in profesorjev iz tega dela sveta precej povečala. In – organizatorjem pomembnega »družabnega« dogodka, zimskega plesa v Madisonu, je prišlo na misel, da predstavnike teh dežel na univerzi povabijo kot častne goste. Pokroviteljica plesa nas je najprej povabila k sebi domov in kakorkoli mešani so bili moji občutki, ko sem šla tja,

sem bila nadvse presenečena, ko sem ugotovila, da je bil njen tast, znan tukajšnji onkolog, eden prvih ameriških zdravnikov, ki je v času hladne vojne sodeloval s kolegi v Moskvi in Leningradu. Neprikrita zvedavost, neposredna zainteresiranost in, kot pravijo, za srednji zahod tipična nepretencioznost so prispevale k temu, da smo se, čeprav skoraj edini predstavniki univerze na tem plesu, na katerem se je v državnem Kapi-tolu zbrala vladna in gospodarska smetana države Wisconsin, počutili če ne le domače, pa vsaj ne preveč tuje. In morda ne ilustrira teh posebnih lastnosti tukajšnjih ljudi nič bolj kot to, da jim je prišlo na misel pripraviti ves hladni bife na plesu – iz vzhodnoevropskih predjedi in slaščic.

Tako smo sredi wisconsinske zime, od daleč in izza prepolne mize sledili dogodkom, o katerih zdaj že vsi zatrjujejo, da so enako ali celo bolj pomembni kot tisti leta 1945.

Toda od začetka marca, tako se mi zdi, se je splošno navdušenje zaradi »vzhodnoevropskega vrenja« umaknilo bolj umirjenemu razmišljanju. K temu so gotovo prispevala sporočila o konfliktih, negotovostih, bojznih in vsem ostalem, ki so se začela vrstiti v tisku in na televiziji. Toda temeljni preobrat v razmišljanju ljudi je nastal tisti trenutek, ko je postalo vprašanje združitve obeh Nemčij ne le aktualno, ampak povsem realna perspektiva. Zdelo se mi je, da so Američani dotlej gledali na dogodke v Vzhodni Evropi kot na nekaj ne ravno lokalnega, a vendar ne globalnega: možnost združitve Nemčije in nastanka nove in seveda drugačne nemške države pa jih je zadela neposredno. Dogodki nekaj tisoč kilometrov daleč niso bili ne več oddaljeni niti ne samo »exciting«, zastavljali so vprašanja, ki so se tikala Američanov neposredno. In zdi se mi, da je spoznanje, da gre za dolgotrajen proces, v katerem bo veliko napredovanj in nazadovanj, konfliktov in poskusov njihove pomiritve, spoznanje, da gre za življenjska vprašanja držav, narodov in posameznikov, in spoznanje, da »ni Zahoda brez Vzhoda« in ne »Vzhoda brez Zahoda«, začelo čedalje bolj prevladovati. Zdi se mi, da se danes ljudje tukaj zavedajo, da dobljena bitka še ne pomeni dobljene vojne, pot do nje bo še dolga in težavna.

# Pisma iz Amerike

Alenka Selih

## Prvo: Države vzhodne Evrope dobivajo identiteto

Ko sem pred januarja prišla na pet mesecev v ZDA, se nisem mogla liberálni viti, da je za povprečnega Američana Vzhodna Evropa tako rekoč šele začela nastajati. Morala je skoraj prevleči, če rečem povprečnega Američana, saj – kjub temu, da sem bila tu že večkrat, a vedno le za kratke čase – ni vem prav, kakšen naj bi ta bil. Toda dosti so bile države na vzhodu in jugovzhodu Evrope v zavesti tistih Američanov, ki sem jih poznala, nekakšen svj konglomerat. Ta pogodba pa se je začela polgama jasniti. Češkoslovaška in Romunija danes nista več zamenljivi, pa tudi Jugoslavija in Češkoslovaška ne več.

In čeprav Jugoslavija sploh ni v središču zanimanja, mi ugotavljam, da prihaja do sprememb prepoznati in da gospodarske spremembe prelenujejo politične, se vendarle zgodijo, da nekateri poznavalci delajo celo na like močnej države. Tako sem v prvih dneh bivanja na pravni fakulteti Univerze Wisconsin – na amerškem srednjem nahu – dvakrat odgovarjala na vprašanje, iz katerega dela Jugoslavije prihajam, in bilo je očito, da spravevala vesla, za kaj gre. Toda restnici na ljubo moram priznati, da se nobeden od njih ni močnil povsem ostreji svoje evropske preteklosti; eden je bil Latvjec, ki je Latvijo zapustil kot mlad fant leta 1943, drugi pa je bil švedski Nemec s podobno usodo.

Sredstva javnega obveščanja vestno skrbijo za to, da se je podoba o množilni Vzhodni Evropi začela tako sermunitati. Vredila časopisi povprečnega dogodekom tem dela sveta več stvari domov, eden med njimi z značilnim naslovom »Vreje v Vzhodni Evropi«.

Televizijska izbrata izlazi konfliktni situacije in poročila o njih včasih tako, da lahko priznate gledalca rano zrazumeti. Komentarji ob jasnakem začetnem tonu greh ZK, ko je komentator (po primiku nosede našega lokalno lahkonostno omrežje) zavrnilo vopno, me je postal naravnost ki telefona – zveza na sero ni bila pretirna.

V začetku mojega bivanja tu so se večini ljudi, a katerimi sem se srečala, zdeli dogodki v Vzhodni Evropi vzemljiviji. In čeprav ima ta beseda rečeno v angleščini pozitiven in negativen predznak, se vendar še uporablja v pozitivnih revalch. Ko sem jih pooblašala prepričevali o tem, da za nas, ki smo prišli, niso samo vzemljiviji, namreč predvsem viraško tako reeni in tekti, se mi je zdelo, da jih kjub priznavanju manj prepričala. In najbrž je Američani, ki je iz vurne razlage opazoval to vrenje in razmišljal o tem, da je njihova država tako obvrstana na podobem način pred arhivno sto let, narej nabliža misel o tem, da gre za vsaj demokratizacijo, ki se bo kmalu in ljubo končala.

Nemnda pomembni, ki smo je Vzhodnoevropski ljudem, se je kmee janarja pokazala tudi na tipično amerški, neopredelj, pa po svoje malce naravn nabiti. Univerza Wisconsin je pred kratkim tle postala oprema o izmivaciji sprejela večjo skupno profesorov monokovske Univerze Lomosoosva in tako se je sklapina podiplomcev, doktorandov in profesorjev iz tega dela sveta precej povečala. In – organizatorjem pomembnega »institucionalnega« dopolnila zimskega plesa v Madisonu, je prišlo na misel, da predstavitelj teh del na univerzi povabijo kot častne goste. Pokrovnostica plesa nas je razpeli povabila k sebi domov in kakor koli misliti so bili moji občutki, ko sem bila ta, sem bila nadvse presenečena, ko sem ugotovila, da ni bil njen tate, tem bal moji občutki, ko sem bila ta, sem bil zdravnikov, ki je v času hladne vojne isodevala s knjigi v Moskvi in Leningradu. Sprejela sta srečala vod, nepredena zainteresiranost in kot povabljen, za srednji zahod tipična referenčnostnost so pripuževali. In temu, da smo se, čeprav skoraj učini predstavitelja universe na tem plesu, na katerem se je v državnem Kapitolu zbrala vlada in gospodarska sredstva države Wisconsin, počutili če ne kotese, pa vsaj ne preveč naje. In morala se izvirati teh izosestnih lastnosti tukajšnjih ljudi nič kot to, da jim je prišlo na misel pripraviti vse hladni in tople, ali – vzhodnoevropskih predjedji in slastik.

Tako smo sredi vsakodnevnih zime, od dalje in zra nepolne mreže sledili dogodkom, o katerih sodaj levoji zadržujejo, da so enako ali celo bolj pomembni kot tisti iz leta 1945.

Toda od začetka marča, tako se mi zdi, se je splošno navdušenje zaradi »vzhodnoevropskega vrenja« umaknulo bolj umirjenemu in konfliktu, negotovosti, bojaznih in vsem ostalem, ki so se začela vrstiti v taktu in na sledih. Toda temeljni preobrat v razmišljanju ljudi je nastal tudi trenutek, ko je postalo vprašanje združitve sledih Nemčije ne le aktualno, ampak tudi povsem realna perspektiva. Zdelo se mi je, da so Američani došli gledali na dopolnje v Vzhodni Evropi kot na nekaj ne ravno lokalnega, a vendarle ne-globalnega:

možnost združitve Nemčije in nastanka nove in seveda drugačnje svetovne države pa bi jo začela negorednost. Dugodki nekaj tisoč kilometrov dalje niso bili več ne odločilni niti ne samo »evrazijski«, zastavljeni vprašanja, ki so se tikala Američanov neposredno. In zdi se mi, da je spominjanje da gre za filigranjen proces, v katerem bo veliko napredovanj in nazadovanj, konfliktov in poskusov njihove povornitve, spominjanje, da gre za življenjska vprašanja držav, narodov in premevkov in spominjanje, da ni Zahoda brez Vzhoda – in »Vzhoda brez Zahoda«, zabolje občoli prevladovati. Zdi se mi, da se danes ljudje tokaj zavajajo, da dobitena bitka ne bo pomeni dolžne vojne, pot do raje bo še dolga in težava.

## Drugo: Kritični Američan v Vzhodni Evropi

Vzhodna Evropa je kar nagnej polje stolpe v amerškem razumevanju. Poveča je del amerške zbulike zabeli razumevanju, kako daljnosežne so spremembe, do katerih je prišlo, in vno zapletenost ter pogosto protivarnost nastalega položaja.

Tako se človek ne začuti prevleči, če mu amerški pravnik, ki je poleg tega doktoriral in ruske agolovne in eno leto z družino prebil v Moskvi, v razgovoru o tej temi reče tiki pred mardani volitvami v Vzhodni Nemčiji, da je poljudj sedaj tak, da bi si človek na tistem ledi močnejšega uspeha biše vzhodnoevropske komunistične partije. Zdi se mi, da je tak izjava predvsem izra predpise naskrbljenosti v zvezi z družilivju Nemčije in skrbri, da bo tako kot se je na teh volitvah povečala vne zgodnji konservativna stranka dobila večino in s tem verjetno bitveno vplivala tudi na izid voliv v Zahodni Nemčiji.

Ta naskrbljenost se je v mnogo jasnije pokazala, ko sem postala vsaj dva univerzitetni profesorjeva tukajšnje pravne fakultete, ki veljata za lvo usmerjena, o tem, kako sta doživela svoj človeštinski oblate na Poljskem in Češkoslovaškem. Varšavska univerza je postala na simpoziju o svobodi in demokraciji v današnjih razmerah približno desetinska delegacija profesorjev pravnih fakultet v ZDA, ki mi sodbu jejo pri skupini, imenovani kritični pravni študij. Leta, deloma tudi marksistično usmerena skupina pravnih teoretikov in v zadnjih desetih do petindesetih v pravnih fakultetnih krogih s svojimi kritičnimi stališči pogosto objeala zelo različne – afirmativne in kritične – odmeve in si je pridobila glaj ene najbolj zrednih pravnobučnih prevnih voliv v ZDA. Sivo vrenjavajovine je v nekaterim imeni stališči seznanili B. M. Zupančič, ki je tu usmerilo določil bilje.

Oba člana amerške delegacije na simpoziju sta bila po tem obisku povsem medena in si nista bila na jasnem, kaj se v Vzhodni Evropi pravzaprav dogaja, ali pa sta morala bila sodena s dejstvom, da se dogaja nekaj čisto drugega od tistega, kar sta pričakovala.

Zdi se da je nameravala vsa amerška skupina opozoriti poljske kolege na nevarnosti, ki jih priznava s seboj svobodni trg, in bila sta pripravljena, da je Poljskoto jasno, kakšne pomembne posledice so takšne pravice, kot so brezglavno kolstvo, udravljeno in socialno zavarovanje in druge tipične socialnodemokratske pravice, ali morata tudi pravice, udravljeno v državi socialne blaginje.

Morda sta imela oba kolega s madisonsko pravno fakultete namen poročati Poljskem, kakšen problem je tukaj pri poročilski dopustitvi; morata bi o tem lahko dala takšno ilustracijo, za kakršno sem pred kratkim tukaj izvedela: zaposlena mati ima za parov pravico izkoristiti svoji redni dopust (približno tri tedne). Neka mlada mati je razpisala na univerzi kot raziskovalca z doktoratno razmisli s otrokom, ki ga doji, je problem rešila tako, da ga je v kongurski svet prinesla s seboj za delovno mesto.

Toda v svoje presenečenje sta našelna na drugo vrsto razmišljanja, da je treba ustvariti »akumulacijo kapitala« – če ne gre drugače pač s prodajo donosnega premoženja raznim tujim investitorjem. In se gre drugje, seveda tudi pod ceno – njeno ugotavljanje je v administrativnem postopku inverzitorju itak zelo težavno. Za ilustracijo sta uvedela primer, ki se je tudi meni zdel nekakšen prototip in takšno razmišljanje: bivša Poljska združena delavska partija se je baje odločila predstavitelj svoji osrednjo stavbo (CK) predstaviteljmu.

In v resnici se zdi, da so za vzhodnoevropske države postale čili poročanje nprazniščilnih vestovalcev – od tih, ki hodie (po poročanju tukajšnjega tiskaja) pomašajo pri pripravi nove ustave, tistih, ki poljske pravice pogodbajo o tem, kako v ločaj raznih strahov počuvati varnostno s človekovih svobod, ki so do tih, ki imajo mnogo bolj pravejšee gospodarske namene pri katerih igrajo večjo vlogo ohiščilne, kot so predalidizem in in roj povezava itak, samo delovna sila in mišji pravna standardi (zahlebi) za vsotno okolico je uvajanje takšnih oblik tehnologije, ki okolijski mišjo nastena in se je ZDA hooje zato zmožili.

Med postavljenjem sem si seveda zastavljala vprašanje zase in za nar dom. Presenečena bom dejstvom, da so bili tukajšnji profesori, tudi tisti, ki se odločevali v amerški, skorajka izprijeli zaradi tega, ker se utegne v teh državah izgubiti tudi tisto, kar so tu takaj v Ameriki s vsami njenimi problemi zdravstvenega in pokoljnega zdravja vevna vsaj nekateri intelektualci (tisti so dosežek realnega socializma, sem se spravevala, kako v Sloveniji gledano na ta vprašanje in ali se tiarj, ki sodaji odločajo in tisti, ki mo bolj kmalo odločati, zavajajo vsaj tiste, ki jih niso s seboj povsem nava usmerjeni na terezi, ki nam je najbrž sicer bolj oznan, ali mi najbrž le nekaj ča ne homo dorati – zaradi obhrovnosti, pa tudi subjektivnih občutkov).

Prihodnji: Ameriški pogled na prihodnost Sovjetske zveze

Naši razgledi, 8. junij 1990 / Naši razgledi, June 8, 1990

## MIHA TIŠLER

### *Znanost povezuje*

Za uspešno znanstveno raziskovanje so potrebni znanje, zamisel, opremljenost in finančna podpora, ki je pogojena. Sinteze organskih spojin so povezane z zahtevami ugotavljanja strukturnih značilnosti, ker omogočajo različne instrumentalne metode. Po koncu druge svetovne vojne smo morali postavljati organsko kemijo iz temeljev, ker je bila opremljenost praktično ničelna. Razmere so se počasi izboljševale, a kemikalije smo lahko naročali le enkrat letno, ugotavljanje strukturnih značilnosti pa je bilo mogoče le na aparaturah, ki so bile takrat v Ljubljani. Za uspešno raziskovalno delo je bila zato nujna povezava z institucijami v tujini.

Na pobudo takratnega predsednika SAZU Josipa Vidmarja sem se kot član delegacije na sedežu Ameriške nacionalne akademije znanosti (NAS) v Washingtonu udeležil pogovora o predlaganem projektu sodelovanja z ameriškimi univerzami. Ker je bil moj predlog sprejet, je projekt omogočil obojestransko izmenjavo znanstvenikov in krajša bivanja v ZDA za raziskovalno delo in predavanja. Na tej osnovi mi je NAS omogočila v letih 1968 in 1977 obiske in predavanja na univerzah v ZDA. To so bile univerza Illinois, Urbana-Champaign (gostitelj Nelson J. Leonard), Kalifornijska univerza Berkeley (Henry Rapoport), UCLA (Donald J. Cram, Nobelova nagrada 1987), univerza Stanford (Carl Djerassi), univerza Michigan, Ann Arbor (Leroy B. Townsend), univerza Duke, Durham (Charles K. Bradsher) in univerza Wesleyan, Middletown (Max Tishler). Na univerzi Duke sem se srečal z dolgoletnim članom te univerze, biokemikom in takratnim predsednikom NAS Philipom Handlerjem ter z uglednim slovenskim fizikom, akademikom Antonom Peterlinom. Pri Nelson J. Leonardu je 18 mesecev (1986–1988) raziskoval Andrej Petrič iz naše skupine, leta 1988 je bival v okviru NAS dva meseca na BYU v Provu.

V začetku sedemdesetih let preteklega stoletja je prišel v Ljubljano za eno leto kot gostujoči profesor Jerald S. Bradshaw z univerze Brigham Young (BYU) v Provu, Utah. Skupaj smo raziskovali fotokemične sinteze in pretvorbe nekaterih bicikličnih heterocikličnih sistemov. Sodelovanje se je pozneje nadaljevalo tudi s sosednjo univerzo Utah v Salt Lake Cityju (David M. Grant, Ronald J. Pugmire, Josef Michl), kjer so omogočili Branku Stanovniku kot gostujočemu profesorju, da je posnel z jedrsko magnetno resonanco (NMR) C-13 spektre azoloazinov v zvezi z ugotavljanjem položajev protonacije in kvarternizacije na sistemih z več dušikovimi atomi v obroču. V te namene so bile izvedene tudi meritve magnetnega cirkularnega dikroizma. Takratna fakulteta za naravoslovje in tehnologijo Univerze v Ljubljani je Jerald S. Bradshawu podelila častno priznanje. Sam sem bil deležen gostoljubja ameriške univerze, ko sem leta 1986 kot gostujoči profesor predaval en semester na podiplomskem študiju na univerzi BYU v Provu.

Pomoč pri raziskovalnem delu je prišla tudi iz industrije. Ko sem sintetiziral novo spojino, je nastal produkt, ki mu tudi s sodobnimi spektroskopskimi metodami ni bilo mogoče ugotoviti strukture. Pomagal mi je Milan Uskoković, direktor raziskav naravnih spojin pri Hoffmann-La Roche v Nutleyu. Rentgenski posnetek je pokazal nepričakovano in nenavadno strukturo produkta.

Dolgoletno sodelovanje je bilo z oddelkom za kemijo floridske univerze v Gainesvillu, kjer je deloval Alan R. Katritzky. Začelo se je, že ko je bil profesor v Veliki Britaniji, preden se je odselil v ZDA. Bil je izjemen kemik, član Royal Society (FRS) in dopisni član SAZU od leta 2001. Izdajal je knjižno zbirko *Advances in Heterocyclic Chemistry* pri založbi Academic Press. Bil sem član uredniškega odbora in v tej zbirki sem v obdobju od 1984 do 2006 s soavtorji (Branko Stanovnik, Patrik Kolar, Alan R. Katritzky in Pankaja K. Kadaba, univerza Kentucky) objavil deset monografij s področja heterociklične kemije.

Leta 1968 je Raymond N. Castle ustanovil društvo International Society of Heterocyclic Chemistry (ISHC). Dejavnost društva obsega

načrtovanje mednarodnih kongresov na dve leti, izdajanje publikacij, pospeševanje razvoja heterociklične kemije in nagrade za nove dosežke. ISHC mi je poveril organizacijo 5. mednarodnega kongresa heterociklične kemije, ki je bil nato leta 1975 v Ljubljani z veliko mednarodno udeležbo. Zaupali so mi tudi funkcijo predsednika ISHC, ki sem jo opravljal v letih 1978 in 1979. Castle je izdal knjigo o piridazinih, kjer sva z Brankom Stanovnikom napisala eno poglavje.

Opisana sodelovanja so vodila do 25 skupnih znanstvenih člankov in monografij in do številnih obiskov in predavanj ameriških profesorjev v Ljubljani, ki so nas seznanjali z najnovejšimi dosežki iz organske kemije.

Leta 1971 sem se udeležil XXIII. kongresa IUPAC (International Union of Pure and Applied Chemistry) v Bostonu. Pismo ameriškega profesorja, naslovljeno name, so pomotoma dostavili uglednemu profesorju Maxu Tishlerju. Ugotovil je pomoto, vrnil pismo in me povabil na univerzo Wesleyan. Tja je prišel leta 1970 iz farmacevtske industrije Merck, kjer je izvedel vrsto uspešnih sintez več vitaminov in prvi izoliral aktinomycin D. Tudi naključje je lahko spodbudno.

