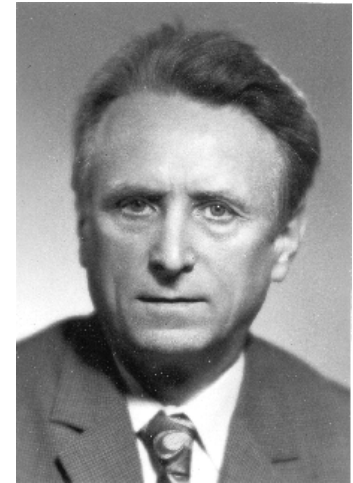


IN MEMORIAM

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Zdeněk J. Bažant died in Svrabov, Czech Republic, on August 26, 2001 at the age 93 years. He became an ASCE member during his extended visit to the U.S. in 1947 and persevered to retain his membership throughout the entire period of communism in Czechoslovakia (1948-89). Born on June 11, 1908 to the family of a renowned civil engineer and professor of structural mechanics in Prague, he earned the degree of Civil Engineer in 1930 and Doctor of Engineering in 1934 from the Czech Technical University in Prague (ČVUT). He joined Lanna Company, then the largest construction firm in Czechoslovakia, and became the chief design engineer in 1942. Except during the closing of Czech universities under Nazi occupation from 1939 to 1945, he simultaneously lectured at ČVUT and pursued research in the stability of foundations on sand. Returning with enthusiasm from the U.S., he was appointed in 1947 to the professorial chair of geotechnical engineering at ČVUT. In 1948, however, came the victory of a communist dictatorship, the early fanatical years of which exposed him and other non-communist colleagues to persistent harassment, which led to a loss of research funding, assistants and foreign contacts, and forced him to spend most of his time defending himself against political attacks. He belonged to those uncompromising non-members of the party who, as a matter of principle, eschewed cronyism with those in power, even though it presented obstacles to their scholarly work and diminished their prospects for official recognitions, major awards, and leading positions. In reward, though, he and others of a similar strong character gained moral superiority and the respect of decent people, which is ultimately more important. After retiring from his professorship at ČVUT in 1975, he continued his professional career as a staff consultant to the firm Geoindustria in Prague. He lived long enough to experience the satisfaction of the fall of communism in 1989, but for his career it unfortunately came too late – that year he entered full retirement.



Zdeněk J. Bažant
Life Member of ASCE
June 11, 1908 – August 26, 2001

In the light of this gruesome period of history in his country, Bažant's scientific accomplishments are particularly impressive. He became the leading expert in foundation engineering in Czechoslovakia and pursued in his 10 books and 156 research papers a systematic scientific treatment of this engineering field anchored in the theory of mechanics and a knowledge of soil behavior. His textbook "Foundation Engineering" (third edition, in Czech, 1981) sold 22,000 copies, and his book "Methods of Foundation Engineering" (Elsevier, 1979) was well received worldwide. In his paper "Grundbruch unter Spunnwand" (Bautechnik, 1940) and book "Stability of Cohesionless Soils" (in Czech, 1953), he developed and experimentally verified a mathematical method to assess the stability of foundations in sand subjected to rising filtration flow. In his paper "L'emploi du béton armé pour fortifications et abri contre avions" (Travaux, 1937), he contributed a method used in British and U.S. specifications and manuals during the war to determine the required thickness of anti-aircraft shelters and bunkers. He conducted original experiments on vibration, seismic stability and liquefaction of saturated sand, and deduced design recommendations which he reported at the Congress of the ICSMFE (London, 1957) and the World Conference on Earthquake Engineering (Auckland, 1965). He applied these results in the earthquake-resistant design of Danube dikes and other large hydro-projects. In recognition, he was selected as the general reporter for the Sixth European Conference on Soil Mechanics in Vienna in 1964. He analyzed the stress transfer between drilled piers (caissons) and the surrounding soil, and authored the Czechoslovak design code (ČSN 73 1084, 1981) for large diameter drilled piers (caissons) and other codes (described in his paper "Estimating Soil Moduli from Drilled Pier Load Tests", *Journal of Geotechnical Engineering*, ASCE, 1984). In his early career at Lanna, he directed the construction of fortifications along the German border and designed many major structures, as well as directed the construction of several dams (e.g., Střekov and Ladce). As a consultant during his later academic career, he produced a host of designs and expert evaluations of major hydro and structural projects in Czechoslovakia (foundations of dams at Lipno and Orlický, the Danube shipyard in Komárno, anchorages of foundation walls and excavation walls of high-rises and subway stations in Prague and of surface coal mining excavations at Tušovice, pier foundations for the cooling towers of the nuclear plant at Dukovany, etc.). When a disaster occurred, which was frequent, the government employed him as a consultant.

