

Portrait of the Glaciologist as a Young Dynamicist

ABSTRACT. During the recent International Symposium on Dynamics in Glaciology hosted by the University of Limerick, the Mathematics Consortium for Science and Industry and the Science Foundation of Ireland the Secretary General of the International Glaciological Society, Magnús O'Magnús, had an opportunity to catch up with the master Irish writer *Jimmy James Joyce* (of *Cnoc Ayeal*, Co. Dublin) to learn about his experiences as a symposium attendee. In his characteristic style, Jimmy Joyce responded with a stream of consciousness covering the scientific and social aspects of the symposium, the mid-week excursion and the post-symposium tour. His last sentence begins his first sentence, and what follows is his story.

Quotes of the symposium:

Don't worry Lonnie, these are what grass-fed animals produce... - Ellen Mosley Thompson to Lonnie Thompson, the Society's most recent Seligman crystalist, while walking across a cow pasture on the flank of a *droim* near Drumandoora on the mid-week excursion.

Thus the unfacts, did we possess them, are too imprecisely few to warrant our certitude... - James Joyce (describing the science of glaciology in *Finnegans Wake*, 1939)

PRESENT AT INTERVIEW:

IGS Secretary General: Magnús O'Magnús

Irish Author: Jimmy Joyce

Magnús O'Magnús:

Jimmy, you're looking pretty cabbaged now. Did all that dynamics at the symposium put the devil in ya?

Jimmy Joyce:

Aye Magnús, quit acting the maggot, I'm not the only one circling over Shannon tonight; so bring up your pint and let me tell you a story:

31 riverrun, past Eve and Adam's, past Shannonside, from swerve of shore to bend of bay, brings us by a commodius vicus of
 32 recirculation back to Bunratty Castle, Limerick and Environs. There we began the symposium on the ice's dynamic to be played
 33 out by powerpoint, projector and large sheets of poster paper, with coloring schemes that are sometimes jet and sometimes gray
 34 like jet's contrails. All the regular jacks were there, including the *feens* of mathematical and theoretical glaciology (especially
 35 those from Eire) that give *handy* explanations for all that the rest see and measure. Also there were the lovely *crayturs* who
 36 had more than a touch of the poet when it came to fluid dyanmics. What was best of all was the meeting venue next to the
 37 Stables, where many would gather for a pint after a long day of argue'in about the wee parameters.

38 No sooner did I jump up from my *scratcher* on the rainy Monday morn'in, did the new president of the IGS, Eric Brun, get
 39 the brakes off, and the talks and posters of the symposium kicked right in: ranging from subglacial hydrology, to ice sheets and
 40 climate change... from basal freeze-on, to the impact of present warming. Garry K.C. O'Clarke gave the lead-off talk which was
 41 absolutely *lethal*, and concerned the circulation of Lake Vostok and the ice on the roof of that lake. And then there were more
 42 talks about advances in ice-flow modeling. At one point, a tribe of numerical modelers gave a full tribute—one appropriate for
 43 a Celtic hero—to a man named Stokes. (We couldn't tell if it was an investiture or a funeral.) So finally, by Tuesday, we made
 44 it to the Seligman Crystal Award Presentation and Lecture followed by Barbeque, all made enjoyable by the opening of wine
 45 bottles and pouring of creamy Guinness.

46 Now the *oul' lad* who they gave the Crystal to was no *eejit*, but was a real *legend* who'd done more than 50 expeditions in
 47 high-mountains and other *desperate* places all in the name of glaciology and ice-core science. His lecture was *class*, and the
 48 poets got started working their craft to honor him later in the week at the banquet. For example:

49
 50 Lonnie Thompson is one of those guys
 51 whose career is a series of highs,
 52 for salvaging scraps
 53 of some shrinking ice caps
 54 They gave him the Seligman Prize.

55
 56 There once was a young man named Lonney
 57 Who exclaimed, "My, Those glaciers look bonny.
 58 I'll climb them and see
 59 what the climate might be
 60 Back when mammoths were woolly and brawny. "

61
 62 But when he got up there he found
 63 The glaciers were now mostly ground
 64 They'd melted way back...
 65 A greenhouse attack!

66 "This land should be white and not brown!"

67
 68 He went back to his wife, lovely Ellen.