## DRAGICA TURNŠEK

### *Sodelovanje z geologi in paleontologi iz ZDA*

Raziskovala sem mezozojske stromatopore in korale. Z mnogimi kolegi iz različnih geoloških inštitucij iz ZDA sem si dolga leta dopisovala in izmenjavala strokovne članke (z dr. S. Cairnsom, dr. A. Fosterjem, dr. A. G. Coatesom, dr. M. Drosserjevo, dr. J. Soraufom, dr. H. Filkornom, dr. V. Zlatarskim in drugimi). Osebno pa smo se srečevali na simpozijih, ki jih je naša mednarodna organizacija Association for Fossil Cnidaria and Porifera organizirala vsaka štiri leta. Leta 1983 je bil simpozij v Washingtonu v ZDA in ga je vodil dr. William Oliver s Smithsonian



Ekскурzija k Velikim jezerom leta 1983. Spredaj dr. Carl Stock in dr. All Fagerstrom drugi in tretji z leve, D. Turnšek zadaj desno. Ostali udeleženci so iz različnih držav. / *Excursion to Great Lakes 1983. In front Dr. Carl Stock and dr. All Fagerstrom. second and third from the left, D. Turnšek right behind. The other participants are from several countries.*

Institution v Washingtonu. Organizirana je bila tudi ekskurzija k Velikim jezerom, ki jo je vodil dr. All Fagerstrom z Univerze v Nebraski. Imela sem predavanje, ki je bilo v ZDA objavljeno v razširjeni obliki: Turnšek, D., Buser, S. Ogorelec, B.: 1984: The Role of Corals in Ladinian-Carnian Reef Communities of Slovenia, Yugoslavia. *Palaeontographica Americana*, 54.

Nekateri ameriški kolegi so tudi obiskali naš inštitut, da bi si ogledali našo fosilno zbirko, literaturo, se posvetovali ali pa sodelovali. Leta 1982 nas je obiskal dr. George Stanley z Univerze v Montani v zvezi s primerjavo triasnih koral in ogledom grebenov na terenu. Leta 1995 je naš inštitut obiskal dr. Carl Stock z Univerze v Alabami, da je izdelal seznam mezozojskih stromatopor, ki jih je potreboval za pregled teh fosilov v eni najpomembnejših paleontoloških publikacij *Treatise on Invertebrate Paleontology*.

V letih med 1990 in 2015 je naš inštitut večkrat obiskala dr. Rosemarie Baron Szabo, sicer Berlinčanka, ki se je preselila v ZDA, v Knoxville v Tennesseeju, in je danes raziskovalna sodelavka Smithsonian Institution v Washingtonu in ena najboljših poznavalk krednih koral. Do potankosti je preučila vso mojo zbirko. Kredne rodove in vrste je prav tako vključila v publikacijo *Treatise on Invertebrate Paleontology*. Kot ljubiteljica jezikov je v ZDA leta 2014 objavila dopolnilno razlago o izvoru germanizmov v slovenščini (*Germanisms in the Slovene Language with Remarks on the modern usage of the original German terms*).

Na pobudo ameriških kolegov je v ameriški seriji Special Publications no. 30, ki ga je izdalo društvo Society of Economic Paleontologists and Mineralogists, Tulsa, Oklahoma, izšel zbornik *European Fossil Reef Models* (Toomey, F. D. ed.), v katerem smo slovenski geologi prispevali dva članka. (Turnšek, D., Buser, S., Ogorelec, B.: *An Upper Jurassic Reef Complex from Slovenia, Yugoslavia*, in Čar, J., Skaberne, D., Ogorelec, B. Turnšek, D., Placer, L: Sedimentological Characteristics of Upper Triassic (Cordevolian) circular Quiet Water Coral Bioherms in Western Slovenia, Northwestern Yugoslavia).



Najbolj konkretno in delovno pa je bilo sodelovanje pri raziskavah spodnjekrednih grebenskih tvorb iz Nove Mehike in Mehike. V letih 1978 in 1982 je naš inštitut obiskal prof. dr. David LeMone, profesor z Univerze El Paso, Teksas, in leta 1981, dr. Robert Scott, takrat zaposlen pri Amoco Production Company, Tulsa, Oklahoma. O teh raziskavah smo pripravili dva krajša in en obsežnejši članek, v katerih smo prikazali 19 vrst koral ter njihov stratigrafski in paleoekološki pomen (Turnšek, D. & LeMone, D. V., 1981: Preliminary analysis of the Cretaceous Corals from Cristo Rey, Dona Ana County, New Mexico. *New Mexico Geology Science and Service*, v. 3, no. 1, Turnšek, D., LeMone, D., & Scott, R.W., 1984: Corals from Cerro de Cristo Rey, Dona Ana County, New Mexico and Chihuahua, Mexico, *Palaeontographica Americana*, no. 54, in Turnšek, D., LeMone, D. & Scott, R., 2003: Tethyan Albian Corals, Cerro de Cristo Rey Uplift, Chihuahua and New Mexico. U. S. Gulf Coast Cretaceous Stratigraphy and Paleoecology, Perkins Memorial Volume, Special Publications in Geology, No 1.)

Vse moje poznanstvo in sodelovanje s kolegi iz ZDA je bilo vedno nadvse prijetno in uspešno. Z nekaterimi si še vedno dopisujemo.



Obisk Rosemarie Baron Szabo v Ljubljani leta 2005(?) / *Rosemarie Baron Szabo's visit in Ljubljana in 2005(?)*

## ROBERT ZOREC

### *Spremljanje delovanja celičnih organelov v živi celici v realnem času*

Razmeroma dolg polet je do Denverja, kjer naj bi opravil nekaj poskusov na posamezni celici. Načrt je bil, da ostanem tam pol leta, in pripraviti je bilo treba kar nekaj prtljage. A to ni bila le osebna prtljaga, pač pa tudi oprema, ki je bila razvita in izdelana v Sloveniji, in sicer za meritve najšibkejših električnih signalov iz posamične žive celice, iz celice, ki vsebuje celične organele.

Življenjske oblike sestojijo iz kraljestev bakterij, arhej in evkariontov.<sup>1</sup> V Denverju je bil načrt izpeljati poskuse na slednjih celicah. Splošno velja, da so celični predelki, kot so celično jedro, mitohondrij in sekretorni mešički, prisotni le v evkariontskih celicah. Izvor evkariontov je še nepojasnen<sup>2</sup> in predhodniki teh celic<sup>3</sup> še niso bili enolično določeni. Enako je nejasno geološko obdobje, v katerem so nastali evkarionti. Fosilni ostanki razkrivajo, da so organizmi, podobni evkariontom, obstajali že najmanj pred 3 do 3,5 milijarde let,<sup>4</sup> kar pa je bistveno več, kot je bilo splošno sprejeto mnenje, da so ti nastali pred dvema milijardama let. To kaže, da so se začela oblikovati različna kraljestva življenjskih oblik zelo zgodaj po nastanku Zemlje.

Citološka struktura bakterij in arhej je nezapletena. Kako se je struktura zapletenost celic evkariontov razvila iz arhej,<sup>5</sup> ni znano. Večina hipotez sloni na razumevanju prehoda med prokarionti in evkarionti z integracijo neke oblike arhibakterij v evbakterijo. Načelno je evolucija evkariontov povezana z nastankom celične strukture, ki je podobna mitohondriju, kjer naj bi potekala presnova, odvisna od kisika, saj se je v obdobju, ko so nastali evkarionti, tudi pojavil kisik v atmosferi. Po drugi strani pa je tudi mogoče, da so aerobni in anaerobni evkarionti, v katerih so bile strukture, podobne mitohondrijem, skupaj obstajale na evlucijski poti.<sup>6</sup>

Hipoteza, da so se evkarionti razvili iz predhodnika arhej, je v zadnjem času pridobila zanimanje. Še posebej zato, ker so v teh organizmih verjetno obstajali predhodniki celičnih organelov, ki so bili čisto drugačni od mitohondrijev. To so razkrile genetske študije na arhejah. Odkritje novega debla 'Lokiarchaeota' kaže v genetskih zapisih gene, ki so značilni za evkarionte in so vpleteni v preoblikovanje celičnih membran.<sup>5</sup> V teh celicah arhej so geni, ki uravnavajo fagocitozo. To je oblika endocitoze, kjer se delci ali molekule lahko internalizirajo v celično notranjost tako, da se prenesejo v mešičke, ki se odcepijo od plazmaleme in potem potujejo po citoplazmi.<sup>7</sup> Ta proces poteka vzdolž citoskleta z aktinom. Genom skupine Lokiarchaeota kodira pet sorodnikov aktina, ki imajo visoko podobnost z evkariontskim aktinom, in proteine, povezane z aktinom,<sup>5</sup> kot so monomerni GTP-vezavni proteini: GTPaze. Ti proteini uravnavajo dinamiko aktinskega citoskeleta in s tem promet mešičkov v citoplazmi.<sup>8</sup> Skupina Lokiarchaeota vsebuje tudi gene za večino GTPaz iz superdružine Ras, ki predstavlja skoraj 2 % proteoma.<sup>5</sup> V skupini Lokiarchaeota so tudi geni endosomalnega kompleksa, potrebni za usmerjanje transporta (ESCRT). To so deli struktur, ki jim pravimo multivezikularna telesa (MVB), del endosomalne poti, ki je potrebna za biogenezo lizosomov. V evkariontih ta endosomalna pot usmerja plazemske proteine v razgradnjo, avtofagijo in druge poti.<sup>9</sup> Odkritje genov, ki so povezani s plastičnostjo membrane in transportom mešičkov, kaže, da je skupina Lokiarchaeota po strukturi že podobna evkariontom, saj vsebuje celične organele, a ti so drugačni od mitohondrijev, privzetih z endosimbiozo.<sup>5</sup>

Cilj poskusov v Denverju je bil izmeriti interakcijo med membrano posamičnega celičnega organela, npr. lizosoma, in med plazemsko membrano. V evkariontih so lizosomi del endo- in eksocitoznih poti, prisotni v tako rekoč vseh živalskih in rastlinskih celicah. Termin lizosom je bil uveden leta 1955,<sup>10</sup> izhaja iz grščine: *λύσις* – »razgraditi« in *soma* – »telo«; »litično ali prebavno telo«.<sup>11, 12</sup> Do pred kratkim je veljalo, da so lizosomi le razgradni organeli za katabolizem, ker vsebujejo

hidrolitične encime. Poleg razgradnje biomolekul pa je danes jasno, da je vloga lizosomov tudi v uravnavanju energetske presnove, transportu receptorjev na plazemsko membrano, celični sekreciji in celičnem signaliziranju. Vsi ti procesi potekajo lahko zato, ker se membrana lizosomov lahko aktivno zliva s plazemsko membrano. Ta osrednja vloga lizosomov ni le povezana z endocitotskim vstopom snovi v celice, pač pa tudi z eksocitotskim izstopom snovi iz celice. Kot zanimivost povejmo, da so bili termini avtofagija (lizosomalna razgradnja znotrajcelične vsebine), endocitoza (lizosomalna razgradnja materiala zunajceličnega izvora) in eksocitoza uvedeni na posvetovanju v Londonu leta 1963,<sup>11</sup> takoj po odkritju lizosoma.

Za meritve fuzije membrane posamičnega lizosoma s plazmalemo je idealno uporabiti metodo meritve membranske kapacitete, parametra, ki je linearno sorazmeren površini membrane, ta pa se spreminja zaradi procesov endo- in eksocitoze.<sup>13</sup> Neodvisno od laboratorija nobelovca Erwina Neherja je naš laboratorij razvil tehnologijo in opremo za meritve membranske kapacitete s tako veliko občutljivostjo, da se lahko z njo izmeri interakcija najmanjših celičnih organelov s plazmalemo, in sicer posamičnih dogodkov fuzije in fisije v izoliranih celicah<sup>14</sup> in v celicah v tkivnih rezinah.<sup>15</sup>

Rezultati meritve, ki so bili opravljeni v Denverju na endokrinih hipofiznih celicah, so prvokrat razkrili, da je narava fuzije posameznega mešička s plazmalemo sestavljena iz več intermediatov. Preden se membrana mešička povsem integrira s plazemsko membrano, se pojavijo vmesna stanja, ki imajo vsak svojo značilnost in so uravnavani s specifičnimi molekulskimi procesi. To odkritje v Denverju je odprlo nove smeri v raziskavah, ki so utrdile vlogo proteinov SNARE, predmet Nobelove nagrade v letu 2013, in sicer ne zgolj v procesih, ki uravnavajo pripravo na fuzijo dveh membran, pač pa tudi vlogo teh proteinov v fazah po fuziji, v vmesnih stanjih, ki vodijo v popolno integracijo membrane mešička s plazmalemo.<sup>16</sup> Ti novi intermedii homeostaze fuzije mešičkov s plazmalemo so tudi tarča zdravil, kakor je bilo pokazano v

letu 2019 (Lasič E, Lisjak M, Horvat A, Božič M, Šakanović A, Anderluh G, Verkhratsky A, Vardjan N, Jorgačevski J, Stenovc M, Zorec R. Astrocyte Specific Remodeling of Plasmalemmal Cholesterol Composition by Ketamine Indicates a New Mechanism of Antidepressant Action.

Sci Rep. 2019 29;9(1):10957) v naših laboratorijih. Ketamin, splošno uporabljeni anestetik s psihomimetičnim in antidepresivnim delovanjem, ki je tudi t. i. rekreativna droga, deluje neposredno na ravni interakcije posameznega mešička s plazemsko membrano.<sup>17</sup> Ti novi pogledi na mehanizme interakcije membrane celičnih organelov s plazmalemo odpirajo nova področja v nevroznanostih, celični biologiji in biotehnologiji na splošno.

Potovanje v Denver leta 2000 je spodbudilo napredek celične fiziologije.

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## O AVTORJIH PRISPEVKOV

Akademik **Tadej Bajd** (1949), upokojeni redni profesor za robotiko Fakultete za elektrotehniko Univerze v Ljubljani, je od leta 2014 predsednik SAZU. Podpredsednik SAZU je bil med letoma 2011 in 2014.

Akademik **Bojan Čerček** (1949) je dr. znanosti, kardiolog, redni profesor na Kalifornijski univerzi.

Dopisni član SAZU **Marc L. Greenberg** (1961) je profesor slovanskih jezikov in književnosti na Fakulteti za jezike, literature in kulture Univerze v Kansasu v ZDA in njen dekan.

Akademik **Igor Grabec** (1939) je dr. znanosti, upokojeni redni profesor za fiziko Fakultete za strojništvo Univerze v Ljubljani.

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Akademik **Jože Krašovec** (1944) je dr. bibličnih znanosti, dr. filozofije, dr. teologije, dr. zgodovine religij – religijske antropologije in redni profesor za biblični študij Stare zaveze Teološke fakultete Univerze v Ljubljani. Med letoma 2014 in 2017 je bil podpredsednik SAZU.

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Akademik **Marko Mušič** (1941) je univ. dipl. inž. arhitekture, podpredsednik SAZU med letoma 2008 in 2014, namestnik predsednika (2013–14) in predsednik SAZU leta 2014.

Izredni član SAZU **Boris A. Novak** (1953) je pesnik, dramatik, esejist, prevajalec in mladinski pisatelj, redni profesor na Oddelku za pri-

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Izredni član SAZU **Marko Snoj** (1959) je primerjalni jezikoslovec, etimolog, slovaropisec na Inštitutu za slovenski jezik Frana Ramovša ZRC SAZU ter profesor na Oddelku za primerjalno in splošno jezikoslovje Filozofske fakultete Univerze v Ljubljani.

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Akademik **Miha Tišler** (1926) je dr. kemijskih znanosti, častni doktor Univerze v Ljubljani, redni profesor za organsko kemijo Fakultete za kemijo in kemijsko tehnologijo Univerze v Ljubljani in njen zaslužni profesor.

Akademikinja **Dragica Turnšek** (1932) je dr. znanosti, paleontologinja, znanstvena svetnica na Paleontološkem inštitutu Ivana Rakovca ZRC SAZU v pokoju.



Akademik **Robert Zorec** (1958) je dr. znanosti, redni profesor za patološko fiziologijo na Inštitutu za patološko fiziologijo Medicinske fakultete Univerze v Ljubljani in podpredsenik SAZU. Od leta 2017 je podpredsednik SAZU.





***A AS AMERICA***



As a part of the cooperation of the National Academy of Sciences and the Yugoslav Academies of Sciences and Arts Council, 11 scientists visited Slovenia in 1974 and four visited the United States of America. I myself was one of the fortunate four, even though I barely started out as a researcher. My mentor was Professor Lojze Vodovnik, a career-long enthusiast over modeling of the neuro-muscular system. During laboratory meetings, he frequently encouraged us to embark on creating the complex ankle-joint model, which includes the agonistic and antagonistic muscle group. I started with the computer simulation of the model as a parallel project to my primary research task to develop a system for computerized measuring of walking. Professor Vodovnik rewarded me by allowing me to present my model at an American biomedical engineering conference in Philadelphia. Additional financial aid from the National Academy of Sciences enabled me to visit the top US rehabilitation engineering laboratories in Columbus, Los Angeles, San Francisco and New York. Ohio State University, where I was welcomed by Professor Robert Mc Ghee, was also the place I held my very first invited lecture on computerized measuring of walking. It is difficult to describe what an impression this visit to the USA had on a then 25-year-old researcher. I have carefully kept the letter of invitation from the National Academy of Sciences, National Research Council, Commission of International Relations, from October 1, 1974 signed by Mr. Charles P. Trumbull, Section on USSR & Eastern Europe, containing the following friendly opening phrase: »The National Academy of Sciences welcomes you to the United States!« and continues with: »It is clear that you will be a most welcome guest.«. The National Academy of Sciences truly prepared an excellent itinerary, I had plane tickets waiting for me at my Philadelphia hotel, hotel reservations were made ahead of my arrival in every city I visited, and I also received per diem to cover my food expenses.

In 1982, Professor Lojze Vodovnik of the Yugoslav Academies of Sciences and Arts Council on one side and Professor Robert Mc Ghee on behalf of the National Academy of Sciences organized a symposium *Movement in Man and Machine*. It was held from May 24 to 28 in Portorož. The symposium was attended by the most prominent American and Yugoslav roboticists and biocybernetics specialists, and significantly influenced further development of Slovenian robotics. A lecture by Professor Richard Paul, one of the most reputable roboticists at the time, proved particularly important. With his outstanding robotics course book published in 1981, Professor Paul influenced the teaching of robotics the world over. He also significantly impacted the way robotics was taught at the University of Ljubljana. The first Slovenian robotics course book was published as early as 1985. These days, Slovenia boasts a number of robotics course books, in both, Slovenian and English. The ones written in English were published by Springer International Publishing. Professor Bernard Roth's lecture was excellent as well. He visited Slovenia frequently because of his close friendship with Professor Jadran Lenarčič, the instigator and moderator of the series of ARK – Advances in Robot Kinematics symposia, as the central scientific robotics event in the world. The President of the Slovenian Academy of Sciences and Arts, Professor Janez Milčinski accompanied the symposium *Movement in Man and Machine* with the following words: »When I next visit the Prague Jewish Cemetery, I shall place a stone on Rabbi Löwe's grave, since he created the humanoid Golem. I shall be thinking about the American and Yugoslav scientists and wish for their work to always benefit the wellbeing of humans and humankind.«

Nearly every member of the Slovenian Academy of Sciences and Arts has cooperated, at one time of their career or another, with American scientists or artists. Some studied in the USA, others received one of the many US grants or stipends, others spent longer or shorter periods of time as researchers at US universities and institutes. Their

stories are collected in this book with the intent to rekindle the cooperation between the National Academy of Sciences and the Slovenian Academy of Sciences and Arts.