Aside from his profession, Bažant was deeply interested in world history and philosophy. His passions were encyclopedias, and he contributed to several of them. Even though he belonged to the unfortunate generation whose entire productive life was spent under national socialist and communist dictatorships, he never complained. He always strived to see some positive signs of progress. With his great sense of humor, he was a persistent optimist. He was a great man.

*Zdeněk P. Bažant, F. ASCE, W.P. Murphy Professor, Northwestern University, Evanston
Ladislav Lamboj, Dean, Faculty of Civil Engineering, Czech Technical University, Prague*

Rec Zdenka P. Bazanta pri pohrbu sveho otce Zdenka J. Bazanta (11.6.1908 – 26.8.2001) v Praze dne 4. zari 2001

Draha sestro, pribuzni a pratele,

Nas otec, Zdenek, zil dlouhy a plny zivot. Byl vzornym tatou, dedeckem a pradedeckem, a oddanym manzelem nasi zesnule mamince po dobu 64 let.

Po 15-lete kariere jako stavebni inzenyr u Lanna, tehdejsi nejvetsi ceskoslovenske stavebni firmy, kterou zakoncil jako sef-inzenyr, zacal po valce na technice vyzkum filtracni stability pisku, který byl velmi uspesny. V roce 1947 se tata vratil s nadsenim a novymi poznatky z dlouheho studijního pobytu ve Spojených Statech, kde navazal cenne odborne styky. Hned pote prislo unorove vitezstvi totalitni diktatury. Sam si dnes dovedu zive predstavit, jak zdrcujici pro nej, ve věku 40 let, musela asi byt ztrata vetsiny prostredku na vedecke pokusy a na asistenty, ztrata kontaktu v cizine, a nutnost venovat vetsinu casu obrane pred politickými utoky.

Otec patril k tem nekompromisnim nestranikum, kteri zasadne odmítli bratrckovani s temi u moci, i kdyz jim to ztizilo vedeckou praci a snizilo pro cely zbytek kariery sance na vysoke oficielni pocty a na vedouci pozice. Za odmenu vsak otec a jini jako on ziskali moralni prevahu a uctu slusnych lidi, coz je dulezitejsi.

V tomto svetle se mi osobne jevi tatovy odborne vysledky jako zvlaste obdivuhodne. Jako profesor Ceskeho vysokeho uceni technickeho v Praze od 1947 do 1975, stal se vedoucim inzenyrskym odbornikem v oboru zakladani staveb, vodnich i pozemnich. V jeho 10 knihach a 137 clancich, byl prukopnikem systematickeho vedeckeho pojeti zakladani stavel zakotvene v teorii mechaniky zemin. Vypracoval radu navrhu a odborných posudku velkých stavebních děl. Když se staly stavebni havarie, coz bylo casto, byl to nas otec pro koho ministr stavebnictvi poslal sofera (a nejmene jednou i helikopteru). Tata byl ten ke komu se obratili, kdyz potrebovali radu. Jeho metoda navrhu tloustky protiletckých a pevnostnich krytu byla kopirovana do anglických predpisu za valky. Když se stavelo metro v Atlante, zjistil jsem, ze vedouci inzenyr pouzival jeho knihu prelozenou do anglictiny. Byl zvolen jako generalni zpravodaj 6. Evropske konference mechaniky zemin ve Vidni r. 1964. Byl autorem normy pro širokoprumerove vrtane piloty a jinych norem, autorem navrhu zpevneni Dunajských hrazi proti zemetreseni, atd.