69 And said, "At this rate there's no way of tell'in

70 How bad it might get -
 71 I've started to fret
 72 that the oceans will soon start a'swell'in. ”

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74

75 So you'd think that the meeting had us all *knackered* by this point, but *Jakers*, that's when the fun just started, and we
 76 headed out on the mid-week excursion through Co. Clare and the Burrens. Now this was a lovely day, in a light rain as usual,
 77 and it began with a bus ride along River Shannon and across the bridge at Killaloe where we could look over Lough Derg and
 78 see the whitecaps and feel the wetness that keeps the island so green. The morning was devoted to the area between Ennis
 79 and Gort, and we stopped several times to walk across the *droims* and see the wavy landscapes molded by the ice that flowed
 80 across the fair island in ancient times. That was where we noticed what the cows were leaving behind for us to step on. Ellen,
 81 the *bonnie wan* of Lonnie, explained that these cows, being grass fed, were leaving behind nothing for us to act the *cod* over.
 82 Ok, so you step in a few.

83 After more drumlins and lunch, the Burrens were shocking. This landscape was occupied since ancient times and was dusted
 84 with *cashels* and *ráth*, dolmens and portal tombs . What they used to say about the Burren was: *it is a country where there is*
 85 *not enough water to drown a man, wood enough to hang one, nor earth enough to bury him...*, but there were enough grikes
 86 and clints along the way to twist an ankle. The place was first settled in neolithic times, and you could see old walls made
 87 of stone that enclosed fields with no soil, nothing but bedrock limestone surface. This place was part of the neolithic farming
 88 revolution that suffered from soil erosion and environmental degradation at the very outset of human influence on the globe.

89 Along the way, we stopped and hiked up to *Cathair Chomáin*, a ring fort or *cashel* perched on the edge of a steep ravine.
 90 We could imagine the time, probably before the fifth millennium B.C.E. when the thick walls of this stone fort protected a
 91 wise king and beautiful princess, and where water was kept for travelers bringing grain and other trade goods. Beyond *Cathair*
 92 *Chomáin*, we stopped at the site of a portal tomb, *Poul nabrone*, dating from 3800 B.C.E. where the disarticulated bones of
 93 22 adults and 6 children were placed before the Bronze Age.

94 Then it was on to Gus O'Connors' pub in Doolin to have our supper and a *tint* to quell our thirst. This was the place made
 95 famous by Irish music (and where the Playstation-3 game, *Folklore*, sites the portal to the realm of the dead). From there it
 96 was on to the steep, windswept Cliffs of Moher and O'Brien's castle where we saw the dark night of the North Atlantic slip
 97 its veil across the green island.

98 After another day of talk about ice streams, surging glaciers and glacial geomorph, we got on with a party at a place near
 99 Bunratty Castle. And here we learned about limerick poetry, a few examples of which:

100

101 If you seek enhanced lubrication
 102 Your till needs liquid stimulation
 103 for a bed that's not wet
 104 needs more friction to get
 105 the maximum sliding sensation

106

107

108 There once was an ice stream that got

109 an embarrassing wet sticky spot
 110 “If it’s not too much trouble,
 111 I’d like to decouple
 112 And surge once again while I’m hot. ”

113
 114 Well, you get the picture, and a selection of these poems will be published elsewhere. But after the fine evening’s celebration,
 115 we returned to our last morning of talks on Friday. A small tear welled in my eyes as Heike Gramberg gave the last talk on
 116 the *Formation of Drumlins* expressing an idea that she and Andrew Fowler, organizer of this great symposium, had managed
 117 to put together to help explain the landscape we had seen on the mid-week excursion.