Tadej Bajd  
President  
Slovenian Academy of Sciences and Arts



## **TADEJ BAJD**

### **Pendulum Testing of Spasticity**

*In 1980 I was appointed Research Scholar at the Department of Orthopedics, School of Medicine at the University of Southern California in Los Angeles. My research was in the area of rehabilitation engineering and was supervised by Professors James Reswick and George Bekey, who has later turned (like myself) to robotics. I spent most of my time at Rancho Los Amigos Rehabilitation Center in Downey which, at that time, was the largest US rehabilitation hospital. My postdoctoral studies were financed by the National Institute of Handicapped Research, Department of Education, Washington, D.C.*

*It was my initial belief that my research would be in the frame of functional electrical stimulation (FES). FES is a rehabilitation method where electrical pulses delivered to the peripheral nerves are producing action potentials resulting in contractions of paralyzed muscles and thus movements of the limbs. At the time, at Rancho, FES was used with patients after stroke, while in Ljubljana we started to use FES to restore walking in completely paralyzed paraplegic subjects. There was a concern of medical experts at Rancho that FES might increase the spasticity of paraplegic subjects, so it was decided that my task would be to demonstrate the effect of FES on the spasticity level.*

*Spasticity is defined as a motor disorder characterized by a velocity-dependent increase in tonic stretch reflexes (muscle tone). In clinical practice, spasticity is described as the resistance felt to manually induced passive movement. Being an engineer, it was my aim to assess the spasticity quantitatively and not only subjectively as it is usually the case in the clinical environment. I was therefore upgrading the Wartenberg pendulum test by measuring and recording the knee joint angle with a double parallelogram goniometer. In our study, the spasticity*

*in knee extensors was tested by placing the subject on a tilt table in the supine position with both legs bent over the edge, hanging free at the knee. The examiner grasped the foot and brought one leg to a horizontal position. The limb was allowed to fall freely while recording the knee angle and the electromyographic (EMG) signal from the knee extensors (see Fig. 1, p. 15.). In a healthy person the leg swings around the resting position and no EMG is present when the subject is fully relaxed. In a patient with only slight spasticity, an irregularity is present only in the first swing of the knee goniogram and preceded by only a small amount of EMG activity. In moderate spasticity the knee goniogram is not reaching the resting angle, while the EMG occurs at each negative slope of the knee joint angle. There is even less knee angle oscillations and higher EMG activity apparent throughout the trace in the case of severe spasticity. In a patient with extreme spasticity, the lower leg does not move at all from the fully extended initial position [1].*

*My visit to Rancho Los Amigos Hospital was followed by the visit of Professor Lojze Vodovnik who was at that time already a member of the Slovenian Academy of Sciences and Arts. He came to the US as he was in urgent need of "scientific refreshment" after being the Dean of Faculty of Electrical Engineering, University of Ljubljana. Professor Vodovnik continued with the research on spasticity by using the pendulum test assessment. He proposed a combined biomechanical and neural model to facilitate qualitative discussion of the observed phenomena [2]. Both of us had been in position to demonstrate that FES does not increase spinal spasticity. In contrary, we showed that spasticity can be decreased by applying electrical stimulation to the dermatome belonging to the same spinal cord level as the selected spastic muscle group. The influence of FES on spasticity in subjects after spinal cord injury and stroke is described in several our published papers.*

*Professor Vodovnik and I prepared another article aiming to near the simple and inexpensive instrumentation needed for the pendulum testing of spasticity to the clinical environment [3]. Eight parameters*

were extracted from the knee angle and velocity recording to evaluate the degree of spasticity. A rigorous statistical analysis was performed to determine the parameters relevant for the estimation of spasticity. It happened that this article is my best cited paper. Already in 2002 it was noticed by Le Cavorzin et al. that “pendulum test is the best documented method of spasticity assessment in the international literature” [4]. Even more citations appeared during the last years, this is thirty years after the publication of our paper “Pendulum testing of spasticity”.

In the conclusion let us briefly review the contents of the articles citing our paper. They can be divided into five groups:

- application of pendulum test to different etiologies,
- improved measurement sensors for pendulum testing,
- improved modelling of spasticity based on pendulum testing,
- evaluation of various therapeutic modalities to decrease spasticity,
- application of pendulum test to the upper extremities.

Apart from patients after spinal cord injury and stroke, pendulum testing of spasticity was applied also to subjects after cerebral palsy, Parkinson’s disease, multiple sclerosis, intracranial lesions, and rheumatoid arthritis. The test was used even in human cadavers. Simple electrogoniometers were replaced by optical, inertial (accelerometers and gyroscopes), and ultrasonic sensors. Variability and reliability of the test were also evaluated. Our biomechanical and neurophysiological model was upgraded by nonlinear and time-varying muscle modelling. Mathematical model based on equilibrium point hypothesis was proposed together with independent component analysis. The effects of physical therapies (Bobath treatment, strength training, whole body vibration), surgical interventions (dorsal rhizotomy), and pharmacological approaches (baclofen, tizanidin, tetrazepam, botulinum toxin, and nabilone therapy) were also studied. The test was also transferred to the upper extremity, while assessing the movements in the elbow joint.



2. Barbara in Blaž na kampusu University of Southern California v Los Angelesu /  
*Fig 2: Barbara and Blaž at the campus of the University of Southern California,  
Los Angeles.*

*During my postdoctoral studies I was accompanied by my wife Dr. Barbara Bajd, biologist, who during our stay in California attended classes at the prestigious Lee Strasberg Theater and Film Institute in West Hollywood, spending, however, most of her time with our two-year old son Blaž (Fig. 2). During the weekends we had the chance to visit Californian cities from San Diego to San Francisco and national parks from Joshua Tree to Yosemite National Park with our old Chevrolet Vega car.*

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## **BOJAN ČERČEK**

### **My Collaboration with Slovenian Scientists/Physicians**

*Member of Medicine Section of the Slovenian Academy of Sciences and Arts from 2016.*

*MD from University of Ljubljana in 1974, PhD from Karolinska University in Stockholm in 1996.*

*ABIM Board Certification in Internal Medicine, Cardiovascular Disease, Critical Care Medicine and Adult Cardiac Echocardiography.*

*Director of Cardiac Intensive Care Unit at Cedars-Sinai Medical Center, Professor in Residence in Department of Medicine at David Geffen School of Medicine at University of California, Los Angeles (UCLA) and in Cedars-Sinai Professorial Series.*

*My collaboration with Slovenian scientists/physicians:*

#### **A) Participation at professional meetings, invited talks, and clinical teaching rounds at University Clinical Center in Ljubljana:**

*A selected list is included below:*

- 1) Reperfusion syndrome. University of Ljubljana, Ljubljana, Slovenia, 1987.*
- 2) Routine management of AMI. Slovenian Society of Cardiology, Radenci, Slovenia, 1994.*
- 3) Prehospital treatment of acute myocardial infarction. Third International Symposium on Intensive Care Medicine. Bled, Slovenia, 1994.*
- 4) Reperfusion in patients with cardiogenic shock. Third International Symposium on Intensive Care Medicine. Bled, Slovenia, 1994.*

- 5) *The role of troponins in management of acute coronary syndromes. 6<sup>th</sup> International Symposium on Intensive Care Medicine, Bled, Slovenia, 1998*
- 6) *Coronary bypass surgery in acute myocardial infarction. 6<sup>th</sup> International Symposium on Intensive Care Medicine, Bled, Slovenia, 1998*
- 7) *Acute septal and papillary muscle ruptures in acute myocardial infarction. 6<sup>th</sup> International Symposium on Intensive Care Medicine, Bled, Slovenia, 1998*
- 8) *Pathophysiology of unstable plaque. Acute coronary syndrome in Slovenia Symposium. Bled, Slovenia, 2001.*
- 9) *Therapeutic options in non ST-elevation MI. Acute coronary syndrome in Slovenia Symposium. Bled 2002.*
- 10) *Antibiotic treatment of acute coronary syndrome. Acute coronary syndrome in Slovenia Symposium. Bled, Slovenia, 2002.*
- 11) *Novel therapies of atherosclerosis. International Conference in Medicine, Radenci, Slovenia, 2002.*
- 12) *Cardiac diseases, case presentations and discussions. Visiting professorship, Department of Medicine, University of Ljubljana, Slovenia, 2008.*

**B) PhD students from University of Ljubljana:**

*Drs. Konia and Cercek have successfully defended their thesis; Dr. Mihailovic is currently enrolled in the Ph D studies.*

**Mojca Remskar Konia, MD, PhD, MACM:** *joined my laboratory in the Atherosclerosis Research Center at Cedars-Sinai from 2001 through 2002, for the PhD studies, supported by the Research Council of Slovenia. She is a graduate of the University of Ljubljana with an MD in 1996. She obtained the PhD in 2002.*

*The topic of research was the arterial wall thickening after arterial wall injury. She studied the effect of CD 40 signaling in the process. The findings were published in Circulation Research (88: 390-4, 2001).*

*After completion of residency in internal medicine and PhD studies in Ljubljana, Dr. Konia continued the career in the US. In 2002 she was an intern in surgery at the University of Miami Jackson Memorial Medical Center and was a resident in anesthesiology, 2003-2006 at UC Davis Medical Center. Thereafter she joined UC Davis Department of Anesthesiology and completed Fellowship in Cardiac Anesthesiology in 2006-2007. In 2008 she joined University of Minnesota. She is currently Associate Professor of Anesthesiology at the University of Minnesota, the Director of the Residency Program in Anesthesia and Vice Chair of Education in the Department of Anesthesia. She is extensively involved in clinical work and in the medical educational in the department. She has received numerous teaching awards while at the university of California Davis and at the University of Minnesota. She has published from the clinical work as anesthesiologist and in medical education. She has 28 peer reviewed publications.*

**Miha Cercek, MD, PhD:** *joined my laboratory in in the Atherosclerosis Research Center at Cedars-Sinai from 2004-2005 for PhD studies at the University of Ljubljana. He was supported by the Research Council of Slovenia.*

*The topic of the research was the autocrine role of interleukin 15 in intimal thickening after arterial wall injury. The findings were published in Biochem Biophys Res Commun (13, 618-22, 2006)*

*Dr. Cercek continued with residency in internal medicine and cardiology at the University Clinical Center in Ljubljana. He is currently the director of the Coronary Care Unit in the Division of Cardiology at the University Medical Center in Ljubljana and is clinically active in managing the patients in the unit and as an interventional cardiologist. He has 6 peer reviewed publications.*

**Peter Mihailovic MD:** *joined my laboratory in the Atherosclerosis Research Center at Cedars-Sinai Medical Center while enrolled in PhD*



*studies at the University of Ljubljana, in 2016. He is supported from the funds of Foonberg Chair in Cardiac Intensive Care at Cedars Sinai.*

*The topic of research is the immune mechanisms of atherosclerosis. He is studying the effects of autoimmunity to a self- antigen hCAP. It is a transitional research. The mechanistic studies focusing on CD 8 T cells are done in transgenic mice with experimental acute myocardial infarction, while human studies involve patients with acute coronary syndrome. The results have been presented at two national research meetings, of the American Heart Association and Vascular Biology (AHA Scientific Sessions 2016 in New Orleans, NAVBO 2016 in Boston).*

*Dr. Mihailovic plans to continue the career in Slovenia. After completion of the research at Cedars Sinai he will enroll in residency in cardiology at the University Clinical Center in Ljubljana. His professional goal is to become an academic researcher in acute cardiac care and an interventional cardiologist. We have already set up for plan for scientific collaboration in the field of autoimmunity in coronary artery disease after his return to Slovenia.*

### **C) Postdoctoral fellows:**

**Marko Noč MD, PhD:** *Dr. Noc spent one year as a clinical and research fellow in the Interventional Cardiology and Cardiac Critical Care at Cedars Sinai. I spearheaded his stay at Cedars Sinai and provided the mentorship for his involvement in acute cardiac care in Cardiac Intensive Care Unit. His mentor in the Cardiovascular Interventional Center was co-director of the center Franck Litvack MD.*

*He was funded by Fulbright Scholar program from 1999-2000.*

*While at Cedars-Sinai, Marko intensively worked in the Cardiovascular Intervention Center with all diagnostic and therapeutic coronary interventions. With these skills and in depth knowledge of the system of treatment acute coronary syndrome he instituted country wide system of care for acute ST elevation myocardial infarction in Slovenia.*

*This system is ranked as one the best in the Europe and resulted in over 50 lives saved every year when compared to care prior to the system of emergent transfer to invasive cardiology capable center from anywhere in Slovenia.*

*He is currently the Head of the Center for Intensive Internal Medicine at the University Clinical Center in Ljubljana and professor of Medicine at the Medical School of Ljubljana, Slovenia.*

*Dr. Noc continued with research of the acute coronary intervention in patients with out of hospital cardiac arrest. He is worldwide one of the top three investigators of the role of acute coronary angiography in patients after cardiac arrest. He is a well sought out speaker and is a member of European Working Group. He is a co-author on many position papers and guidelines for the European Heart Society. Dr. Noc is currently a member of the European Academy of Sciences and Arts (Class II-Medicine) since 2012 and is a member of the Executive Committee, Stent for Life, ESC/EAPCI. He is also the co-chair, EASPCI National Cardiac Societies& International Affairs Committee. In 2017 Dr. Noc has been elected the associate member of the Slovenian Academy of Art and Sciences.*

*Dr. Noc has 103 peer reviewed publications.*

#### **D) Visiting professorship:**

**Igor Kranjec MD:** *Dr. Kranjec, professor at the Medical School in Ljubljana and Director of the Cardiac Intensive Unit, Division of Cardiology at the University Clinical Center in Ljubljana visited Cedars Sinai Division of Cardiology for 3 months in 2001. He was supported by Fulbright Scholar program.*

*He performed a comparative study of the treatment of patients with acute coronary syndrome at his institution and at Cedars Sinai Medical Center. The findings were presented at the Grand Rounds at Cedars-Sinai.*

*After return Dr. Kranjec participated in many studies in the field of coronary disease under the umbrella of the European Society of Cardiology (Euroheart Survey, ACS Snapshot Registry 2005 through 2009).*

## **IGOR GRABEC**

### **Cooperation between the Faculty of Mechanical Engineering, University of Ljubljana and Cornell University, Ithaca, NY, USA**

*In the decade 1970-1980, the Laboratory for Synergetics at the Faculty of Mechanical Engineering of the University of Ljubljana, undertook to explore the phenomenon of acoustic emission (AE) caused by deformation of materials and its application at testing of technical constructions and industrial processes. During the presentation of our research results at the International Conference on AE at Anaheim, California in 1979, I was invited by Professor Wolfgang Sachse from the Department of Theoretical and Applied Mechanics of Cornell University to visit his laboratory where similar investigations of AE and other ultrasonic phenomena had been carried out. At that event, we prepared a plan of cooperation, and in accordance with it, I visited Cornell University in 1988 and stayed for three months. During my visit we started to develop for processing of AE signals a new system with a structure of a neural network. By this development we opened a new field in the framework of AE investigations and development of related instruments that has provided for intensive publication of our research results in the leading scientific and technical literature from the related domain [1-13]. In parallel with this we have also presented results of our investigations to the professional society in a series of reports at international conferences [14-33]. Original research on the newly opened domain led us also to preparation of a patent and innovation [34,35]. Based upon results of successful cooperation the Cornell University appointed me as "Adjunct Professor of Theoretical and Applied Mechanics". Among our cooperation with foreign scien-*

*tific institutions the cooperation with Cornell University was the most successful.*

*Triggered by the editor of Springer Series in Synergetics we prepared in the period from 1993 to 1997 the book Synergetics of Measurement, Prediction and Control that presents rather exhaustive review of our cooperation results [36]. After the publication of the book our cooperation has been limited mainly to the exchange of scientific information due to the lack of financial support.*

*Along with our joint research and preparation of scientific publications we have performed a series of exchange visits into which we have included also our diploma-students and young researchers. At the Cornell University dr. Edvard Govekar spent three months of his post-doctoral study visit while Rok Šribar finished his doctoral study there. In addition, Samo Božič finished his post-graduate and doctoral study at the Polytechnic Institute of New York University, while dr. Kornelija Zgonc has carried out his post-doctoral study visits at various research institutions in the USA.*

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Ob sprejemu novincev na Cornell Univerzi pred spomenikom ustanovitelja Cornella – na sredini rektor univerze, levo profesor Sachse, desno profesor Grabec. / A welcome for new students. Left to right: Professor Sachse, Dean of Cornell University, and Professor Grabec in front of the statue of Ezra Cornell, Cornell U co-founder.



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## **MARC L. GREENBERG**

### **Slovene Linguistics from Across the Pond**

#### A Transatlantic View

*My home town, Los Angeles, has a population about 5 times that of Slovenia. Born in 1961 in Hollywood, my family first moved from Hollywood to the homogeneously “white” middle-class suburb of Whittier when my brother, Phillip, was born in 1963 and in 1968 to West Los Angeles, which was much more international: in the neighborhood my peers included Nisei (first American-born generation Japanese), whose parents still had fresh memory and trauma from their time in the US internment camps; Holocaust survivors from Poland, Germany, Estonia; a short walk away a culturally dense Mexican-American neighborhood; and plenty of examples of the American Melting Pot: on my street a married couple, the husband Chinese, the wife Swedish, conversed in German. Our neighbors on either side were born in Japan, except for the husband of one couple, who was born during the Second World War in Arkansas at a War Relocation Center. My father owned a furniture store in a blighted area of Los Angeles, where I spent some time having long conversations with one of his suppliers, a German-Russian-speaking immigrant from Germany who had survived the War as an interpreter and reporter, who shared stories about his encounters with officers and political functionaries on both sides of the conflict.*

*Being a Californian can mean many things, the default position being to live in an ahistorical, monocultural, future-oriented, materialistic, culture of vanity and self-indulgence. But endless resources are available for alternative reinventions. My own reinvention was a function of curiosity. My great-grandparents, some of whom lived well into my adulthood, spoke with the Yiddish accents of their mother lan-*

*guage, and could, in principle, switch into the state language of their countries of origin: Russian, Ukrainian, Romanian, and Hungarian. This generation, characteristic of those who emigrated in the 1890s to early 1900s embraced the Melting Pot for their children and passed on little about their origins, including their language. Yiddish became the language of “secrets” as well as a code for terms of endearment. This piqued my curiosity and I would query them, mostly futilely, to tell me more about what it was like in the Old Country. There were tiny, but evocative vignettes, e.g., my Bucharest-born great-grandmother recounted how she saw King Carol II drive by in his carriage. But most of the memories were buried with them. As a teenager, my interest in origins broadened to a curiosity about the globe. Without means to travel, I collected postage stamps, read copiously about American history and literature about far-off lands; enraptured by a classical guitar recording of Andrés Segovia, I learned the instrument and its relative, the lute, affording musical journeys to 16th-century England, eighteenth-century Italy and Germany, 19th-century Spain; encounters with immigrants opened my horizons to the power of language learning and I set myself to autodidacticism in German and Russian; with a friend in the neighborhood I tuned into shortwave radio stations from Albania, China, the USSR, the Vatican, etc.*

*Beginning college at UCLA in 1979, I found myself, as best said in Slovene, “my axe fell into honey”: enrolling for Russian-language courses I discovered that UCLA had an exceptionally good program in Slavic languages, both with foci on literature and linguistics, and I eagerly learned Russian, Czech and Serbo-Croatian, alongside courses on the history and structure of the languages, dabbling also in Latin, Greek, Sanskrit, Albanian, Hungarian, and Finnish. Cold-War-era funding helped to finance study-abroad trips to the USSR, Yugoslavia, Czechoslovakia, and Hungary. My first study trip in 1982 was to the Leningrad State U. The late Brezhnev-era experience was both fascinating and eye-opening, but also disheartening in its quotidian indignancies to its citizens. The*

*following year I spent the summer at Charles U., meeting there my future wife, Marta, whose native language, Slovene, drew me to another language and culture. We used Czech as a bridge language for a few years until our communication evolved into a code-switching between Slovene and American English, which is shared by our bilingual children.*

*Yugoslavia in the second half of the 1980s fed my curiosity by affording the experience of a variety of perspectives on the world, languages, and cultures. I traveled with an archeologist friend, trained in Belgrade, the length and breadth of Yugoslavia, as I did too, with Marta (from Triglav to Gevgelija). My experiences with people and places contrasted pleasantly with my pessimism about life in the USSR and I knew then that I wanted my work to return me continually to Yugoslavia. During my Fulbright stay (1988–90) Marta and I married and started a family, Benjamin having been born in Ljubljana's Clinical Center not long before the events of late 1989. As conflict brewed in the country, when it came time to defend my dissertation in 1990 we had to make a choice about staying or going. With a small child in tow and uncertainty for Europe lying ahead, we left, and fortune led to my hiring in a tenure-track position in Slavic linguistics, one of the last of its kind, at the U. of Kansas.*

*During doctoral study at UCLA I was honored to study with the late Yugoslavian dialectologist Professor Pavle Ivić, attending in 1985 his seminars on Yugoslav dialectology and word-prosody systems of West South Slavic languages. Knowing my interest in Slovene, he suggested a paper on prosodic possibilities in Slovene dialects, following his method for the Serbo-Croatian dialects. With a UCLA graduate research fellowship I spent summer 1986 in the archives of the Dialectological Section of the SRC SASA as well as consulted with the dialectologists there and with Prof. Jože Toporišič at the U. of Ljubljana. This resulted in my first publication on Slovene dialectology (Greenberg 1987). Prof. Ivić also suggested that I read Avgust Pavel's work on the Prekmurje dialect, which led me to seek funding under the Fulbright Doctoral Disserta-*

tion Program to conduct fieldwork in Prekmurje and Porabje (defended UCLA 1990); the dissertation material appeared in a series of articles, Greenberg 1989, 1993, 1994).

During the Fulbright fellowship, I consulted with and collaborated fruitfully with many scholars, from the younger generation through the most senior, from Velimir Gjurin, Marko Snoj, Alenka Šivic-Dular, to Profs. Tine Logar, Jože Toporišič, Zinka Zorko, as well as others. My ties to institutions deepened both through official affiliations (SRC SASA, U. of Ljubljana, U. of Maribor, the Regional and Study Library Murska Sobota) and through personal ties to individual scholars who facilitated with my fieldwork, including the late Prof. Vilko Novak, Father Lojze Kuhar, and wonderful families in Prekmurje and Porabje who opened their homes to me to “teach” me their home language. The then-director of the Murska Sobota Library, Jože Vugrinec, generously offered me a photocopy of Avgust Pavel’s manuscript of *Vend nyelvtan*, an invaluable unpublished source on the last major codification of the Prekmurje dialect as a standard. Being present during the final days of Yugoslavia allowed me to explore issues of language and its symbolic importance in the framing of national narrative and formation of national identity. The Trial of the Four and the protests in support of the defendants made me to witness the cascade of events that moved not just through Yugoslavia but also the USSR and the Soviet Bloc, affording deeper insight into the social and political functions of language.