Velkou oporou meho mladi byla pohoda v nasi rodine, ktera myslim byla castecne reakci na utisk ve state. Po odchodu do Ameriky jsem si uvedomil, ze to asi byl duvod, proc ani jako velky kluk jsem se nikdy proti otci nevzbouril. Retrospektivne, velky vliv na me jako kluka mely nase kazdodenni debaty po rodinne veceri v padesatých letech. Otec mel eklektickou znalost svetove historie a filosofie. Jako spisovatele ocenoval napr. Karla Capka, Andre Maurois a Anatole France. Mel vasen pro encyklopedie (a do nekolika take napsal vlastni clanky). Vracel se domu pesky z Karlaku do Dejvic denne v 7:45 a vzpomínám jak jednou, zhruba 1951, vitezoslavne dorazil s velkým balikem. Byla to americka Columbia Encyclopedia. Díky trhlinám v censure, objevil ji na prodej v jednu zastrcenem antikvariátu. Tu pak procital po radu let. Tak jsem se napríklad dozvedel tu pravou historií bolseviku v Rusku, ktera se znacne lisila od te, co nam vstepovali do hlavy ve skole. Otec videl analogie pritomnosti v revolucích minulosti, napr. i ve stredovekem povstani Savonaroly ve Florencii. Díky otci jsem se jako stredoskolak dozvedel o mnohých zakazanych knihach, napríklad psychologie davu od Le Bona, Machiaveliho Princ, kritiky marxismu od Andre Gidea, Masaryka, a Hayeka, historické spisy Churchilla, atd. Doma jsme o tatovi rikali, ze byl chodici encyklopedii.

Otec byl vzorem v mnoha vecich. Byl na minutu presny. Mel peclivy a promysleny poradek ve vsem, a zvlaste ve svých spisech. Vedel napríklad presne, kolik hodin pracoval na kazde knize. Byl clovekem mnoha zasad – nekterých zdanlive malicherných, ale uzitečných (napr. ze ulice se ma vzdy prechazet kolmo).

I kdyz tata patril k te nestastne generaci, jejiz cely tvurci zivot probihal v totalitnim systemu, nikdy si moc neztezoval. Vedel, ze takove tezke (a i horsi) doby byly v historii velmi caste. I za komunismu dokazal videt ruzne svetle body pokroku. Byl totiz nezmaritelný optimista, a mel vytribeny smysl pro humor. Byl to jedinecny clovek.

Drahy tatinku, Tvuj odchod na vecnost je pro nas nesmirnou ztratou. Budes nadale zit v nasi pameti jako skvelý otec, dedecek a pradedecek. Dekujeme Ti naposled za vse, co jsi nam dal. Nikdy Te nezapomeneme.

Translation of the Speech of Zdenek P. Bazant at the funeral of his father Zdenek J. Bazant (June 11, 1908 – Aug. 26, 2001) in Prague, Sept. 4, 2001

Dear sister, relatives and friends:

Our father Zdenek lived a long, full life. He was an exemplary father, grandfather and great-grandfather, and a devoted husband to our deceased mother for 64 years.

After the war, concluding as the chief engineer his 15 year career with Lanna, then the largest construction firm in Czechoslovakia, he started fundamental researches in filtration stability of sands, which progressed fruitfully. In 1947 my dad returned with enthusiasm and new ideas from a long sojourn in the United States, where he developed valuable professional contacts. Right after that came the victory of a brutal totalitarian dictatorship. I can vividly imagine how devastated my dad, at the age of 40, must have been by the consequent loss of most research funding, assistants and foreign contacts, and the necessity of devoting most time to defence against political attacks.