118 Afterward, we enjoyed a fine lunch before saying *Go raibh maith agaibh* and *slán go fóill* to our hosts at Limerick, starting
 119 with Andrew Fowler and including **Magnus: add names here...** , for doing a magnificent job organizing such a wonderful
 120 experience. We’ll meet again at Manali. Bussoftlhee, memory of good time! Till thousandsthee drumlins cover the land and
 121 small *tulach* too. And boundary layers and lips. The keys to knowledge. Given! A way to a symposium we loved at a place
 122 along the

123

124 *Magnús O’Magnús:*

125 Jakers, Jimmy, was that the end of it?

126 *Jimmy Joyce:*

127 Not the least of it, my friend Magnús, I also went on the post-symposium excursion. Let me tell you about that:

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129 As post-symposium tours go, this one, like the others, was a wonderful time to experience the joy of travel, the collegial
 130 company of smart scientists, and the warmth of sharing ideas, food and drink in a senic land touched by ice. The highlight of
 131 this trip was the chance to travel with glaciologists and glaciophiles, young and old, like Hans and Doris Rothlesberger, Atsu
 132 Omura and his family, the Viking family from Iceland (currently encamped in Cambridge, U.K.), Europeans, North Americans,
 133 Asians, *Ozzies* (a.k.a. displaced Irish), and the charming, *blarney*-speaking Irish trip leaders. After boarding a comfortable
 134 coach equipped with driver/expert historian, we covered Co. Clare in a quick drive up to Galloway on a new superhighway
 135 expressing Ireland’s entrance into the modern European Union world. In Galway, we picked up our tour co-guide, geologist
 136 Paul Dunlop, from the University of Ulster, able assistant to co-guide Andrew Fowler, and visited the Galloway crystal factory
 137 where small presents were bought for those left at home (and where Timothy Creyts, curiously picking things up that he
 138 shouldn’t, almost shattered the new Ryder Cup trophy, to be awarded at the Golf match held a few weeks later). Then it was
 139 on to Derryloney drumlin in Barna and the coral (maerl) beach before turning north toward the Twelve Pins of Connemara to
 140 visit the Kylemore Abbey. Of particular interest were the excellent glacial geology of the Benna Beola of Connemara National
 141 Park, the exposures of wonderful green connemara marble, and the story of the lazy beds, the old way of growing potatoes
 142 before the great famine. The final stop of the day was the Tullywee delta, a site of a submarine till deposition particular to
 143 grounding line dynamics. This site was scrambled across from top to bottom by both glaciologists and goats.

144 After pub, dinner and a good sleep in Letterfrack, Co. Galway, we woke the next morning, bright and early (shaking off
 145 the effects of several fine bottles of wine and an excellent meal the night before), boarded our comfortable bus and headed off
 146 to Leenane, to see ice-contact Gilbert-type deltas and the Glaciomarine sediments of Askilliaun, Co. Mayo. Passing the site

147 where the 1990 movie *The Field* was filmed, we drove north, across the Doo Lough Pass, where we encountered a memorial
148 stone dedicated to 400 people who died of famine in 1847 at the height of *an gorta mor*, after walking to Louisburgh in a vain
149 attempt to obtain help. Approaching Askilliaun, we tested our bus driver by forcing him into an extremely tight roadway,
150 where we drove for several miles with hedges and stone walls mere centimeters from each side of the unblemished paint job
151 of the bus. The nerve-wracking experience was worth it, as we visited massive beach exposures of diamicts left behind by ice
152 flowing into Clew Bay from the East. Then it was on to Westport and Clew Bay, our second overnight destination, passing
153 Croagh Patrick (a tall mountain, 762 m, site of a yearly pilgrimage in the name of St. Patrick, the patron saint of Ireland).

154 After seeing Drumindoo drumlin, catching ourselves on various barbed wire field fences, and viewing the exposed drumlin
155 section south of Rassakeeran, we settled into Westport Quay, and boarded two intrepid fishing vessels for a twilight voyage
156 into Clew Bay, to see the drumlin islands.

157 Our third and last day began in a driving rain, as we shifted our attention to the subject of the Connaught esker system
158 and subglacial hydrology. Climbing to the top of a hill near the Collagh esker section, we stumbled across another neolithic
159 ring fort. There, it was decided that Richard and Doug, the Hindmarsh twins, would pose for photographs, allowing all in
160 attendance to reminisce on the fact that the imposing stature of these twins reminded us of what ancient kings must have
161 looked like.

162 From a last lunch together in the rain in an old ruined mansion from the 18th century near Tuam, we drove back to Shannon
163 and concluded our sojourn with a hearty statement of thanks to the organizers: Peg Hanrahan, Zina/: ida Nourreddine, Jenny
164 Write and particularly Marguerite Robinson, for invaluable administration, logistical and technical support.