Among the most fruitful collaborations has been my work with Marko Snoj, who invited me in the early 1990s to revive the long-dormant journal *Slovenski jezik*, which we rechristened bilingually *Slovenski jezik / Slovene Linguistic Studies (SJ/SLS)*, to create an international forum for dialogue and progress on the linguistic analysis of the Slovene language. We found that we worked effectively together, especially as we made use of then-nascent email to bridge the Atlantic (though we also met in person during the summer when I made family visits to Slovenia). Marko’s early critique, for example, of my 2000 book helped me to

*improve it, particularly for the insight he had into accentology, etymology, as well as his generous permission to consult the pre-publication draft of his etymological dictionary of Slovene toponyms. Greenberg 2000 was awarded Best Book in Slavic Linguistics in New York by the American Association of Teachers of Slavic and East European Languages in 2002 and I believe much of this award owes to Marko's advice and encouragement. Meanwhile, our collaboration on SJ/SLS continued to develop as we attracted high-quality authors on both sides of the Atlantic to the journal and by our tenth year of publication in 2007 we were recognized in a prestigious international Slavistic publication as the journal of record for Slovene linguistics. Starting in 2005 we also began publishing both in print and platinum open-access (freely available in a permanently-curated institutional digital repository) editions, which broadened our readership immensely and helped to advance the culture of publication in Slavic linguistics to a more open standard of scholarly communication.*

*Later I was involved in co-founding the Maribor-centered Slavic journal *Slavia Centralis* (whose name I proposed at one of our early planning meetings), which fills a niche in its focus on the Slavic languages of Central and Southern Europe in contact with non-Slavic languages. This journal, whose prime mover is colleague and editor-in-chief Marko Jesenšek, took the print- and OA-model at its starting point, again gaining it a wide international readership.*

*After Marko Snoj and I passed our co-editorship of SJ/SLS to younger and highly capable colleagues, Kozma Ahačič and Grant Lundberg, we continue our collaboration and parallel activities on numerous fronts, from research (e.g., Snoj and Greenberg 2012), activism for open access (e.g., Bonaccorso, et al. 2014), to our activities as institutional leaders in our respective domains, he as the Director of the Fran Ramovš Institute for the Slovene Languages, ZRC SAZU, and I as the founding Director of the School of Languages, Literatures & Cultures at the University of Kansas. Administrative work and institutional devel-*

opment of this nature have their rewards, but, as Slavists sometimes say, the responsibility can feel as “heavy as the crown of Monomakh.” The transatlantic collaboration that has spanned much of our active careers has provided the moral support to help me wear the crown more lightly.

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## **ALOJZ KRALJ**

### **Selected Memories of my Numerous Stays in the USA**

*I dedicate this account to the memory of two great personalities, scientists and visionaries, mentors and personal friends; Academician Prof. Dr. Lojze Vodovnik and Prof. Dr. James B. Reswick from the USA. I owe eternal gratitude for all the cordial meetings and for their great hospitality in the US to researchers and friends; Prof. dr. Jacqueline Perry, Prof. Dr. P. Hunter Peckham, Prof. Dr. B. Bayron Marsolais, Prof. Dr. Donald McNeal and a great family friend Dr. Daniel J. Antonelli, to name but a few.*

*I had travelled to the United States and collaborated with numerous researchers several times prior to 1973, when I visited the country as a recipient of the Fulbright-Hays Grant. I became a Visiting Assistant Professor at the University of Southern California (USC), where I taught Biomedical Engineering Approaches to Neuromuscular Disability. I did research work with colleagues from the Rehabilitation Engineering Center (REC) of the Rancho Los Amigos Hospital in Downey. The center had a good rapport with the REC in Ljubljana, Slovenia, established in 1972. The talks I had at USC with the Dean of School of Engineering Prof. Ddr. Zohrab A. Kapieliano and Head of Biomedical Engineering Department, Prof. Dr. Fred S. Grodins, directed my attention to the issues of ensuring quality of education and research in university environment. I was honored to work at USC at the same time as the internationally acclaimed mathematician Prof. Dr. Richard Bellman, whose famous book, Dynamic Programming, was a part of my master's degree literature. USC and the Rancho Los Amigos Hospital REC was also where I met the preeminent robotics expert, Prof. Sr. George A. Beakey, whom I meet regularly at the well-known External Control of Human Extremities conferences in Dubrovnik, Croatia.*



*It was great honor and pleasure to see the Bulletin of Prosthetics Research publish an article on the prospects of functional electronic stimulation (FES) with restoration of mobility of paraplegic patients, which I authored in Ljubljana together with the Chief Physician Dr. Slobodan Grobelnik MD.<sup>1</sup> The article detailed data and methodology of FES-facilitated muscle strengthening, fatigue and the preparations for attained standing in paraplegic patients. It further envisioned the possibility of walking of such patients with the help of FES. At Rancho Los Amigos REC I researched the possibilities of FES improvement of the standing phase in hemiplegic patients.*

*In 1974, I became Visiting Researcher at the Krusen Center of Research and Engineering, Moss Rehabilitation Hospital. The center had developed a first-rate computer-based measurement of capabilities for studying gait with optional projection of the supporting force vector onto the walking patients. I utilized this in research of the effects of three-channel FES in the supporting phase of patient walking. This research led to the development of a six-channel electric stimulator.<sup>2</sup>*

*From May 11<sup>th</sup> to May 23<sup>rd</sup> 1981, I was invited to lecture at the complementary training for physicians and biomedical experts at the NATO Advanced Study Institute in Aylesbury, UK. The complete lectures and debates were published in the sizable publication Spinal Cord Injury Medical Engineering.<sup>3</sup> In it I described the complete FES methodology for lower extremities of paraplegic patients.<sup>4</sup> A fellow lecturer, Prof. Ddr. Daniel Graupe of Illinois Institute of Technology invited me to Chicago,*

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<sup>1</sup> Functional Electrical Stimulation - A New Hope for Paraplegic Patients, *Bulletin of Prosthetics Research* 10-20 FALL 1973, pp. 75-102, Library of Congress Catalog Card No. 66-60273

<sup>2</sup> Three channels for the swing phase and three channels for the support phase; conference paper in Sussex 1971 and IEEE Trans., Vol. BME-26, No. 2, 1979

<sup>3</sup> Dhanjoo N. Ghista in Hans L. Frankel, Ed., *Spinal Cord Injury Medical Engineering*, Charles C. Thomas, Publisher Spring Field Ill., USA, pp. 557

<sup>4</sup> Dhanjoo N. Ghista and Hans L. Frankel, Ed., *Spinal Cord Injury Medical Engineering*, Charles C. Thomas, Publisher Spring Field Ill., USA, pp. 439-509

*where we began researching the applicability of paraplegic patient's own muscles' EMG (EMG signature discrimination analysis) for control of FES stand up and walking. I welcomed the offer for collaboration for the term from November 20<sup>th</sup> 1981 to July 19<sup>th</sup> 1982. It supported my aim to transfer and disseminate the entire FES methodology across the United States. My letter of appointment as a Professor at the IIT stated, that I was to research at the Faculty of Electrical Engineering, where I was to lecture on the subject of Functional Electrical Stimulation to Master's candidates. Our research collaboration included the physiotherapy department of the acclaimed Michael Reese Hospital in Chicago, where we*



*Predsednik zasliševalne komisije po demonstraciji hoje in razgovoru pacientu izreka čestitke. / President of the Committee on Veterans' Affairs congratulating the patient after demonstration of walking.*

*trained patients in FES standing and simple walking. The success of the knowledge transfer is illustrated by the photograph from the book Chicago, The Next Frontier; it shows Prof. Graupe's team, Dr. Kate H. Kohn MD and two students that were already training with the team in 1982.<sup>5</sup>*

*In the summer of 1982, I had to return home. One of the reasons for that was the lack of a suitable laboratory for research of biomechanics of movement and locomotion in Chicago, at both IIT and the Michael Reese Hospital. I kept returning to the Pritzker Institute of Medical Engineering, IIT as Visiting Professor up to August 1986. We set up a laboratory for biomechanical research of locomotion at the Institute and it was likely the only such laboratory in the Chicago county at the time. Prof. Dr. Robert Jaeger was my primary co-researcher from Pritzker Institute of Medical Engineering. We successfully cooperated in both, medical and research work with Prof. Dr. Paul R. Mayer Jr., Director of Spine Injury Center and the colleagues from Rehabilitation Institute of Chicago (RIC). I soon became good friends with Dr. Mayer and Prof. Dr. Dudley Childress from RIC.*

*In 1986, I was Invited Guest at the FES experts and researchers' hearing before the Committee on Veteran's Affairs, House of Representatives of the Ninety-Ninth Congress in Washington. The hearing endeavored to overview the achievements, contributions and financial sources in the field of rehabilitation and locomotion functions restoration by means of FES in paraplegic patients. Statements by colleagues from various US centers confirmed, without objection, that my team from Ljubljana was the first to achieve and record the standing and simple walking of a paraplegic patient with FES.<sup>6</sup> A publication in the Bulletin of Prosthetics Research PBR 10-20 in fall of 1973 was crucial*

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<sup>5</sup> Chicago, The Next Frontier, Bozidar Yovovich, p. 81, Windsor Publication Inc., Chicago, 1989

<sup>6</sup> Application of Functional Muscular Stimulation, Hearing Before the Subcommittee on Oversight and Investigations of the Committee on Veteran's Affairs, House of Representatives, Ninety-Ninth Congress, Second Session, February 19, 1996, Serial No. 99-42, U.S. Government Printing Office, Washington, 1986, pp. 142 –

*in the recognition of our team's proof of feasibility of FES standing and walking of a paraplegic patient.<sup>7</sup> This research had been co-financed by the Social Rehabilitation Services (SRS) and, later, by the succeeding National Institute of Handicapped Research (NIHR). The head of the NIHR rehabilitation program Mr. Joseph Traub shared my delight at that acknowledgment.*

*Soon after the Congressional hearing, we received an invitation at the Ljubljana REC, to demonstrate a patient's FES enabled and assisted standing and walking in front of the members of the US Congress. The first photo shows a patient walking at Capitol Hill in Washington D.C. in 1986. The second shows the President of the hearing Committee, Congressman G. V. 'Sonny' Montgomery of Mississippi, congratulating the patient. In light of all this, my colleague, Acad. Prof. Dr. Tadej Bajd and I decided to make the FES methodology widely accessible and beneficial to all paraplegic patients. We wrote a monograph, covering the complete knowledge of the FES standing and walking of paraplegic patients, the first work of its kind in the world.<sup>8</sup> We dedicated the book to our spouses Irina and Barbara. The publisher, CRC Press Inc. marketed the book as a bestseller in 1989 and 1990.*

*The US financing rules changed in 1985, and REC Ljubljana could no longer apply. We could still apply for smaller, so called Innovative Grants at the National Institute of Disability and Rehabilitation Research (NIDRR) in Washington D. C.. My colleague Bajd and I successfully secured this financing numerous times until 1993. Thereafter, we began applying for EU research financing. I remain very grateful and honored for the chance to compete for the United States' research fi-*

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<sup>7</sup> Functional Electrical Stimulation - A New Hope for Paraplegic Patients, Bulletin of Prosthetics Research 10-20 FALL 1973, pp. 75-102, Library of Congress Catalog Card No. 66-60273

<sup>8</sup> Functional Electrical Stimulation: Standing and Walking After Spinal Cord Injury, Alojz Kralj in Tadej Bajd, 1989, CRC Press, Inc. Boca Raton, Florida, USA, pp. 198

nancing that my colleagues and I benefitted from, with short breaks, for more than 20 years.

In 1989, I decided to organize an excursion for biomedical tech and robotics students from Ljubljana. Our first trip in 1990 involved 19 students and took 18 days. We travelled by car and visited New York, Boston, Niagara Falls, Detroit, Cleveland, Chicago, the Gary steel area, Pittsburgh, Philadelphia and Washington. We visited universities, various institutes and factories, like the Allen-Bradley Co. in Milwaukee, Wi., Universal Automatic Co. in Chicago, Ill. and Hewlett-Packard in New Jersey. The 1993 for 27 students lasted 22 days. My fondest memories are of cordial exchanges between the students from the two countries, with professors, doctors and factory staff. Our hosts often cried with laughter and almost wouldn't let us leave. They emphasized the fact that ours was the first visit from any of the socialist countries.

In 1991 I was elected IEEE Fellow of the prestigious Institute of Electrical and Electronics Engineers. Soon after, I was elected Vice-rector of Scientific Research and in 1995 Rector of the University of Ljubljana. I was elected a Corresponding Member of the Slovenian Academy of Sciences and Arts on May 27<sup>th</sup> 1993, and Full Member on May 27<sup>th</sup> 1997. I served in the capacity of the Vice-President from May 6<sup>th</sup> 1996 to April 25<sup>th</sup> 2002. I was elected Full Member of the European Academy of Sciences and Arts on March 7<sup>th</sup> 2009.

## **JANEZ KRANJC**

### **My Professional Contacts with the United States**

*My professional contacts with the United States of America reach into two areas. Since the 1990s, together with my colleague, Professor Franjo Štiblar, I have been organizing study excursions to the USA for students of the Ljubljana Faculty of Law. They aim to familiarise Slovenian students with the American legal system as well as with some international organizations with headquarters located in the US. These study trips are limited to Washington DC and New York City. Excursion programme include attendance of public hearings in state and federal courts, and visits to law firms and universities (George Mason, NYU, Columbia, and Fordham University). After attending court hearings,*



S sodnikom Frankom Labudo na NY Bar Association / With Judge Frank Labuda at NY Bar Association.

*students debate with judges and attorneys and attend one or more regular lectures at the above mentioned universities. The students also visit the World Bank, the International Monetary Fund, and the United Nations headquarters in New York. At all these institutions, students meet with various legal experts who address some important legal issues. As part of several excursions, we also visited the Federal Judicial Center in Washington DC.*

*Study excursions to the United States have proven to be extremely useful as they provide students with specific insights into the work of the US judiciary and legal system in general, as well as into the operations of major international organizations. Visits to US universities encouraged several participants to enrol into American LL. M. programs. Given the present importance of American law in international*



*Obisk pri senatorki Amy Klobuchar leta 2017 / A visit to Senator Amy Klobuchar in 2017.*

*trade and finance these excursions offer a valuable enrichment of legal knowledge in Slovenia.*

*Research is another area of my cooperation with the United States. In the academic year 2011/12, I was selected a research fellow at the Straus Institute of the New York University, led by one of the world's most prominent experts in WTO and European law, Professor Joseph H. H. Weiler. The working conditions at the Institute which employed a number of American and European colleagues were near ideal. In addition to the excellent material conditions, the extraordinary academic climate created by joint meetings, workflow discussions, view exchanges and social events were particularly encouraging.*

*I am again in the USA, this time as a guest of The Jean Monnet Center for International and Regional Economic Law & Justice.*



## JOŽE KRAŠOVEC

### Milestones of Cooperation with American Researchers

*I have never been a Fulbright scholar or a visiting professor in the United States, yet my academic path has been marked most clearly by three milestones of cooperation with American academic institutions and with individual American researchers active in the State of Israel and in Slovenia. The first milestone was my research work at the Tantur Ecumenical Institute in Jerusalem, which was founded in 1972, as a modern interconfessional research institute, on the hill of Tantur, located between Jerusalem and Bethlehem. The University of Notre Dame (Indiana) is responsible for the administration and financial maintenance of the Institute. After completing my doctorate at the Pontifical Institute of Biblical Studies in Jerusalem in 1976, one year later the rector of the Institute, Professor Walter Harrelson of Vanderbilt University (Nashville, Tennessee), personally invited me to apply for a Tantur Ecumenical Institute research fellowship. This fellowship allowed me to carry out two years of research at the Tantur Ecumenical Institute and at the Hebrew University of Jerusalem (1979–1980 and 1981–1982).*

*While at the Hebrew University, I enrolled in a second doctorate, completing it in July 1982. My dissertation, titled Antithetic Structure in Biblical Hebrew Poetry, was published in 1984 by Brill in Leiden (Netherlands). The head of the doctoral program at the Hebrew University back then was Jonas C. Greenfield. A New Yorker who had moved to the Hebrew University in Jerusalem after having worked for years at many American universities, Greenfield was a renowned and popular professor of Semitic languages and Qumran manuscripts. On meeting me, he was reminded of the Slovene academic Viktor Korošec, an internationally acclaimed researcher of Roman and cuneiform law. After I had*

*finished my doctorate, Professor Greenfield told me, “When we first met back when you were enrolling, I knew you would complete your project. I am glad I was not mistaken, for many others start but do not finish.” Professor Greenfield later became a member of the Israel Academy of Sciences and Humanities. On March 13, 1995, when I was a researcher at the École biblique et archéologique française de Jérusalem, I was leafing through a newspaper in the dining room after breakfast. The telephone rang. Because I was alone, I picked it up. It was Professor Greenfield, trying to contact the famous French scholar of Qumran manuscripts Émile Puech, who was not available at the time. That very evening, we heard from the media the startling news that Professor Greenfield had died. The coincidence with that phone call on that fateful day is the reason I cannot neglect to mention this occurrence.*

*One interesting aspect of my extremely intensive two-year research at the Tantur Ecumenical Institute was that my daily respite consisted, for the most part, of playing table tennis with a Catalonian colleague. Eventually, I became adept at the art, so much so that I was crowned “house champion” after defeating an American colleague. Within the optimal study surroundings at the Institute, each of us had the opportunity to present our research results at an annual joint seminar. During my first year there, I was lucky enough to have very inspiring daily breakfast conversations with the then rector of the Institute, Professor George W. MacRae, who was also Professor of Biblical Studies at Harvard University. At that time, the Institute generally selected leading American professors to serve a one-year mandate as rectors. Living and working with researchers from all continents made for a unique experience.*

*The second milestone of cooperation with US academic institutions and researchers occurred through my organizing of a symposium on Bible interpretation that took place from September 17 to September 20, 1996, at Cankarjev dom in Ljubljana. It was at this event that we unveiled the first truly ecumenical Slovene Bible translation. Titled “The*

*Slovene Standard Translation,” this version was published under my direction. The initial idea had been to mark the event with an academic symposium that would bring together a small number of researchers. However, interest in the symposium – which focused on textual criticism and translation of the Bible into various languages, with a special emphasis on Eastern (formerly Communist) Europe – was so great that the symposium grew into a truly international congress attended by many of the world’s leading experts in biblical textual criticism. Most of these experts (including Bruce M. Metzger of Princeton University, among others) were from the United States. In 1998, in cooperation with the Slovenian Academy of Sciences and Arts (SASA), the University of Ljubljana and the University of Maribor, we published the 1909-page conference proceedings, which consisted of high quality papers by many of the recently-invited scholars. The title of the four-language (Slovene, English, German and French) volume published by Sheffield Academic Press was *Interpretation of the Bible, Interpretation der Bibel, Interprétation de la Bible, Interpretacija Svetega pisma*. This publication has proved to be a seminal work also in world terms because the majority of these hermeneutical studies into the history of Bible translation deal with something that at the time was not easily accessible to the international academic sphere, namely, the history of Bible translations into Eastern European languages.*

The third milestone in cooperation with American scholars came in Leiden in 2004 when, at the 18<sup>th</sup> Congress of the International Organization for the Study of the Old Testament (IOSOT), the board members unanimously elected me IOSOT president for 2004–2007. One of my tasks was to organize, under the auspices of the Slovenian Academy of Sciences and Arts, the University of Ljubljana and the University of Maribor, the 19<sup>th</sup> IOSOT Congress, alongside smaller congresses – the International Organization for Targumic Studies (IOTS), the International Organization for Septuagint and Cognate Studies (IOSCS), the International Organization for Qumran Studies (IOQS), the International

*Organization for Masoretic Studies (IOMS), the Bible of Edessa Project of Leiden Peshitta Institute, Netherlands (BEP), and the International Syriac Language project, University of Melbourne, Australia (ISLP). This academic gathering brought together leading American researchers from each of these study areas. The 19<sup>th</sup> IOSOT Congress took place in Ljubljana from July 15 to 20, 2007, at the Faculty of Law in cooperation with the Society of Biblical Literature (SBL), based in Atlanta, Georgia, and in close cooperation with the American Academy of Religion (AAR). At the opening of the IOSOT conference on September 17, 2007, David L. Peterson, who was then president of SBL, gave the keynote address.*

*On July 16, 2007, we also unveiled facsimiles of the oldest Slovene Bible translations from the periods before the 1584 Dalmatin Bible. This took place in the framework of the special Biblia Slavica edition, of which Professor Hans Rothe of the University of Bonn and the North Rhine-Westphalia Academy for Sciences and Arts was the editor. The facsimiles and accompanying studies for a comprehensive commentary on the Slovene edition of facsimiles of the oldest Slovene Bible translations were the fruit of the SASA Research Centre project led by Professor Majda Merše. The lectures by invited professors from the 19<sup>th</sup> IOSOT Congress were published in 2010 by Brill (Leiden) in the 639-page Congress Volume Ljubljana. All of the other Congress presenters published their papers in various other academic journals and collections. Collaborating with American researchers led me, in 2009, to receive an invitation to help work on the two-volume Oxford Encyclopedia of the Bible and Ethics, published by Oxford University Press in New York in 2011, and to write a long entry for "Punishment." This topic was then part of my planned research into the dimensions of justice in antiquity and in subsequent legal and philosophical interpretations. The bulk of my research into this topic was published in the extensive studies Nagrada, kazen in odpuščanje (SAZU, Ljubljana 1999) and Reward, Punishment and Forgiveness (Brill, Leiden 1999). My linguistics-oriented monograph The Transformation of Biblical Proper Names (New York*

and London: T & T Clark International, 2010) was published in the United States.