My father belonged to those uncompromising non-members of the party who as a matter of principle eschewed cronyism with those in power, even though it led to obstacles to scholarly work and diminished the prospects for official recognitions, major awards and leading positions in their careers. In reward, though, my dad and others like him gained moral superiority and the respect of decent people, which is more important. In this light, my father's scientific accomplishments appear to me particularly impressive. A professor at the Czech Technical University in Prague from 1947 to 1975, he became the leading expert in foundation engineering and pioneered in his 10 books and 137 research papers a systematic scientific treatment of this engineering field anchored in the theory of soil mechanics. He produced a host of designs and expert evaluations of major hydrotechnical and structural engineering works. When a disaster happened, which was often, it was my dad whom the government brought in as a consultant (at least once by helicopter). His method of assessing the necessary thickness of anti-aircraft shelters and bunkers was copied into the British specifications during the war. When I visited Atlanta subway under construction, I noticed the chief engineer using my father's book, translated in English. My father was selected as the general reporter of the Sixth European Conference on Soil Mechanics in Vienna in 1964. He authored the design code for large diameter drilled piers (caissons) and other codes in Czechoslovakia, the earthquake resistant design of Danube dikes, etc.

A great asset of my youth was the closeness of our family, which I think was partly a reaction to the oppressive state. After my emigration I realized that this may have been the reason why, as a teenager, I have never revolted against my father. In retrospect, as a growing boy I was profoundly influenced by the daily debates at our family dinner during the fanatical early years of dictatorship. My dad had an eclectic knowledge of world history and philosophy. As fiction writers, he adored for example Karel Capek, Andre Maurois and Anatole France. His passion were the encyclopedias (and he contributed articles to some of them). My father returned home daily at 7:45, walking 2.5 miles from his office, and once, I think in 1951, he triumphantly brought a big package. It was the Columbia Encyclopedia. Thanks to cracks in censorship, he discovered it in one obscure used book store. He was then reading it for our benefit for a number of years. Thus I for example learned the real history of communism, which differed from that which was impressed into our minds at school. My dad saw analogies in revolutions of the past, e.g., in the medieval uprising of Savonarola in Florence. Thanks to my dad, I was exposed as a school boy to many prohibited books, including Le Bon's crowd psychology, Machiaveli's Prince, critiques of marxism by Andre Gide, Masaryk and Hayek, histories by Churchill, etc. We used to call my dad a walking encyclopedia.

My dad was an example in many practical ways. Punctual, he had a perfect well-thought-out order in everything, and especially his office. He for instance knew how many hours he had worked on every book. He was a man of principles – some of them apparently petty but useful (e.g., that a street should be crossed perpendicularly).

Even though my dad belonged to the unfortunate generation whose all productive life was spent under national socialist and communist dictatorships, he did not complain. He knew that such difficult (and even worse) times were frequent in history. Even under communism he saw some positive points of progress. With his great sense of humor, he was a persistent optimist. He was a great man.

My dearest father, your departure for eternity is for us an immense loss. You will be remembered as a great father, grandfather and great-grandfather. You will continue to live in our memory. We thank you for all that you gave us.

Pohřeb Štěpánky (Pánči) Bažantové (rozené Kolaříkové-Čuříkové) v Pražském Krematoriu ve Strašnicích, 29. srpna 1997

Proslov syna Zdendy *

Drahý tatínku, drahá sestro, drazí příbuzní a přátelé,

loučíme se navždy s naší maminkou, s naší Pánčí. Byla milující, věrnou, obětavou manželkou našemu tatínkovi přes 63 let. Byla vzornou matkou, babičkou a prababičkou—láskyplnou a starostlivou.

Jako absolvent Karlovy university s doktorátem v sociologii, maminka pracovala po válce v Radě žen, kde byla spolupracovnicí Milady Horákové. Také byla korespondentkou Kanadského rozhlasu. Po komunistickém převratu 1948, Pánči ovšem nikdy nemohla splnit její touhu po takovéto kariéře. Znajíc pět jazyků, působila krátce jako učitelka jazyků na gymnasiu, a poté téměř 40 let jako pracovnice a později vedoucí oddělení v Ústavu pro technické a ekonomické informace (UTEIN), kde s elánem vypracovala řadu významných a žádaných studií. Svě vzdělání nám maminka dychtivě předávala. Pravidelně s námi hovořila o filozofii, etice, politických ideálech, dějinách, atd. Já jí také vděčím za mé první a vlastně jediné lekce angličtiny. Do konce života moje obdivuhodná maminka byla dáma—s dokonalým chováním, vždy elegantní a pečlivě oblečená.