*The final assessment of this decades-long cooperation with American academics is that intensive cooperation with American academic institutions and with individual researchers is of key importance for our country, for various reasons. Cooperation on personal and interstate levels always occurs within an international framework, a framework that today means a global network with many a connection and much cooperation. The spirit of the Bible, which has a particularly distinguished place in the United States, invites a spirit of cooperation that*



Slavnostno odprtje 19. kongresa International Organization of the Study of the Old Testament (IOSOT) v sodelovanju z ameriškim združenjem Society of Biblical Literature 15. julija 2007 na Pogačarjevem trgu v Ljubljani. / *Formal official opening of the 19th International Organization of the Study of the Old Testament (IOSOT) meeting, organised in cooperation with the American Society of Biblical Literature on 15 July 2007 at the Pogačar Square in Ljubljana.*

*stems from the noblest of motives and that helps to bring together nations, cultures and religions. The geopolitical position of Slovenia, which lies at the confluence of East and West, meanwhile, gives us the opportunity to help build bridges between the two worlds. This connecting of disparate worlds was the main spiritual symbol of the two biblical congresses in Ljubljana, where leading scholars from the United States and its important ally, the State of Israel, formed the majority of participants. Cooperation on a scholarly level gives little indication that normal political and cultural exchange is painfully inhibited by the incomprehensible, even irrational, political relationship between the United States and Russia. Researchers are particularly called upon to build bridges and firmly to reject artificial fences that have nothing to do with spiritual and cultural reality.*

## **IGOR MAVER**

### **My Californian Scientific Visits**

*I have travelled to the American federal state of California several times, sometimes for a longer period, sometimes for a brief visit of an academic conference, but always with great pleasure and high expectations, despite the jet lag that confines one to bed for a day or so after arrival. Two longer visiting periods at two Californian universities helped me immensely in my scientific research work and in gaining the needed pedagogical experience abroad, in a somewhat different university environment from the Slovenian one.*

*Some twenty years ago I lectured for the first time at the University of California at Davis near Sacramento, where I was invited by the then Head of the Department of English, Professor Karl F. Zender. He has since been for many years a good family friend and research advisor, an expert in contemporary American literature (especially for the writer William Faulkner from the American South, as Zender belongs among the best known literary critics of his work) and William Shakespeare's drama. With his wife Lynn they have since then visited Slovenia officially and privately several times and have become really enthusiastic about our mountains. Along with research and lecturing this visit also resulted in the publication of my book with a US publisher on post-colonial literatures (*Revisioning Post-Colonial Studies*), in hard-back and paperback edition in a greater number of copies, for which Professor Zender contributed a review published in the book. Ever since this first visit, so important for my academic development, we have both remained active in the International Association of University Full Professors of English, where I currently hold an executive function.*

*After my arrival to this Californian public research university in a small university town of Davis, quite close to the Californian capital and*

*the centre of the „Gold Rush“ in the 19th century, Sacramento, I was at first impressed by the working conditions, from the university library, the typical American campus, the colleagues whose doors were open practically all the time (also quite literally), to the visiting well-known literati and literary critics, and above all, to some sort of creative peace and the possibility of a focused study, writing and lecturing.*

*In my lectures I tried to present Slovenia as best I could, which is why I will not forget the lecture on the influence of American drama on Slovenian theatre after World War Two, which was considerable, in terms of opening up to the broader non-ideological, axiological evaluation of art, especially drama. The questions were numerous and well-intentioned and it is interesting that quite a few critics and cultural workers or simply literature lovers came to the public lecture, who, I hope, got a good insight especially into the Slovenian creativity of the second half of the 20th century. Many of them knew well the Slovenian poet and the later member of SASA Tomaž Šalamun, who often read his poetry at American universities and, in fact, influenced many American poets of the younger generation. This fact many of my colleagues still agree upon: I wrote several studies about Tomaž back then, which were published in American literary journals or books, and I thus gladly promoted not merely him but contemporary Slovenian poetry as well. As regards research, in the 1990s, many printed as well as manuscript materials that I was working on in Davis were already digitized. In Slovenia, and even at some other European universities, this was at the time not quite the case yet, or at least not to the same extent as in the USA, which of course made my research work so much easier.*

*During the time of my stay in Davis I visited many beautiful locations in the vicinity. I most fondly remember the visit to the protected redwood forest Muir Woods Redwood National Monument, the university town of Berkeley, lake Tahoe, the San Francisco sights with the impressive Golden Gate Bridge, the old Sacramento with steamer and wooden building replicas from the „Gold Rush“ period, and the Pacific*



*part, a bit more to the South, where the American Nobel prize winning writer John Steinbeck had lived. Other than that, there were oranges growing in the garden of the house where I lived, what else could I possibly have wished for? San Francisco offered me cultural variety and pleasure that I sometimes missed in Davis, although „San Fran“ or „Frisco“ is often shrouded in fog and is sometimes cooled by the unpleasant Pacific breeze. I attended concerts in the philharmonic, saw a huge sea aquarium, strolled frequently down Fisherman’s Wharf, visited the museum of modern art, organized a panel at the AAASS conference (American Association for the Advancement of Slavic Studies), with the participation of many Slovenian immigrants to the USA, and much more.*

*A few years ago I came to the prestigious private Stanford University in Palo Alto in the so-called Silicon Valley upon the invitation of the then Head of the English Department. My wife and son joined me later on, since I definitely wanted to show my son, before departure, the Silicon Valley, which is why we paid a visit to the Computer History Museum, Mountain View, near the influential Google and Apple facilities in Cupertino. Palo Alto and the neighbouring little towns are beautifully groomed enclaves of computer experts and entrepreneurs, not far from and just slightly South of San Francisco, some half hour away by the local Caltrain. There is no point in discussing the university life itself with its incredible resources, as well as the subtropical climate and vegetation, which is, at least in the central part of the campus groomed to perfection. My first finding was that practical knowledge and experiential learning represent two important premises at Stanford, not only in natural and other sciences, but also in the humanities and social sciences. We would meet with colleagues at lunches on the campus itself, which were always of a working nature as well. The result of my research stay was (among other things) that my good colleague and Head of the English Department, Professor Gavin Jones, published his study of one of Herman Melville’s texts in a book that*

*I edited some years later with the financial support of SASA and the Scientific Research Institute of the Faculty of Arts in Ljubljana, where it was published. We have so far also collaborated in the field of PhD theses in American studies, the interdisciplinary field I coordinate at the Faculty of Arts of the University of Ljubljana.*

*It looks as though I will visit „my“ California again soon, as I was recently selected by the University of Ljubljana and the European Social Fund for a three-month financial support during one semester of visiting lectures, in 2020, at the University of California at Berkeley (in this excellent system public system of Californian universities there are ten university locations from San Francisco to San Diego) within the framework of the internationalization of the University of Ljubljana. In my public lectures I intend to, along with my narrower field of Anglophone literatures, speak about my findings about the first explorations of California in which also participated a Carniolan/Slovenian Jesuit missionary from the end of the 17th and the beginning of the 18th century (a monograph in my co-authorship is forthcoming), about contemporary Slovenian literature, among whom there will be quite a few members of SASA, about the transnational paradigm in researching diasporic literatures today, something I am currently working on, and, last but not least, about the pertinent topic of the so-called frontera, the border and literature between the USA and Mexico in the past and today. In addition, I have been invited to deliver a few lectures at Stanford University in Palo Alto. As Al Jolson sang back in 1924, I myself, too, can now hum his refrain „California, Here I Come“!*

## ZDRAVKO MLINAR

### Cooperation with American Social Scientists

#### Social Context and Personal Experience

##### **Professional Ideological and Political Starting Points**

*More than exclusively Slovenia, Yugoslavia was the starting state and social context of our associations and cooperation with the USA.*

*As an international quirk, Yugoslavia had attracted the attention of social scientists and politicians alike, who appreciated its non-bloc role and innovative introduction of its »self-management system«. This helped open up access to the international arena for several Yugoslav sociologists and 'politologists'. The USA had available the greatest pool of social sciences knowledge, but the official state ideology critically rejected it. Due to the orientation towards dialectic and historic materialism, even sociology was deemed a »bourgeois science« in Yugoslavia.*

*In the 1960s, we started to actively introduce empirical sociological research which, of course, was best developed in the USA, especially as far as methodology was concerned. Ideological and political reservations with regard to forming ties with America persisted and became even bigger in the 1970s. Yet, on the bilateral level, the countries institutionalised their cooperation, particularly by introducing the Ford and Fulbright grants, enabling Yugoslav scientists to specialise in the USA. Unlike other »socialist« states, Yugoslavia was relatively »open« to such arrangements.*

*Despite this, our contacts with American social scientists remained subject to suspicions and control of the Ministry of the Interior. Even cooperation within the institutional framework – primarily in the fields of sociology and political science – was constantly viewed as problematic. This was especially the case for myself and my colleagues from*

*the Faculty of Sociology, Political Sciences and Journalism. We were under enormous political pressure and »administrative interventions«, including seeing four of our colleagues being sacked for ideological deviance, with strong and clear criticism of how they had succumbed to foreign, especially US, influence. When I was hosting visitors from America, finding partners for dialogue proved to be extremely challenging since no one wished to draw attention to themselves by having contacts with Americans.*

*However, there were some notable exceptions, even among the top politicians of the time. The more liberal ones accepted personal responsibility for our cooperation with the Americans and provided some cover for researchers involved in joint research projects. In the 1960s, Anton Vratuša was such a politician. Vratuša had previously worked on the highest level of Yugoslav politics (as an assistant to Edvard Kardelj) and led the Yugoslav delegation to the United Nations in New York.*

*While our quest was for sociological knowledge in the USA, our American colleagues wished to explore the social and political innovativeness which stood out from the established concepts of capitalist and socialist countries.*

### **Establishing Contacts and Differences in University Work**

*The majority of American initiatives came from departments of political sciences, while I personally tried to establish a network with sociologists. For those of us in Slovenia and Yugoslavia, it was crucial to establish and maintain official channels for scientific co-operation with the USA. This chiefly refers to the Ford and Fulbright grants and setting up contacts for professional development. It was through these channels that most of our fellow social scientists cooperated with relevant US institutions.*

*Universities served as the institutional foundations for such contacts. Initially, there was only one university in Slovenia, which formally functioned in quite a rigid and limited structure with emphasised scientific*

*disciplines and hierarchical limits. Socialising was largely formalised and took the form of meetings. In the USA, this was relatively more relaxed (socialising over lunch at a faculty club and personal contacts). This was probably due to varying traditions, although there were other differences. The Yugoslav politicians' concern that matters might get out of hand was evident in the air of distrust and the suspicions levelled at activities outside the institutions. The collectivist philosophy with its negative opinion of internal differentiation and individuality eo ipso leaned toward associations and individuals engaging in communal activities.*

*I was also surprised by the determination to avoid »inbreeding« within the universities, further substantiated by objective possibilities. In the early period in Slovenia, it was practically impossible for individuals to work at more than one university. On top of this, we were very surprised to see the high level of inter-university competition. The Sociology Department at the University of North Carolina at Chapel Hill was publicly recognised as the fourth best in the USA. I also became aware of the great endeavours made by universities and professional organisations to attract individuals from abroad. The heads of university departments virtually boasted having greater numbers of foreigners than their counterparts.*

*I was personally astonished to be invited, as a non-American observer, to present my views at the Summit meeting of the International Studies Association at Southern Illinois University in Carbondale. In my previous visit in 1967 to see Professor A. L. Bertrand of Louisiana State University at Baton Rouge, there had been considerable interest in my country of origin but that was accompanied by simplified preconceptions about communism and the bloc division of the world.*

*Great flexibility and mobility were also evident from the students' ability to select from courses touching on different science disciplines and they were not all limited by obligatory pre-set curricula units as happened in Yugoslavia.*

*A precondition for ensuring a greater selection and combination of courses is, of course, access to different courses at a single location, as occurs on American campuses. While university campuses separate students from the complexity of the everyday life underway in their local communities, they do facilitate or enable course versatility by allowing students to attend courses at various faculties/institutions, unlike in Slovenia where this demarcation is still visible even after the Bologna Process reforms. Naturally, this presupposes the greater individual autonomy of both students and professors typical of the USA. We were particularly surprised by the ease with which an American colleague was able to determine the curriculum and didactic methods for his course in the following year.*

*On one hand, what I could notice in the USA was perfect professional allegiance and daily presence at the faculty. Yet, at the same time, I learned about the phenomenon of the sabbatical year during which professors were exempt from their teaching duties and allowed to withdraw from the faculty, and also travel abroad. A number of my American colleagues whose sabbatical was approaching were interested in spending it in Slovenia. The only thing we were required to do was provide them with a suitable workspace, as I often argued – that would have constituted a great upgrade to our study environment – yet this option mostly remained untapped.*

### **Entering the world through research and teaching activities**

*My joining of the comparative research project *International Studies of Values in Politics*, as presented in *Values and the Active Community in 1970*, proved to be an important connection with American social scientists and enabled me to also work internationally. It was founded by Philip Jacob, a professor at the Department of Political Sciences at the University of Pennsylvania in Philadelphia. This was an extensive international research project which brought together political scientists, sociologists and other social scientists from the USA, Yugoslavia,*

*Poland and India. As a self-governing state which belonged to neither bloc, Yugoslavia was (in line with the coordinator's Quaker values) of particular reference. His colleague Henry Teune held the upper hand in the project, particularly with respect to the methodology. Teune was a well-educated social scientist who acted cohesively in our extremely mixed group of researchers from four countries, while at the same time surpassing the horizons of the actual empirical research in progress. We personally became quite close and enriched our joint empirical research with the theoretical work *Developmental Logic of Social Systems*, 1978 (also mentioned in *Encyclopaedia Britannica*). We also pursued our ideas in the International Sociological Association, first through the Research Committee for Social Ecology. Based on a workshop organised at the Faculty of Sociology, Politology and Journalism, we published the book *Social Ecology of Change* (1978).*

*Other experiences of cooperating with American colleagues soon followed. In 1967, Robert Agger invited me to participate in a comparative survey testing the possibilities of experimentally altering popular opinion on education in local communities (ATE – Attitudes toward Education). In relation to this survey, I spent the first semester of 1968 at the University of Oregon in Eugene. I wrote a study in rural sociology for Cornell University, Ithaca. I met and became friends with Jack Kasarda at the University of North Carolina, Chapel Hill, and we collaborated on some ISA projects. I was particularly close with Craig Calhoun who later became President of the Social Science Research Council (SSRC) in the USA and later the Director of the London School of Economics. Together with Fred Riggs from the University of Hawaii, I worked within an international network devoted to globalisation. I also lectured at SUNY, Buffalo, and appeared in local TV debates.*

*Paradoxically, we often established contacts with European colleagues and international institutions only after having made connections with the USA. This was an era during which European sociology was still disconnected and when links were created and associations*

*founded only gradually until, eventually, such cooperation led to the founding of the ESA (European Sociological Association).*

*Looking back, I believe that cooperation with American social scientists had a positive impact on the establishment of sociology in Slovenia. Their findings either directly applied to us or encouraged critical responses and sociological reflexivity.*



## MARKO MUŠIČ<sup>1</sup>

### A Letter from America

#### **At the Museum of Modern Art**

*Is it truly possible to see – in one place all of what constitutes 20th century art? On the same location, as an oasis in the middle of anonymity, entrepreneurship and speculation? I don't know where to begin. An art exhibition featuring pieces created during the »Age of the Machine«, where you can admire stupendous historic inventions – the famous 1930 Fuller vehicle, the only preserved one of its kind, discovered accidentally only this year – together with an array of works by Léger, Picabia, Delaunay etc.: you can picture me staring at Delaunay's Red Eiffel Tower, which I had been enthralled by in reproductions. To go on: in addition to all of this, all manner of possible and impossible optical machines, the best and most impressive pieces of kinetic and electronic art, that make you think and can certainly not be denounced; because all these mean the same to us, young artists, who enthuse over the electronic brain system as the discovery of, say, the rotating circles system did to Picabia or the daring, sky rending construction to Delaunay. Never in my wildest dreams has it occurred to me that I will be able to observe the original sketches and model of Tatlin's Internacional monument or Le Corbusier's 1931 competition model of Moscow's Centrososjuz. Even though the models were created a long time ago, they remain acutely relevant to this day. Next to it, there are Mies van der Rohe's sketches from 1920, a well known selection of Mackintosh furniture, sketches by Guimard, Rietveld, Wright, Le Corbusier, etc. I am shattered by all of this and I wonder how much we have progressed since then, and why we haven't progressed more.*

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<sup>1</sup> Academy Member Marko Mušič specialised with Louis I. Kahn in Philadelphia on a Ford Foundation Grant.

*The permanent collection of paintings is so impressive I am almost unable to move on from one room to another. The finest paintings by Chiric, Dégas, Gauguin and Van Gogh, Picasso, too; his Guernica, one of my profoundest experiences today, is exhibited in a special room, accompanied by work sketches, photographs etc. The sculpture part is a little less carefully selected, however it still includes wonderful Picasso, Dégas and Modigliani sculptures, a separate room is devoted to Brancusi, there are also a number of Calder's and Pevsner's works. Apparently, the most important art selection is exhibited in the Atrium, but it's closed today, unfortunately. Nevertheless, I can still discern Rodin's Walking Man and Balzac through the glass, and also the famous Picasso's She-Goat, with a magnified model of Tatlin's monument right next to it, rising ten meters high.*

*Unquestionably, the Americans perceive and relate to art considerably differently than the Europeans. This morning – today is a work-free Saturday – operas and theatres are full of young people, and the museum is also packed to the brim. They really act very relaxed, eat and laugh, but at least they're here and modern artists attempt to indulge their attention to the art exhibits. Rauschenberg, for one, installed microphones which sense individual visitors' voices, determine their strength and articulation and use it to light up his latest transparent tridimensional »print.« Undoubtedly, this shows a gigantic leap in the core and character of art. From a closed circle of initiates, who comprehended and conceptualized all sorts of fine nuances at their core, to an exploding mass of individuals whose attention and artist must earn by present it with art which will be theirs, as well.*

### **Realizations about Kahn's Architecture**

*What I find particularly intriguing is the fact that the effect of viewing Kahn's work is completely different from the impression one gets by looking at his sketches, drawings or even models. At first glance, all these appear cumbersome, overly simplified, at times almost naively*

*simplistic, trapped in symmetry and fundamental geometry; in fact, however, there is a strong plasticity and dynamics of the spatial experience. Symmetry and fundamental geometry disintegrate and sing in space and proportion, fill you with the impression of hearty and gentle asymmetry to occasionally truly rich and playful plasticity. This, it seems, is a mark of great mastery. The simple means he uses and the opulence he achieves by employing them are worth much more than the achievements of so many architects, striving in immense effort and with almost spasmodic grasping for plasticity, which, in the end, is neither fuller nor more impressive than Kahn's, while at the same time lacking all the firmly functional and formal background and, most importantly, simplicity.*

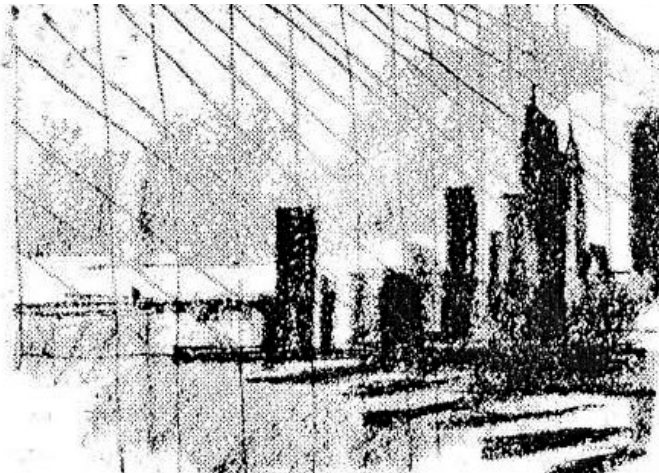
*Kahn's relationship to the materials he uses is completely pure and unadulterated and his details are as simple and delicate as can be, perfectly executed. His attitude to light is extraordinary. He is sensitive to different transitions and flows of light at each part of the day and during each season. The interior as well as exterior of his buildings change in accordance with the Sun's path. This also includes the psychological effects, since the perceived simplicity and clarity enable us to notice all the transient changes with greater ease compared to the overloaded and complicated architecture, which has long lacked a solid creative stemming point.*

*Even more impressive is the fact that such exceedingly simple matters, which would seem banal and childish elsewhere turn into masterpieces in his hands. All too frequently, we are forced to resort to all sorts of clutter because we are unable to grasp the very core, the fundamental truth and profound understanding, and are also unable to express it in all its primordially, archaically unspoiled as a conceptual starting point. Imagine the gigantic effort required to get to that stage which, at the same time, is only the beginning. Satisfaction proves and remains evasive until one finds the solutions and the system which Kahn himself only achieved at almost sixty years old. Until now, I have only*

*been able to see his Medical Research Laboratories in Philadelphia. This is truly a solid and adequate edifice: plastic and straightforward simultaneously, with pure proportions and a clear system. I certainly do not believe all of these ought to be adhered to as to a commandment, particularly not from the formal point of view, unless it is about the totality of the system intended to discover or re-discover the profound fundamental recognition of the fundamentals of the human institution.*

*For it is entirely possible for one to become defeatist and immersed in doubt of your own work. The only way to overcome defeatism is to embrace work enthusiastically, all the while searching for solutions and not to be easily satisfied at the beginning of your search, as is the case with people, who get so pervasively carried away so pervasively by their initial success that they later start lagging behind in their artistic development.*

Naši razgledi, June 20, 1969



Spodnji Manhattan skozi mrežo brooklynskega mostu / *Lower Manhattan through the Brooklyn Bridge net*



Louis I. Kahn, Brynmaur Dormitory pri Filadelfiji / *Louis I. Kahn, Brynmaur Dormitory near Philadelphia*

## **BORIS A. NOVAK**

### **A as America**

*America was put into my cradle; I have inherited it as my genetic material. This DNA chain can be traced to the unusual fact that approximately hundred of my relatives live in the United States, more than at home, in Slovenia. This imbalance is a consequence of emigration: at the beginning of the 20<sup>th</sup> century my grandfather (in the mother line) Janez Lužar and his three brothers, pushed by the economic misery, immigrated to the States. His brothers found a new home in one of the biggest “Slovene” cities, Cleveland, Ohio; Janez, on the other hand, returned to the village Žalna in the region of Dolenjska, together with his wife Angela and their two little daughters, born in the U. S. A. Nevertheless, to the end of his days, he had been proudly announcing he was an American. I have written about him in Maps of Nostalgia (Zemljevidi domotožja), the first book of my epos The Doors of No Return (Vrata nepovrata –Publishing house Goga, 2014):*

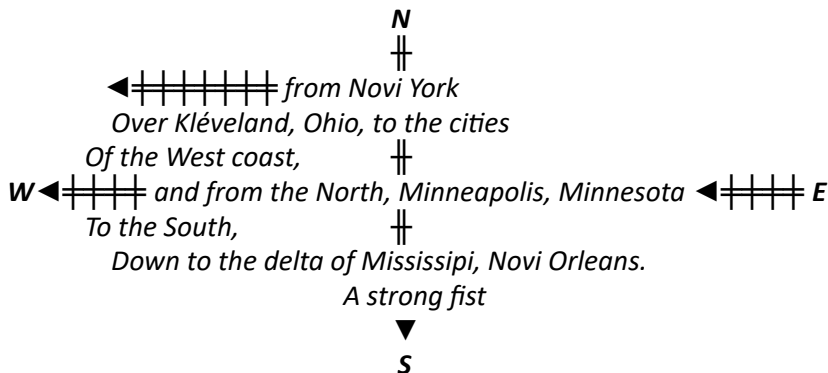
*Our grandfather Janez was an American.  
A hundred years ago, together with three brothers,  
He moved to America,  
Sailing with a steamboat from Trieste*

*Over the glittering abyss of the stormy Atlantic  
To the great goal at Ellis Island. His heart pocket  
Had ever since been warmed by the postcard*

*Of the Statue of Liberty and an I. D.  
Which knew no limits and no borders,*

*With his second first name John.*

*Go to the West,  
Young man, go to the West ... And he went,*



*Served him well: he joined the great works on fast lines  
Of the railroad tracks, and became a railway man.  
The ultimate peak of his hard-working pilgrimages*

*Was a railroad station in Chattanooga, Tennessee – old-fashioned,  
Decorated as in a fairy tale ...*

*Eighty years later  
His grandson came to enjoy the southern charms*

*At the friendly invitation of the poet Richard Jackson. Borders  
In Europe, seemingly eternal, anchored by the iron curtain,  
Were so rusty that they started falling. And exactly in Chattanooga*

*I became obsessed with the story of my grandfather  
Whom I had never seen, because he died soon after my birth ...  
John returned to Slovenia and regained his name Janez.*

*He had bad luck. His three brothers stayed in America  
And became true Americans. On the other side  
Of that big pond we have more relatives than at home ...*

*I will crown this family chronicle with an apocryphal scene  
When the American identity of our grandfather  
Came to the full and incredible expression ...*

*I happened in nineteen forty four. Collabos  
controlled Žalna. Only three houses – a mad,  
Brave decision – joined the Resistance.*

*One night, listening secretly to Radio London,  
A quiet, yet clear sound of jazz music touched  
Our grandfather Janez with distant memories of times*

*When he was still a young John. All the noise and storm scratches  
Could not suffocate the rhythm which kicked him so hard  
Under the belly that he freaked out: Glenn Miller's*

*Military brass band played Chattanooga choo-choo! –  
He turned the sound level as loud as possible, opened the window  
And shouted that it echoed to the stars: Do you hear this music,  
neighbors?!*

*This bloody war will be won by the army marching in such a strong  
rhythm! ...*

*Did somebody hear him? Did they think: old men are crazy ...  
Strangely enough: no denunciation. Humanity? Or the fact*



*That they were each other's hostages, as aunt Nada explained to me?  
Janez's son Janez was a partisan.  
And Janez's son-in-law Janez was a partisan.*

*And Janez's son-in-law Tone likewise ...*

*Whatever: in that mad night  
The old Janez transformed again into John, so young and strong,  
Loudly singing and dancing, singing and dancing and shouting:*

*Do you hear it, neighbors?! Do you hear it, collabos?!  
We are going to win! We, Americans!*

*From my youth on I, John's grandson, have been bound to repeat the story of my grandfather's attachment to America. This fascination started with the discovery of the American literature and culture in the sixties, and turned to the criticism with demonstrations against the military interventions in Vietnam and Iraq; it reached the highest fulfillment with two longer visits at the American universities in Minnesota (Minneapolis) and Tennessee (Chattanooga), and the dramatic peak during the war for Slovenia when I, following my grandfather's example, called America for help. The Time of Fathers, the second book of the epos The Doors of No Return (2015), covers the horror of the 20th century and ends with the fall of Yugoslavia and independency of Slovenia in June 1991; here I combine dramatic scenes of the Slovene defense against the aggression of the so called Yugoslav People's Army and intimate scenes of my father's dying:*

*... In the early Sunday morning I ran to my mother-in-law  
Who had no clue what was going on, took her  
To the shelter – and a dystopian thrill overwhelmed me ...*

*Late-comers were running with the dark, stubborn laughter  
Because all the radio and TV channels announced alarming news  
That bombers were already in the air ... – I felt a mad urge*

*To walk slowly through the increasing emptiness of the streets ... –  
But I was running out of time, the bells rang nine o'clock – the hour  
Planned as the end of the world – when I reached the center*

*Of the emptiness, Gregorčičeva street, the hollow sun was playing  
Hide-and-seek behind the grey clouds, equally as the bombers,  
My mother was already ready, pale, but calm,*

*We tried to persuade father to dress and follow her  
To the shelter, but he was just smiling and calming us down:  
Don't panic, there will be no bombing, he looked at her*

*With warm eyes, touched by her concern, but to me  
He gave an ironic look of the old warrior embarrassed  
By the maddening fear of this calf of his son, mum went*

*To the shelter all in tears, but I did not run,  
Which surprised my father greatly, I phoned  
Our cousin Dennis, in those ten tense days I frequently spoke*

*With a member of Congress and the speaker  
Of the Democrats, and what has our Dennis said to you,  
My father asked me with a sneering voice, and I, full of unrest,*

*Explained that our Dennis was completely calm, It's a tennis  
Of military threats, father explained, Dennis knows it well,  
Nothing will happen, not today, the sky is full of clouds,*

And not of bombers, but already in three months  
It will be damn hard, Croatia, Bosnia, Kosovo,  
That worries me to death, *and he started quoting*

*Statistical data about the fall of the economy causing the war,  
I was listening silently, as always he was right also this time,  
That short hour is written in my memory with the transparent,*

*Unreal aura of the last moment before the time petrified  
And started running with the speed which no longer could be  
stopped,  
We smoked half a pack of cigarettes, he was grateful that I stayed*

*With him, and then I told him, and that sentence marked  
The rest of his days with the weight of the break:  
Nevertheless, you could dress and descend to the shelter,*

*Not because of me and not because of you,  
but for the mother's sake ...  
He looked at me, surprised, as he saw me for the first time  
– Maybe our relation radically changed in that moment,*

*Maybe it was the moment when I became my father's father, –  
He silently obeyed and came back in five minutes, dressed  
In his best tuxedo ... In the same moment the siren announced*

*The end of the air raid alarm, mum returned  
From the shelter, and our father spent the next three months  
In the same, best tuxedo .....*

*..... And our father during his last three months  
Was vanishing from the same, best tuxedo .....*  
*Only his eyes were growing bigger and bigger .....*

*Telephone conversations with Congressman Eckart were not my only contacts with the American political circles in that historical moment. In the long, hot summer of 1991 I was a member of the so-called "war redaction" of the cultural monthly Nova revija, famous for its critical views. Day and night we were camping in two small rooms in Cankarjeva Street in the center of Ljubljana informing the world about the truth of the military aggression, engaged in the "war for the interpretation". Spontaneously, we organized a small editorial group consisting of the following writers and intellectuals: Niko Grafenauer, Drago Jančar, Jaroslav Skrušny, Tomaž Zalaznik, Gordana Vrabec, and myself. Beside the Slovene P. E. N. and the Peace Committee of International P. E. N. (founded by Miloš Mikeln), Nova revija was the main information center of the Slovene civil society during the war. Nova revija launched some of the crucial appeals which were greatly quoted by international media. As the then President of the Slovene P. E. N., I had at the same time written public condolences to the parents of all the soldiers fallen in the Slovene and Yugoslav uniforms, and have made an appeal to the Slovenes to protect their neighbors belonging to other nationalities. A part of the rich documentation of those endless, short, endlessly short days and nights was later gathered in the English publication The Case of Slovenia where Alenka Puhar joined as editor.*

*Mjuša Sever, a Slovene journalist working for the CNN, passed me the telephone number of Dr. Chris Bugajski, the Director of the Republican Center for Strategic Studies in the U. S. A. I called him. It was 2 a. m. Central European Time, in the dead of the night; my exhausted colleagues had fallen asleep on the chairs and in the corners. After the introductory checking, Dr. Bugajski asked me whether I would be willing to address a wider audience. I accepted his invitation. He asked me then for a few minutes of patience in order to organize technical connections. Then he informed me that a group of approximately 150 people was listening to me, and that the questions would be formulated by five or six spokesmen. Of course, they first wanted to know who*

*I was and on whose behalf I was calling; I presented the activities of Nova revija and the Slovene P. E. N. They checked my connections with the U. S. A. When I explained that I had worked as a researcher and as a visiting professor at two American universities and that I was related to Congressman Dennis Eckart I felt I had won their trust. Maybe they listened to me with great attention also because I – growing up in Belgrade and having relatives and friends all over the former Yugoslavia – was a reliable witness of all the complexity of reasons for this bloody conflict; I did not speak out of blind nationalist hatred against others, but out of the concern for the destiny of Slovenia and out of indignation caused by the military aggression. This long distance conversation lasted an hour and a half, maybe two. I was aware of its importance, but its true meaning became clear only a few years later when Dr. Bugajski visited Slovenia; in an official communiqué he revealed the fact that my telephone conversation was the only direct contact between Slovenia and the White House during the war. According to Dr. Bugajski, American diplomacy did not trust official Slovene structures at the time and blocked all the efforts of the newly established Slovene government to contact the White House. Dr. Bugajski repeated the same explanation at the public discussion in the Club of Nova revija. His information was highly explosive, but no media published it and nobody reacted; the only telephone contact with the White House during the war in Slovenia was covered by the thick silence and became a victim of the obstinate political fight for historical merits. I felt boasting publicly with the deed that I considered as my duty would be undignified.*

*Thanks to the unanimous will and defense of the people Slovenia achieved independence; the number of victims was relatively small, but it was a tragedy and a shock, the first armed conflict in Europe after the end of the WW II. The international community, including the U. S. A., acknowledged Slovenia as a state soon enough. Diplomats appointed to Ljubljana, the capital of the newly formed state, faced a practical problem where and how to find facilities fit to be transformed to embassies*

*and residences. One day in Autumn 1992, while I was organizing humanitarian help for refugees from former Yugoslavia and writers from the besieged city of Sarajevo, the first American Ambassador, Allan Wendt, visited our Writers' house. I was surprised. After the welcome coffee he expressed a wish to see the house. I showed him around, and his face was visibly filled with joy. He knocked on the wood of the elegant old-fashioned furniture and exclaimed: "This is perfect! Meetings in the big room, the restaurant on the second floor, and garden parties for the Fourth of July!" I understood in horror that His Excellency had come to buy our Writers' house for the American Embassy. And I uttered the best sentence of my life: "With all due respect, Sir, but the United States of America don't have enough money to buy this house." He was shocked; he had obviously never heard such a sentence. "That's not the way I was informed," he politely answered. Ambassador Wendt was a gentleman and a professional, we shook hands laughing aloud, and off he went, with long steps of his slender and athletic figure, searching for another location. And soon he found it, and very close, and even bigger, and even more beautiful than our Writers' house: the villa, which at the time hosted the Technical Library, on the other side of Prešernova Street. So the American Ambassador has become our neighbor. The distant America had come close, very close.*

*But, as a matter of fact, America has always been very close to me.*

*Thinking about all these events from the time distance I have come to the conclusion that throughout my life, I have been repeating the story of my grandfather Janez, a railway man John, an American. It is true that I several times demonstrated against the politics of the United States and that I bravely defended our Writers's house from being converted into the American Embassy, but – but – whom did I call in the moment of the cataclysmic danger? In the moment of the deepest distress, whom did I call? I called – the Americans!*

*Translated by the author*

## JANEZ OREŠNIK

### My Two Stays in the USA

Introductory remark. It is perhaps useful to know in advance that I concentrated on the linguistics of Scandinavian languages between 1959 and 1987.

#### **My first stay**

*In 1968 I received one of the scholarships allocated to Yugoslavia by the American institution IREX (International Research and Exchanges). In August 1969 my wife and I landed in New York, where all IREX's scholarship holders had to attend a one-month English course. After the course the participants moved to their respective institutions of higher learning, in my case to Harvard (as had been pre-arranged with the assistance of Einar Haugen, Professor of Scandinavian Studies at Harvard). After arriving in Cambridge, Mass., I enrolled, was assigned the status of auditor, and Prof. Haugen became my appointed advisor. I was permitted to attend any lecture (this privilege was also granted to my wife) and to use the legendary Widener Library. I had access also to the lectures at the nearby M.I.T.*

*My eagerness to attend courses diminished quickly, for most were on the level of undergraduate studies whereas I was postdoctoral. In both semesters, I frequented only Professor Noam Chomsky's lectures at M.I.T. During the remaining time, I concentrated on scholarly pursuits in Widener Library, where the personnel considerately assigned me a desk beside the shelves holding the publications about Icelandic (that language was then the main object of my scholarly interest). I never saw any other person beside myself use those books. The collection was superb: it was seldom that I looked for a title in vain. Only the journals were stored elsewhere. Moreover, I had free access to almost*

*all the library shelves (the library was open day and night). I spent most days of the two semesters there.*

*My chief aim was to prepare a detailed paper about a morphological peculiarity of the Icelandic language that had not been noticed by Icelandologists: the occasional »weak« preterite subjunctives of basically »strong« verbs. I had collected the necessary language material during my stay in Reykjavik in 1965/66. My paper was to cover the philological and descriptive properties of the phenomenon as well as an attempt at its explanation. After I had finished writing in May of 1970, I submitted the manuscript to my advisor, Professor Einar Haugen. He suggested that I publish the paper in Sweden (Orešnik 1971).*

*My wife and I participated in a lot of events, also social ones (on the campus and in private homes), and made a number of new acquaintances, particularly among linguists, and first of all among the specialists for Slavic languages, who needed and appreciated the contact with us because of our Slavic mother-tongue, Slovenian. I kept in touch with a number of those colleagues for years to come, at first by snail mail, later by e-mail), and I met some of them again at congresses and conferences. Some even visited Ljubljana as tourists. Some came in order to lecture at the local university, either in a language department or in the Linguistics Club. Shortly before their retirement from public life, my advisor, Prof. Einar Haugen and Mrs. Haugen visited me in Slovenia; to avoid the summer heat, we spent the time together in a mountain valley.*

*My wife and I had another three months of sojourn in the States before us. In June, we traversed a part of the USA in intercity Greyhound coaches – first from Boston to Washington DC to Virginia to North Carolina to Georgia to New Orleans, thereafter north along the Mississippi River as far as Milwaukee, Wisconsin (where we visited old friends). Occasionally, we interrupted the journey to do some sightseeing. All the time we economized as much as possible. We spent the nights in the so-called five-dollar hotels, in which the room had to be booked well in*



*advance of the arrival date. The bookings imposed a tight schedule on our travel, but we managed to adhere to the plans.*

*In July, we attended the Linguistic Society of America summer institute hosted by the Ohio State University in Columbus.*

*Our stay in the USA was rounded off by preparations for the return home. The books and off-prints that we had collected during the year (some presented by colleagues, others bought) filled nine large pieces of luggage. Fortunately, we could cross the ocean on a Yugoslav freighter sailing between the port of New York and Rijeka, Yugoslavia (now Rijeka, Croatia).*

### **My other stay**

*My other sojourn in the USA, in 1975, lasted one week only. I participated in the international Scandinavist conference organized at the University of Texas in Austin. Unfortunately, I became seriously ill two months before the scheduled departure from Ljubljana, and was hospitalized for six weeks. Moreover, quite a long time after the hospitalization, I was on medication causing disconcerting drowsiness. As I had prepared my conference paper before the illness, and I had registered for the conference (registration included flight and living expenses in Austin), I ventured to travel, one month after the hospitalization, by air from Luxembourg to Reykjavik to New York, where I spent one night in my acquaintances' apartment, and continued my flight to Austin on the following day from another airport.*

*In Austin, I slept most of the time. I looked in at the conference only to deliver my paper (later published as Orešnik 1978), I took part in the one-day sightseeing arranged by the conference organizers, and I paid a private visit, during which I could not participate in the conversation because I failed, due to my drowsiness, to recall some of the simplest English words. At the end of the week, I took a flight back to Europe and safely returned to Ljubljana.*

*In my high school days, I used to borrow linguistics publications by*

*mail from the American Library at the US Consulate General in Zagreb. In books dispatched to me, the librarian Corinne Spencer occasionally enclosed a brief handwritten letter for me containing words of encouragement; those letters meant a lot to me. When, much later, I spent some time in Austin (see above), I was not aware that Corinne Spencer was spending her retirement in Texas. If I had known, I would have travelled – in spite of my drowsiness – any distance to meet her and to thank her for the kindness that she had extended to me, a high schooler.*

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## **GREGOR SERŠA**

### **A Fulbright Scholarship Enabled my Early Career Development**

*As a young graduate student with a B.Sc. in biology, I was first employed by the Institute of Oncology Ljubljana at the Immunology Laboratory, under the leadership of Professo Stojan Plesničar. This marked the beginning of my career, and I have worked at the same institution ever since. From the beginning, I was guided into research, while also performing some routine laboratory work. I completed my Masters' and started my Ph.D. program at the Faculty of Medicine of the University of Ljubljana.*

*At the Ljubljana institute of Oncology, various areas of research were developed, predominantly on clinical and diagnostic levels. Pre-clinical level research was still in its development early stages. Therefore, appropriate doctoral programs were not available, and as a junior researcher, I was not yet qualified to formulate adequate scientific questions myself. Additionally, the technological approaches and research equipment were very basic, so the opportunities were rather limited as well.*

*While searching for appropriate training in experimental oncology, I was hoping to land an opportunity to get a scholarship abroad. In found a newspaper advertisement, stating the call for Fulbright scholarships for the Ph.D. program. I applied and during the first interview it already became apparent that competition would be harsh. I was first interviewed at the University of Ljubljana: After leaping over the first hurdle, I was invited to take the Test of English as a Foreign Language (TOEFL) and the Graduate Record Exam (GRE) in Belgrade. This was an extraordinary experience; many students from all over the Republic of Yugoslavia took those exams. I was instructed that I will have to take*

*the GRE test of all the graduate biology program subjects and since I had no time to study, I decided not to prepare and just go for it with the knowledge I already had. I was certain of failure. However, during the exam, I found out that our Bachelor's curriculum program was so good that I remembered almost all the subjects at the exam, but unfortunately, not all the answers. After the exam I returned to Ljubljana. Time elapsed and I received another invitation to a meeting in Belgrade, where, to my big surprise, we were told that all of the 20-30 students gathered there were selected for the Ph.D. program in the USA. Only two of us were from Slovenia. I came back home and told my family I won the scholarship and that I would probably have to go. However, I was still not sure that this was it, as I still "hoped" it wasn't truly happening. But I was surprised again; one day, I received an "open" flight ticket for the USA, which was a shock.*