Pro její generaci, žít přes dvě světové války a 50 let dvou totalitních režimů nebylo lehké. Protivenství krutého politického systému jí však umožnilo projevit stupeň lásky a obětavosti, který se v bezstarostných poměrech snadno projevit nemůže. Ironicky, je to právě v utlačovatelském státě, kde podpora rodiny má největší cenu, jako psychologický obranný val. Z jiného hlediska, zatímco v dávných dobách se na světě během jednoho života téměř nic nezměnilo, v době života Pánči probíhal zcela výjimečný pokrok techniky a životní úrovně. Pánči jej sledovala, díky svému vzdělání, se živým zájmem a nadšením. Též bylo jejím štěstím dožít se znovuzrození normálního, demokratického státu, dožít se lepšího světa, v němž třetí světová válka nehrozí. Ještě větším štěstím ovšem bylo dožít se pěti pravnoučat a sdílet radosti svých dětí, vnuků a vnuček.

Osobně se Ti chci omluvit, nejdraší maminko, za tu bolest dlouhých let odloučení, kterou jsem Ti způsobil svým odchodem do ciziny před 30 roky, a děkuji Ti za porozumění.

Nečekaný skon naší maminky po krátké bolestné nemoci zakončil plný život. Milá maminko, Pánči, skláníme se v hlubokém žalu před Tvou památkou. Nikdy Tě nezapomeneme.

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TRANSLATION of the speech of son Zdeněk at the funeral of Štěpánka (Pánči) Bažantová (née Kolaříková-Čuříková) (deceased on August 23) in the Prague Crematorium in Praha-Strašnice, on August 29, 1997, follows in the next column (approximately recorded after the funeral).

*přibližně zapsáno po pohřbu

Dear father, sister, family and friends:

We are saying forever farewell to our mother, our Pánči. She was a loving, faithful and devoted wife to our father for more than 63 years. She was an exemplary mother, grandmother and great-grandmother—kind and caring.

A graduate of Charles University with a doctorate in sociology, my mother worked after the war in the Women Council,¹ where she was a collaborator of Milada Horáková.² She also was a correspondent of Canadian Broadcasting Corp. After the communist coup in 1948, Pánči could of course never fulfill her desire of such a career. Knowing five languages, she worked briefly as a high school teacher of languages, and then for almost 40 years as a member and later department head in the State Institute for Technical and Economic Information, where she produced with ardor a number of important sought-after reports and studies. She was eagerly sharing her education, regularly discussing with us philosophy, ethics, political ideals, history, etc. I am indebted to her for my first and in fact only lessons of English. To the very end of her life, my admirable mother was a lady—with perfect manners, always elegant and carefully dressed.

For her generation, living through two world wars and 50 years of two totalitarian regimes was not easy. The adversity of the cruel political system, however, made it possible for her to display a degree of love and self-sacrifice that can hardly get manifested in easy times. Ironically, it is under an oppressive regime that the support of family is most valuable, as a psychological wall of defense. From another viewpoint, while in the distant past almost nothing changed in the world within one lifetime, an exceptional progress of technology and living standard was under way during Pánči's life. She followed it, thanks to her education, with vivid interest and enthusiasm. It was her good luck to live long enough to see the rebirth of a normal, democratic state, to see a better world in which the third world war is no longer threatening. An even greater luck was to live long enough to see her five great-grandchildren³ and share the happiness of her children and grandchildren.

Personally I wish to apologize to you, my dearest mom, for the pain of long separation I caused to you by my departure abroad 30 years ago, and thank you for your understanding.

The unexpected death of our mother after a short and painful illness terminated a full life. Dear mother, Pánči, deeply aggrieved we pay respect to your memory. We will never forget you.

¹National leadership of non-communist women movement.

²One of the democratic leaders, who was executed on trumped-up charges by the communists after their coup of 1948, and now has one of the major Prague boulevards named after her.

³Vojtěch, Steve, Tomáš, Vít and Jolanka.