*But, I still did not know where to go! I searched for universities. At that time there was no internet, so my boss, Professor Plesničar told me he knew Prof. Luka Milas at the M.D. Anderson Hospital in Houston and that he would call him and ask whether he would be willing to take me on board. He did phone him, and after an interview, Professor Luka Milas was willing to take me into his lab of Experimental Radiotherapy in the Division of Radiotherapy. He was Head of the Laboratory with his own group of researchers. On the very first day there he told me he decided I should work on the role of the Tumor Necrosis Factor alpha (TNF- $\alpha$ ) in radiosensitization. I had no clue what that meant. I did not know anything about TNF- $\alpha$  and had no experience in radiobiology. And so I started my work on this topic which, in a way, is still a part of our work now.*

*The training in Huston was intense, with a lot of experiments and hard work from sunrise to sunset. The people in the laboratory soon accepted me into their community, and helped me whenever I needed help. I especially remember Nancy the technician. She was skilled in all the techniques and whatever experiment Luka planned, she knew*

*how to perform it. I remember the days I spent in the animal colony treating mice and irradiating them. Whenever I met Luka in the laboratory he asked about the results. I told him the experiment was not yet finished and he asked about the interim results. And so, I calculated the results almost every evening. Based on the interim results Luka called me again and we planned the next experiment. So I learned to start further experiments whenever I was quite certain that the first experiment would support my hypothesis. Another thing that I learned that I still practice is to keep an eye on your students and whenever they look less busy, plan a new experiment with them.*

*I am grateful to Luka for the experience and predominantly for the training that I had, which helped me out throughout my professional career. Besides professional experience, he also gave me a lot of knowledge about leadership and how to navigate through the scientific field of your interest. He also took me to business meetings, evaluation hearings of his labs, and even to his business lunches. Through that I learned a lot on how to run a laboratory and I made a lot of business connections, even with the top people in the field at that time. Whenever I later contacted them, they remembered me and were always helpful.*

*Since I took the non-degree Ph.D. program, my scholarship was over in a year. I intended to do my experiments in the States, and then return to defend my Ph.D. in Slovenia. The reason for this was that my old position in Ljubljana was waiting for me and I was already of a quite advanced age for a full Ph.D. program. However, because after one year I was still in the middle of the experiments and I obviously performed well, I was offered an extension from the M.D. Anderson Hospital. I stayed for another 7 months and completed the experiments from my Ph.D. program. In addition to work on this topic, I was also given an additional one which I completed during that time as well. After a hard day's work I would hand-write my thesis, as I knew that once I returned to Slovenia the drive to write would be gone (Figure). The results of all*

*that work were two papers published in top international journals: The International Journal of Cancer and Cancer Research.*

*The atmosphere in the laboratory was very good, friendly as well as competitive. We worked hard, but often we would go for a game of rugby or swimming together. Parties for this or that occasion were organized at coworkers' homes almost every weekend. And Luka frequently kindly invited me to his house, and we became very good friends.*

*I was so enthusiastic about my work in Huston that I was considering coming back after completing my Ph.D. studies in Slovenia. Several times Luka, tried to encourage me to come back, but life turned things around and that never happened. There were several reasons for my decision, but I have no regrets since the experience in Houston gave me strength and guided me to establish my own group at the Ljubljana Institute of Oncology Ljubljana, as well as to use the knowledge in the development of our own research area. Now, at a late stage of my career, looking back, I would like to say that I cherish the gained experiences more and more, as I still use them in the planning and evaluation of the experiments nowadays.*

*During my second year in Houston, I was invited to Thanksgiving dinner at Professor Bill Brock's home. A discussion started about the Fulbright program and one of the guests there had strong arguments against the US government, claiming it gives away money for foreign students to learn and take the knowledge back home. He said, these students were trained to be their competitors, but my position was that they were US allies and ambassadors of knowledge gained there.*

## **UROŠ SKALERIČ**

### **My Experience with Work and Life in the USA**

*In 1972, after one year of work at a private clinic in Palermo, I decided to continue my studies at post graduate level and do Master's study at the Ljubljana Faculty of Medicine. After passing the exams, I was looking for a topic for my Master's thesis. Even during my undergraduate studies, Prof. Dr. Lojze Brenčič impressed with periodontology, I went to Prof. Dr. Janko Muller and asked him for help with choosing a topic. Prof. Muller called Dr. Milan Scharo at the Jožef Stefan Institute (IJS) and inquired whether he would take me to his laboratory. Prof. Schara agreed, so my "Stefan period" began. In 1975, I got my Master's thesis and in 1979, my PhD, on topic of biophysical characteristics of dental enamel in the Laboratory for Electronic Paramagnetic Resonance (EPR).*

*Given the fact that most of the IJS associates continued their post-doctoral studies abroad, I decided to apply for a Fulbright scholarship myself. I recall there was only one post-graduate fellowship for all natural sciences in Slovenia annually. I received the 1980/81 scholarship, which I spent at the Periodontology Department of the Emory University School of Dental Medicine in Atlanta. Prof. Dr. Michael Fritz included me in a project in which we tried to cover the dental recession with free gingival grafts. I was also impressed by regular weekly seminars and a review of current professional literature. The residents' knowledge was checked on daily basis, so that in the end of the specialization there was no final exam at all. My colleagues welcomed me, especially Prof. Dr. Steven Offenbacher, with whom we discussed the possibility of the impact of periodontal disease on complications during pregnancy and premature birth. Professor Offenbacher offered me a job and he could*

*not believe that I wanted to return to my homeland, even though my wife and two daughters came to the US with me. That's why we decided with Prof. Offenbacher to continue the project in experimental animals, and that I would carry out a clinical research in Ljubljana. After a one-year stay in Atlanta, I returned to Ljubljana where I started research of the state of periodontal tissue in women with recurrent miscarriages together with a number of prominent Slovenian gynecologists. Recurrent miscarriages are defined as situations where a woman miscarries three times in a row and doctors cannot determine the cause of repeated miscarriages. After a year, a renowned professor of gynecology wrote a review of the project stating that women who experience recurrent miscarriages are neurotic and therefore clean their teeth less. With this, the project has been extinguished. Professor Offenbacher continued his work and announced a few years later that pregnant women with inflamed periodontal tissues were as much as 7 times more likely to give birth to children prematurely with low birth weight.*

*In the United States, I also got to know the profile of a dental hygienist for which torganised training had been available since 1913. In the United States, there are about 200 000 dentists and just as many dental hygienists. So, after returning from the United States, I started a campaign to introduce schooling dental hygienists in Slovenia. But professional organizations and authorities had not yet matured enough to recognize the need for that, so the idea did not come to fruition. It took another 20 years to put it to practice. I was luckier with setting up the interdisciplinary Center for Dental Research. It was established in 1987 by the Dental Clinic and the IJS with the aim of bringing together dentists and natural scientists working in the field of biophysics and biochemistry in basic research. A week after the foundation of the Center, I returned to the United States with my family, this time also on a Fulbright scholarship. This time round, I ended up in the Laboratory of Microbiology and Immunology at the National Institute of Dental Medicine, NIH, in Bethesda, Maryland. This was followed by a surprise, as*



*my bosses, Dr. Stephen Mergenhagen, and Dr. Sharon Wahl wondered what sort of work would interest me. Since I was intrigued by the activity of free oxygen radicals, I was involved in the project of experimental arthritis in rats.*

*I studied two rat strains, one of which developed arthritis after intraperitoneal injection of streptococcal cell walls, while the other did not. In the study, I found that diseased rats had monocytes, which in vitro conditions released higher concentrations of oxygen radicals and thus contributed to the formation of joint inflammation. We confirmed the link by injecting enzymes into the joints that remove free radicals and thus prevent inflammation and the onset and development of arthritis. After nine months at Bethesda, the boss asked me to prepare a seminar to present my work. The lecture went well and in about a week, I was offered a post at the Institute. Having obtained the approval of my parent institution, the Ljubljana Faculty of Medicine, I extended my stay for one year, and, later, two more. In 1988, the Fulbright program celebrated its 40<sup>th</sup> anniversary in Washington, DC. Senator William Fulbright approached our group and told us about the origins of the program. He served as Chairman of the Foreign Affairs Committee in the US Senate. In 1945, he was presented with some photos of the American bombings of Hiroshima and Nagasaki. He said that the photos were shocking and he believed that US reputation was badly affected by this act. That was why he decided to launch a campaign for a congressional law, which would allow foreign researchers and artists to gain additional expertise refine in the USA and the Americans abroad. He was said to have presidential ambitions, which he categorically denied. The following question was about the program expenses. He said that in the 40 years of the program (1948-1988) about 200,000 scientists and artists participated in the exchange, which cost the US administration one quarter of a single atomic submarine. With this program, Senator Fulbright made a name for himself as one of the most positive personalities in the USA and the world (Figure 1).*

*Work at the Institute took place from 8:30 to 20:00 on a regular working day, while our Japanese colleagues put in even longer hours. As a result, their wives felt desolate and lonely. Personally, I spent most of my time at the Institute and my daughters were mostly at school, so my wife decided to obtain a work permit, which she was granted. After finishing high school, Alenka graduated from the A cosmetology College in Vienna, and took a job at a prestigious spa in Bethesda, working in facial care. Apparently, she was very successful, since the spa owner offered her the post of Head of Department after she obtained the required certification. Her earnings made it easier for us to survive, since a Fulbright scholarship is only meant to support the carrier, rather than his/her entire family. One of my wife's clients, a General Electric Director visited the spa in 1989. She said that she had recently had lunch with former US Foreign Secretary, Henry Kissinger, who told her that a brutal civil war was about to break out in Yugoslavia any time. Naturally, a family discussion had immediately begun on whether it was safe to return home.*

*Work at the Institute was well advanced, especially due to excellent research opportunities at the NIH. Daily seminars at institutes, lectures by Nobel laureates and a plethora of quality research equipment translated to excellent research results. Staying in the United States had also enabled me to attend various congresses and hold invited lectures at universities in New Orleans, Atlanta, Morgantown, Los Angeles and San Francisco. Interactions with various foreign researchers had also inspired various ideas, some of which have also come true. Thus, I transferred the results of arthritis suppression in rats to Ljubljana, where my colleague, Dr. Milan Petelin prepared his doctoral dissertation in which he proved that in experimental periodontitis in Beagle dogs, with the subgingival application in the liposomes wrapped antioxidant enzymes, reconstitution of periodontal tissue was achieved. Another idea which I began to develop in Bethesda, was the quest to determine whether the issue of HIV was also found in gingival fluid.*

*Upon return to Ljubljana, Dr. Mojca Matičič, in her doctoral theses, concluded that gingival fluid was a possible medium for transmission in patients with AIDS.*

*In addition to research ideas, I met many friends during my stay in the US that I am still in contact with today. After returning to Ljubljana in 1990, I conducted weekly seminars in the English language for dentists doing postgraduate studies at the Center for Dental Research. A large number of master's theses and doctoral dissertations followed,*



*Senator Fulbright na srečanju s štipendistov v Washingtonu aprila 1988 /  
Senator Fulbright at a meeting with scholarship holders  
in Washington, April 1988*

*as well as the promotion of many of these post graduate students to teaching and professor posts.*

*Working in the United States and familiarization with the knowledge of the world's leading periodontologists has allowed me to organize joint congresses and manage various international organizations.*

*To conclude, my work and stay in the US were beneficial and successful and had a significant impact on my professional development and career and consequently also on the development of Slovenian dentistry.*

## **MARKO SNOJ**

### **Slovene Linguistics from across the Pond**

#### A Cisatlantic View

*To a comparative linguist, English and English speaking countries did not seem terribly appealing until the end of the 20th century. Traditionally, mainstream Indo-European comparative linguistics was centered in Germany and Austria, and Slavic comparative linguistics was predominantly developed in centers hosting major etymological projects, particularly in Moscow and Cracow. In spite of the fact that William Jones (1746–1794), an Englishman, is considered the founder of comparative linguistics, the United Kingdom remained on the outskirts of comparative linguist endeavors. Some US universities started building a solid reputation in the field of comparative linguistics around that time.*

*Kansas State University has been important for Slovenians and Slovene studies since the 1980s, and even earlier. KU was one of the rare US universities with a position for Slovene within a department of Slavic studies. In 1990, this university became even more interesting with the arrival of a young, energetic linguist with a special affection for Slovene, Professor Marc L. Greenberg. His affection for the language is not founded only on his inclination toward small, versatile and lively languages, such as other Slavic languages, particularly Czech, Croatian and its Kajkavian dialects as well as Hungarian and Albanian, but is of a more intimate nature, as well. His wife is Marta Pirnat-Greenberg, a Slovenian Slovenist, who started her teaching career at the Ljubljana Faculty of Arts, and continued her professional path at the University of Kansas.*

*In 1994 the Editorial Board of the journal Slovenski jezik, still in the process of creation or re-creation, warmed to the idea of making it*

*international. I invited my colleague, at the time in the middle of a research stay in Slovenia, Marc L. Greenberg, on board. This was the beginning of a fruitful and delightful transatlantic cooperation, now expanding into almost a quarter of a century. Some of us will remember that the mid 1990s were the time of the increasing popularity of email, the beginning of Internet popularization and other information and communications platforms in general, which made daily long distance communication possible. Without these, we could not have even imagined the editing of the first issue, with a thousand and one details to consider and agree upon. Later, Marc apparently quoted my statement about how email enables people to communicate better across the Atlantic than people physically residing in the same building, even the same room on several occasions. It took three years for the idea of a joint international Slovenist journal to come to fruition, and the first issue of the bilingual Slovenski jezik / Slovene Linguistic Studies was published in the spring of 1997. It was clearly profiled as a publication for the promotion of Slovenistic linguistic papers, regardless of the language in which it was written and of the theoretical orientation, in contrast to its linguistic and literary and Slavistics-oriented counterparts Slavistična revija, Jezik in slovstvo, which mainly covers pedagogy and Jezikoslovni zapiski, which, at the time, operated as an internal publication of the Fran Ramovš Institute for Slovenian Language at the Research Centre of the Slovenian Academy of Sciences and Arts.*

*Articles for publication in Slovenski jezik / Slovene Linguistic Studies were selected with the agreement of two anonymous reviewers unfamiliar with the identity of the author. This selection process, which today seems self-evident, was a novelty and transferred to Slovenia from North American academic circles. In other journals, not only on the humanities namely, the editorial board members reviewed and assessed articles for publication. The other novelty we introduced after eight years of publication of the journal was free and open access. Having secured the authors' permission, we transferred all the articles (in-*

cluding those from archived issues) to the repository of the University of Kansas, with unfettered access via permalinks and, later, DOIs. This has since become common practice, but in 2005, “our” journal was the first of its kind in the world of Slavic linguistics to offer “platinum” open access. This is most likely the reason the journal gained recognition rather quickly and attracted an increasing number of foreign authors. Until 2011, Slovenski jezik / Slovene Linguistic Studies was regularly published in Ljubljana and Lawrence, where KU is located. From the moment we entrusted the journal editing to our younger colleagues, Kozma Ahačič and Grant H. Lundberg, the journal has been co-published in Provo, Utah. The open access online journal remains on the KU server, however.

It was of course impossible to limit outstanding transatlantic cooperation merely to journal editing. In our daily email exchanges, Marc and I tackled a number of other linguistic issues, predominantly about diachronic linguistics. During that period, Marc was working on his book *A Historical Phonology of the Slovene Language*, which was published by the venerable at Universitätsverlag Carl Winter in Heidelberg in 2000. Two years later, the Slovenian translation was published with the Maribor based publisher, Aristej. I was cooperating on the finalization of *Bezljaj’s Etimološki slovar slovenskega jezika* (1995, 2005, 2007), preparing *Slovenski etimološki slovar* (<sup>1</sup>1997, <sup>2</sup>2003, <sup>3</sup>2016) and conceptualizing *Etimološki slovar slovenskih zemljepisnih imen* (2009). Marc needed my unpublished materials and interpretations and I, in turn, needed his. We were able to clarify a number of issues through correspondence, in a much better way than we would have been able to, had we not communicated regularly. Then, people who were able to debate and selflessly share their findings concerning such issues were even rarer than today.

Marc and his family spent their summer vacation in Europe nearly every year. These were opportunities for live discussion. In Slovenian, naturally, since we predominantly corresponded in it. Initially, in our

*correspondence, we each stuck to our own language, but as early as during the first year of editing the journal, Marc decided to practice his Slovenian. After all, we were both Slovenists and Slavists, not Anglicists. He attended conferences in Slovenia and throughout the Slavic world fairly frequently, and we were able to sort out a number of matters then. In that period, I mostly worked in Ljubljana, eager to finish the projects I started in the earlier stages of my career. Not until 2008, soon after I was promoted from “assembly line dictionary worker” to Institute Director, did I set foot on North American continent. First I visited Canada to attend the 16th Biennial Balkan and South Slavic Linguistics, Literature and Folklore, and later KU in Lawrence, USA. There I lectured at the Linguistic Colloquy about my current topic of interest, namely the etymological research of Slovene and other unconsolidated Slavic name families. This term is used to describe name families in which the words, denoting inhabitants of a certain place and the related adjective are not derived from the same base as the place name itself, e.g. Skaručna, skaruški rather than \*\*skaručenski, and Skaručan rather than \*\*Skaručnjan). On that visit, I first noted a phenomenon which has only recently begun to emerge in Slovenia. While some members of my audience understood the topic in detail and were able to debate the issues after the lecture, other attendees asked rather fundamental questions the answers to which could easily have been Googled independently. The discrepancy between incredibly well educated students who fully comprehended the subject and their considerably less informed, yet equally loudly debating counterparts was so evident it had made a lasting impression on me – just one of the differences in university life in the USA and Slovenia.*

*But diverse people make the world go around, determining the development direction and speed of individual identity through a vector, as well as their present, be it north American, Western, Central or East European or West Balkan, where Slovenia is increasingly associated. In the Alpine region particular, people tend to believe the grass is al-*



*ways greener on the other side, and Slovenians frequently view the north America and western world organizational order with a bit of envy. However, there are two sides to every coin and it probably really doesn't matter in this case whether it comes up heads or tails. If a quarter of a century ago, I had to chose between spending my most creative years in an organized academic environment and publish my papers in the World's most prestigious journals as well as sail the world to participate in international conferences or spend the majority of my life at home, engrossed in the compilation of comprehensive and academic dictionaries of one of the smallest Slavic languages, I truly do not know which option I would have chosen.*

*If I were granted this choice retrospectively, I would, of course, choose my actual destiny, even though the reasons would not be rational.*

## **BRANKO STANOVNIK**

### **USA-Slovenia Cooperation**

*In 1973, I was invited to deliver a plenary lecture at the 4<sup>th</sup> International Congress of Heterocyclic Chemistry taking place in Salt Lake City, Utah. At this conference, the International Scientific Committee elected Professor Miha Tišler as President and me as a Vice-President of the 5<sup>th</sup> International Congress of Heterocyclic Chemistry to be organized in Ljubljana in 1975. This was followed by invitations to visit many universities and industrial research laboratories in the USA. These visits resulted in a number of scientific co-operations and joint research projects; with Professor R. N. Castle, Editor of the Journal of Heterocyclic Chemistry, and J. S. Bradshaw (Brigham Young University, Provo, Utah), who spent several sabbaticals in our group in Ljubljana, Professor P. K. Kadaba (University of Kentucky, Lexington, Kentucky), who also spent a sabbatical in our group, Professor D. M. Grant and Dr. R. Pugmire (University of Utah, Salt Lake City), as well as leading scientists in <sup>13</sup>C NMR spectroscopy, just to mention some:*

*In 1980, Professor A. R. Katritzky moved from the University of East Anglia (Norwich, Great Britain) to University of Florida (Gainesville, Florida) where he founded the Center for Heterocyclic Compounds with a large research group. Excellent relations with Professor Katritzky continued also after moving to the States. In 1998, I was elected Inaugural Honorary Member of the Florida Center for Heterocyclic Compounds, and in 1999 I was elected Board Member and Scientific Editor of Electronic Journal ARKIVOC, established by A. R. Katritzky, and in 2000 member of the Advisory Board Advances in Heterocyclic Chemistry.*

*From 1983 to 1987, I served as Member of Advisory Board, International Society of Heterocyclic Chemistry and since 1997, Member of Advisory Editorial Board, Journal of Heterocyclic Chemistry, USA*

**Chapters in books and other Review articles written on invitation of USA editors and published in USA**

**R. N. Castle, Editor, Brigham Young University, Provo, Utah**

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**A. R. Katritzky, Editor, University of Florida, Gainesville, Florida**

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**d) with Chemical Research Department, Hoffmann-La Roche, Inc., Nutley, New Jersey**

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**e) with SANDOZ USA Patent:**

- M. Jurgec, R. Ručman, B. Stanovnik, M. Tišler, *Process for brominating ergot alkaloides* : United States patent no. 4, 609,731 : date of patent Sep 2, 1986.

**Plenary and Invited lectures at Congresses and Symposia in USA**

- 5th International Congress of Heterocyclic Chemistry, Salt lake City, Utah, 1975*  
*FloHet: Florida Heterocyclic and Synthetic Conferences*., University of Florida, Gainesville, Florida  
*FloHet II 2001 Plenary lecture*  
*FloHet X 2009 Invited lecture*  
*FloHet XII 2011 Invited lecture*

### ***Invited lectures at US Universities***

*University of California, San Francisco 1974*  
*University of Alabama, Tuscaloosa 1974, 1980*  
*Ranselaer Polytechnic Institute, Troy, NY, 1974*  
*Eli Lilly Research Laboratories, Indianapolis, Indiana 1974*  
*Indiana State University, Bloomington, Indiana, 1974,1976, 1985*  
*University of Utah,, Salt Lake City, Utah, 1974, 1976*  
*Brigham Young University, Provo, Utah, 1976, 1991*  
*University of Kentucky, Lexington, Kentucky, 1976, 1985*  
*Lederle Laboratories, American Cyanamide Company, Pearl River, NY, 1979*  
*Texas Christian University, Forth Worth, Texas, 1979*  
*North Texas State University, Denton , Texas, 1979*  
*University of Michigan, AnnArbor, Michigan, 1980*  
*Univerity of South Florida, Tampa, Florida, 1985*  
*Emory University, Atlanta, Georgia, 2009*

### ***Membership in Editorial Boards of US journals***

*Jounal of Heterocyclic Chemistry*  
*Advances of Heterocyclic Chemistry*  
*ARKIVOC (Scientific Editor)*  
*Inaugural Honorary Member of Florida Center for Heterocyclic Compounds,*  
*Gainesville, Florida, USA*

## **ALENKA ŠELIH**

### **East-European Countries are Getting an Identity**

As a Fulbright visiting scholar I spent the 1989/1990 spring semester (from January 1990 until June 1990) at the University of Wisconsin-Madison Law School. I taught a course on European juvenile justice systems and worked on my research project on sentencing in the USA criminal law.

My stay in the USA incited me to pen a short series of letters which dealt with my impressions on life in Madison to the Slovenian journal *Naši razgledi* (*Our Horizons*). Eight of these letters were published in this journal in June and July 1990.

The following letter was the first one of them.

*I arrived to the United States of America in the middle of January and I could not help feeling that in the eyes of an average American, Eastern Europe had only now started to come into existence. Perhaps the term "average American" is too strong since I, regardless of the fact that I had been here several times before, even if only for shorter periods, am not exactly sure of what an average American is supposed to be like. However, in the minds of the Americans I have met, the countries of Eastern and South-eastern Europe were some kind of a grey conglomerate. But now this image is gradually becoming clearer. Today Czechoslovakia and Romania are no longer seen as one and the same and neither are Yugoslavia and Czechoslovakia.*

*Even though people here find that changes in Yugoslavia are not happening fast enough and that the economic changes are happening faster than political ones and thus Yugoslavia is not in the center of attention, there are some connoisseurs who do differentiate between*



*individual states within the country. And so, during my first two days of my stay at the University of Wisconsin-Madison Law School the American Mid-West, I was twice asked which part of Yugoslavia I come from and it was apparent that both inquirers knew what they were asking about. Though, all truth be told, none of them could deny their European backgrounds – one was a Latvian who left his country as a young boy in 1945 and the other was a Silesian German with a similar story.*

*The public media is diligently assuring this shift in the image of a monolithic Eastern Europe. The main newspapers are dedicating a few pages a day to the events in this part of the world, one of them with a recognizable title The Eastern European Pot May Soon Boil Over.*

*Television is focusing on conflicting situations and its manner of reporting can seriously disturb an affected viewer. When, in a comment related to the initial congress of the Yugoslav League of Communists in January, a spokesman, whose last name suggested he was of our origins, casually mentioned civil war, I went flying towards the phone – luckily the line was not disconnected.*

*In the beginning of my stay in the States, most people whom I met found the events in Eastern Europe “exciting”. And although in English this word carries both negative as well as positive connotations, it is only used in connection to something positive. I attempted, although I feel to no avail, to explain that to those of us who are directly affected, these events are not only the least exciting but also especially serious and hard. And it is probably true that to an American who had been following this boiling from a safe distance and thinking that his own country was similarly upset about a hundred years ago the idea that this is a wave of democratization which would end soon and well, was likely the most valid.*

*The sudden attention we are receiving as Eastern Europeans also materialized in the end of January in a typically American, direct and somewhat naïve way. The University of Wisconsin has, on the basis of an exchange agreement, recently accepted a large group of professors*

*from the Lomonosov University in Moscow and thus the group of post graduates, doctoral students and professors from this part of the world had been quite enlarged. The organizers of an important “social” event, the Madison Winter Ball, had the idea to invite the representatives of these countries as guests of honor. The Ball sponsor first invited us to her home and regardless of how mixed my feelings were on my way there, I was very surprised to learn that her father in law, a well known Wisconsin oncologist, was one of the first American doctors to cooperate with colleagues from Moscow and Leningrad during the Cold War. Genuine curiosity, direct interest and, as they say, typical mid-western unpretentiousness all assured that we, although almost the only representatives of the university at the Ball, for which the political and business leaders of Wisconsin gathered in the Wisconsin State Capital, felt if not quite at home, at least not too out of place. And perhaps nothing says more about the curios qualities of the American people than the fact that they remembered to prepare a cold buffet made up entirely of Eastern European appetizers and desserts.*

*And so, in the middle of the Wisconsin winter, we followed from afar and were seated at a full table, the events which now already everyone is proclaiming to be at least equally if not more important than the events of 1945.*

*However, it seems that from the beginning of March, the general excitement about boiling Eastern Europe has been replaced by a calmer perspective. Surely this shift was influenced by the news of conflicts, uncertainties, fears and all the rest which began appearing in the printed media and on television. But the foundational shift happened the moment when the question of the German unification became not only relevant, but a realistic possibility. It seemed that until then, the Americans have regarded the events in Eastern Europe neither as something local nor something global at the same time – but the possibility of German unification and the formation of a new and of course different German state affected them directly. Events happening some*



*several thousand kilometers away no longer seemed so far and unexciting, they raised issues concerning the Americans directly. I feel that the realization that this would be a lengthy process which would involve many advances and setbacks, conflicts and attempts to resolve them, is one that relates to existential issues of countries, nations and individuals and the idea that there can be “no West without East” and “no East without West” had started to take over. It seems that today, people here are aware that winning a battle does not necessarily mean winning the war and that the path to victory would be long and hard.*

## MIHA TIŠLER

### Scientific Cooperation

*To be successful in research, one needs knowledge, good ideas, the necessary equipment and adequate financial support. Syntheses of organic compounds are necessarily linked with determination of structural characteristics using different instrumental methods. After the Second World War, we had to build organic chemistry from the ground up since there was practically no necessary equipment. Conditions slowly improved, chemicals could be ordered only once a year, determination of structural characteristics was possible only using the equipment available at that time in Ljubljana. Therefore, establishing foreign connections was an urgent necessity.*

*As suggested by the then acting President of the Slovenian Academy of Sciences and Arts (SASA) Josip Vidmar, I was a member of the delegation that visited the headquarters of the National Academy of Sciences (NAS) in Washington D. C. to explain our proposal for cooperation with American universities. The proposal was accepted and resulted in a bilateral exchange of scientists and short research and teaching visits to the USA. Following this agreement with the NAS, I was able to visit and lecture at several US universities in from 1968 to 1977: University of Illinois at Urbana-Champaign (host Nelson J. Leonard), University of California Berkeley (Henry Rapoport), UCLA (Donald J. Cram, Nobel Prize 1987), Stanford University (Carl Djerassi), University of Michigan, Ann Arbor (Leroy B. Townsend), Duke University, Durham (Charles K. Bradsher) and Wesleyan University (Max Tishler). At Duke University, I met Philip Handler, then acting President of NAS and former long standing biochemist at this University, and Anton Peterlin, a distinguished Slovenian physicist and member of the Slovenian Academy of Sciences and Arts. Andrej Petrič from our research group spent 18 months (1986-*

1988) at the University of Illinois with Nelson J. Leonard and stayed at BYU for two months within the frame of NAS in 1988.

In the nineteen-seventies, Professor Jerald S. Bradshaw from the Brigham Young University (BYU) in Provo, Utah, spent a year in Ljubljana as Visiting Professor. Together, we researched photochemical syntheses and transformations of some bicyclic heterocyclic systems. Further cooperation involved the neighboring University of Utah in Salt Lake City (David M. Grant, Ronald J. Pugmire, Josef Michl). As Visiting Professor, Branko Stanovnik recorded carbon-13 nuclear magnetic resonance spectra of some azoloazines there, in order to determine the protonation and quarternization site on systems with several nitrogen atoms in the ring. For these purposes, measurements of magnetic circular dichroism followed. The Faculty of Natural Sciences and Technology of the University of Ljubljana, as it was called at that time, conferred to Jerald S. Bradshaw a document of recognition. I myself experienced hospitality of BYU in 1986 as visiting professor where I lectured for one semester at post-graduate studies. Our research was also supported by the chemical industry. Synthesis of a new compound afforded a product to which the structure could not be assigned, even when using modern spectroscopic methods. Milan Uskoković, Director of Natural Products Research at Hoffmann-La Roche, Nutley, helped with the X-ray determination which revealed an unprecedented and unusual structure.

Our long standing cooperation involved the Department of Chemistry at the University of Florida, Gainesville, with Alan R. Katritzky. It started before he came to USA from Great Britain. He was an exceptional chemist, member of the Royal Society (FRS) and corresponding member of SASA from 2001. He was editor of *Advances in Heterocyclic Chemistry* published by Academic Press. I was a member of the Editorial board. From 1984 to 2006, in cooperation with Branko Stanovnik, Patrik Kolar, Alan R. Katritzky and Pankaja K. Kadaba, University of Kentucky, I published ten monographs on concerning heterocyclic chemistry.

*The International Society of Heterocyclic Chemistry (ISHC) was founded in 1968 by Raymond N. Castle with the aim to promote heterocyclic chemistry, to plan biannual International heterocyclic chemistry congresses, edit publications and confer awards for new achievements. The ISHC entrusted me with the organization of the 5<sup>th</sup> International Congress of Heterocyclic Chemistry which was held in Ljubljana with impressive international attendance in 1975. I was elected President of the ISHC and served from 1978 to 1979. Castle edited the book on pyridazines, to which Branko Stanovnik and myself jointly contributed a chapter.*

*The above mentioned cooperation resulted in 25 scientific publications and monographs. There were many visits and lectures of American professors in Ljubljana with the aim of presenting the latest achievements in organic chemistry.*

*In 1971, I participated at the XXIII IUPAC (International Union of Pure and Applied Chemistry) Congress in Boston. A letter from an American professor addressed to me was delivered to a distinguished professor, Max Tishler by mistake. He found out the error, returned the letter and invited me to Wesleyan University. He moved there in 1970 from Merck Pharmaceuticals. There, he successfully achieved syntheses of several vitamins and was the first to isolate Actinomycin D. Serendipity can also be stimulating.*

## **DRAGICA TURNŠEK**

### **Cooperation with Geologists and Palaeontologists from the USA**

*I investigated Mesozoic stromatoporoids and corals and have long corresponded with many colleagues from several US institutions and exchanged a number of scientific papers (Dr. A. Foster, Dr. S. Cairns, Dr. A.G. Coates, Dr. H. Filkorn, Dr. M. Droser, Dr. J. Sorauf, Dr. V. Zlatarski, and others). Personally, we met at symposia organised every 4 years by the International Association for Fossil Cnidaria and Porifera. In 1983, such a symposium was organized in Washington, headed by Dr. William Oliver from the Washington Smithsonian Institution. An excursion to the Great Lakes was organized at the time, guided by Dr. All Fagerstrom from the University of Nebraska. My lecture on Triassic corals in Slovenia was published in extended form (see Slovenian text)*

*Some of my American colleagues also visited our Institute to view and study my fossil collection, or to consult, or cooperate in research work.*

*In 1982, Dr. Geoge Stanley from the University of Nebraska visited our Institute to study my Triassic coral collection and see coral reefs in the field.*

*In 1985 my collection was studied by Dr. Carl Stock from the University of Alabama, to make a Catalogue of Mesozoic Stromatoporoid genera and species for one of the most important paleontological editions: Treatise on Invertebrate Palaeontology.*

*From 1990 to 2015, Dr. Rosemarie Baron Szabo of Knoxville, Tennessee, visited our institute on a number of occasions. She is originally from Berlin but later moved to the USA, and became Research Associate at the Smithsonian Institution, and one of the best authorities on Cretaceous corals. She studied my entire Cretaceous coral collection*



*and prepared volume for the Treatise on Invertebrate Palaeontology. Knowledgeable in languages, she published in the USA, a volume in which she attempted to provide an explanation Germanisms in Slovenian in 2004 (see Slovenian text).*



Obisk dr. Davida LeMonea na našem inštitutu leta 1978 /  
*Dr. David LeMone's visit to our Institute in 1978*

*As proposed by our American colleagues, the Special American Publications No. 30, (copyright by the Society of Economic Palaeontologists and Mineralogists, Tulsa, Oklahoma, the journal European Fossil Reef Models, (Toomey D.F., ed.) was published in which the geologists from Slovenia contributed two articles (see Slovenian text).*

*Nevertheless, joint research on the Lower Cretaceous Coral reef structures from New Mexico and Mexico proved to be the most successful and concrete. In 1978 and 1982 our Institute was visited by Dr. David LeMone, from the University of Texas, El Paso, and in 1981 by Dr. Robert Scott, in that time working at the Amoco Production Company, Tulsa, Oklahoma. We prepared two shorter and one extended articles, in which we systematically represented 19 Lower Cretaceous coral species, completed with their stratigraphical and paleoecological importance (see Slovenian Text).*

*All my knowledge and co-operations with colleagues from the USA was always extremely kind, and with some of them we still correspond.*



Obisk dr. Roberta Scotta na našem inštitutu leta 1981 /  
*Dr. Robert Scott's visit to our Institute in 1981*

## **ROBERT ZOREC**

### **Monitoring Sub-cellular Organelle Function in a Living Cell in Real-time**

*June-December 2000 Fulbright Fellowship  
University of Colorado Health Sciences Center  
c/o Professor Bill Betz  
Department of Physiology and Biophysics*

*A relatively long flight was ahead, to Denver, where I was intending to carry out experiments on single cells. The plan was to stay for six months and therefore relatively large suitcases were packed for the trip. However, not because of personal items, but because of transporting also equipment developed and built in Slovenia, to measure extremely faint electrical signals in a single living cell, from a cell that contains sub-cellular organelles.*

*Life forms belong to the Domains (Super kingdoms) of Bacteria, Archea and Eukarya<sup>1</sup>, and the experiments to be carried out, were planned to be on eukaryotic cells. It is almost universally accepted that sub cellular organelles, including the nucleus, mitochondria and secretory vesicles exist solely in these cells. The origin and appearance of eukaryotes, however, remains debatable<sup>2</sup>, and their immediate predecessors<sup>3</sup> are not yet unequivocally identified. Similarly unclear is the geological age of eukaryote emergence; eukaryotic signatures have been recovered in fossils of 3 to 3.5 billion years of age<sup>4</sup>, this being substantially older than generally accepted time of eukaryote emergence ~ 2 billion years ago. This may indicate a very early divergence of the Domains of Life.*

*Cytological structure of Bacteria and Archaea is relatively uncomplicated. How Eukarya, characterized by a significant degree of cel-*

lular structural complexity developed from Archaea<sup>5</sup>, is unclear. Most hypotheses assume a prokaryote-to-eukaryote transition or an integration of an Archaeobacterium into a Eubacterium. Conceptually, the eukaryote evolution is linked to the presence of mitochondrion-like structures, in which oxygen-dependent metabolism takes place, and because the appearance of eukaryotes is associated with the presence of oxygen in the atmosphere. On the other hand, it seems, however, possible that aerobic and anaerobic eukaryotes, harboring mitochondrial homologues of various sorts, have co-existed throughout eukaryote history<sup>6</sup>.

The hypothesis that Eukarya emerged from an ancestral Archea has recently gained interest, in particular after sub-cellular organelles other than mitochondria were recognized in the early life forms through genetic analysis. Indeed, the discovery of 'Lokiarchaeota', a novel phylum, with genes encoding an array of eukaryotic signature proteins that are required for membrane plasticity supports this view<sup>5</sup>. Specifically, this ancestral Archaea-expressed genes encoding proteins, which in Eukarya contribute to remodeling of cell shape and membrane deformation including phagocytosis, a form of endocytosis, where molecules or particles are transported into the cell involving vesicles pinching off the plasma membrane<sup>7</sup>. This process requires cyto skeletal elements such as actin; the Lokiarchaeum genome encodes five actin homologues with high similarity to eukaryotic actin and actin-related proteins<sup>5</sup> such as small GTP-binding proteins - GTPases. These are key regulators of actin cytoskeleton dynamics, essential for vesicle traffic<sup>8</sup>. Substantial presence of Ras-superfamily GTPases, which account for nearly 2% of the proteome, has been identified in Lokiarchaeota<sup>5</sup>. This Archaeal phylum also contains the genes for endosomal sorting complexes required for transport (ESCRT) proteins, components of the multivesicular body (MVB) structures, belonging to the endosome pathway required for the biogenesis of lysosomes. This pathway as is known in Eukarya today, is directing plasma membrane

proteins for lysosomal degradation, acting in viral budding, in cytokinesis, autophagy, and other pathways<sup>9</sup>. Identification of archaeal genes involved in membrane remodeling and vesicular trafficking indicates that the emergence of sub-cellular organelles, resembling endolysosomal structures, was already under way before the acquisition of the mitochondrial endosymbiont<sup>5</sup>.

The aim of experiments in Denver was to monitor the interaction of a single subcellular organelle, such as a lysosome, in Eukaryotic cells with the plasma membrane. Lysosomes are dedicated organelles of endo- and exocytotic pathways, which operate in nearly all animal and plant cells. The term lysosome was introduced in 1955<sup>10</sup> from Ancient Greek "λύσις" - "to loosen" and "soma" - body i.e. "lytic or digestive body" since several degrading enzymes have been found in this structure<sup>11,12</sup>. Until recently, it was thought that lysosomes are merely responsible for catabolism, since they contain hydrolytic enzymes. Besides degradation of biomolecules, however, the lysosome is involved in energy metabolism, in delivery of membrane receptors to the plasma membrane, in secretion, and in cell signalling. All this is possible as lysosomes actively fuse with other cellular structures including the plasmalemma. The central position of lysosome is not only linked to endocytotic entry of molecules into the cell but also to exocytotic exit of molecules. Incidentally, the terms autophagy (for lysosomal degradation of material of the intracellular origin), endocytosis (for lysosomal digestion of material of the extracellular origin) and exocytosis were all introduced at a meeting in London in 1963<sup>11</sup>, which followed lysosomes discovery.

Thus to monitor the fusion of a single vesicle such as a lysosome with the plasma membrane, an ideal method to be used is the electrophysiological method of monitoring membrane capacitance, a parameter linearly related to membrane area<sup>13</sup>. Independently of the lab of Nobel Laureate Erwin Neher, our lab developed technology for monitoring membrane capacitance sufficiently sensitive to detect unitary

*vesicle fusion/fission events in real-time of even the smallest vesicles in isolated eukaryotic cells<sup>14</sup> and also in tissue slices<sup>15</sup>.*

*The measurements carried out in Denver on endocrine pituitary cells revealed the nature of the single vesicle fusion events, which consists of intermediates, previously not detected. Thus, these experiments uncovered for the first time that before the vesicle membrane fully merges with the plasma membrane, many intermediate stages occur, each representing a distinct entity regulated by distinct molecular machinery. The discovery in Denver led to a wealth of further experiments seeding new directions in establishing that the SNARE proteins, the subject of the Nobel prize in 2013, not only act at the stage of facilitating the membrane fusion, but as revealed recently, also at the post-fusion stages when the vesicle membrane fully integrates with the plasma membrane<sup>16</sup>. These new stages of vesicle homeostasis represent targets for drug intervention, demonstrated in 2019 (Lasič E, Lisjak M, Horvat A, Božić M, Šakanović A, Anderluh G, Verkhatsky A, Vardjan N, Jorgačevski J, Stenovec M, Zorec R. Astrocyte Specific Remodeling of Plasmalemmal Cholesterol Composition by Ketamine Indicates a New Mechanism of Antidepressant Action. *Sci Rep.* 2019 29;9(1):10957) by our laboratories, where the action of ketamine, an anesthetic with analgesic, psychomimetic, rapid antidepressant effects, and also a recreational drug, directly modulates the interaction of vesicles with the plasma membrane<sup>17</sup>. Therefore, these new concepts of how membranes of sub-cellular organelles interact with the plasma membrane seeded the opening of new fields in neuroscience, cell biology and biotechnology in general.*

*The visit to Denver in 2000 resulted in advancing Cell Physiology.*

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## A WORD ON THE AUTHORS

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