

AG26: Agallamh le Murchadh Peutan: Briathrachas Saidheans Gàidhlig

Interview with Murdo Beaton: Gaelic Science Terminology

Presenter: Seumas Dòmhnallach (James MacDonald)



SEUMAS:

Còmhla rinn an-diugh tha am fear saidheans, Murchadh Peutan. A Mhurchaidh, thoir dhuinn beagan dhed eachdraidh fhèin anns an t-seadh dhan d' thug e gu beatha ann an saidheans thu.

MURCHADH:

Uill, tha mi cinnteach gur e gun do rinn mi ceum ann an saidheans ann an Oilthigh Ghlaschu, 's às dèidh sin, bha mi ag obair air grunn de rudan eile gus an deach mi gu Colaiste Chnoc Iòrdain 's thug mi a-mach teisteanas na mo neach-teagaisg saidheans, 's bha mi ag obair air sin airson iomadach bliadhna ann an Àrd-sgoil Phort Rìgh agus nuair a thòisich fòghlam tro mheadhan na Gàidhlig bha iad a' coimhead airson tidsearan anns a h-uile cuspair aig an robh Gàidhlig agus a bhiodh deònach an cuspair aca a theagasg tro mheadhan na Gàidhlig, agus 's ann mar sin a thòisich mise ag obair an toiseach air a bhith a' teagasg tro mheadhan na Gàidhlig.

SEUMAS:

Tha thu air an seòmar teagasg a chur air do chùlaibh. Tha thu air do dhreuchd mar tidsear fhàgail, ach, a dh'aindeoin sin, tha thu fhathast an sàs gu mòr ann an saidheans is fòghlam, nach eil, a-thaobh cloinne agus tidsearan?

JAMES:

With us today is the scientist, Murdo Beaton. Murdo, tell us a little about your own history in the sense of what led you to a life of science.

MURDO:

Well, I'm sure it's because I took a science degree at Glasgow University, and afterwards, I worked on a number of other things until I went to Jordanhill College and qualified as a Science teacher, and I did that job for many years in Portree High School and when Gaelic-medium education started they were looking for Gaelic-speaking teachers in every subject who would be willing to teach their subject through the medium of Gaelic and that's how I first got started in teaching through the medium of Gaelic.

JAMES:

You have left the classroom behind you. You've retired from teaching, but, despite that, you are still heavily involved in science and education, aren't you, both with children and teachers?

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MURCHADH:

Tha gu dearbha, ag eadar-theangachadh stuthan do Stòrlann, am buidheann a tha a' cur a-mach stuthan teagasg, agus ag eadar-theangachadh leabhraichean saidheans agus leabhraichean matamataig gu Gàidhlig, agus, gu dearbha, 's e rud inntinneach a tha sin oir 's ann glè thric gheibh thu dòigh air rud a chur anns a' Ghàidhlig, saoilidh mise, ann an dòigh, uaireannan a tha ga dhèanamh nas sìmplidh na tha e anns a' Bheurla. Agus tha mi cuideachd an sàs ann an cùrsa airson tidsearan, an cùrsa S(t)reap, far a bheil mi a' toirt seachad beagan dhen eòlas a th' agam do thidsearan a tha ag iarraidh a bhith a' teagasg Saidheans agus Maths tro mheadhan na Gàidhlig.

SEUMAS:

Mar sin, tha mòran dhe na briathran a th' ann, 's ann bho chànan eile a tha iad a' tighinn co-dhiù?

MURCHADH:

Gu dearbha fhèin, agus gu h-àraid nuair a sheallas tu air leithid na h-ainmean air na buill bodhaig ann am bodhaig mac an duine, glè thric, na h-ainmean meadaigeach, chan urrainn dhut a ràdh gur e Beurla a th' annta agus faodaidh sinn an cleachdadh ann an teagasg Saidheans tro mheadhan na Gàidhlig oir bidh a h-uile duine gan tuigsinn, agus tha iad gu ìre mhòr stèidhte. Uaireannan eile, tha e comasach dhut faclan a dhèanamh suas a tha ciallach. Ach feumaidh sinn cuimhneachadh cuideachd, gu bheil a h-uile cànan, mura bi e ag atharrachadh 's mura bi e a' toirt a-staigh faclan bho chànan eile, tha an cànan sin a' dol a bhàsachadh. 'S ma tha Gàidhlig a' dol a dh'fhuireach beò, feumaidh e faclan a thoirt a-staigh bho chànan eile.

SEUMAS:

Mar sin, feumaidh cothromachd agus co-ionannachd a bhith ann a thaobh na facail nuair a tha e ga theagaisg ann an sgoiltean is eile.

MURDO:

Yes, indeed, translating materials for Stòrlann, the body that produces teaching resources, and translating science books and mathematics books into Gaelic, and, indeed, that is very interesting because you can often find a way to say something in Gaelic, I think, that in a way, sometimes makes it simpler than it is in English. And I'm also involved in a course for teachers, the Streap course, where I impart some of my experience to teachers who want to teach Science and Maths through the medium of Gaelic.

JAMES:

So, a lot of the terminology, that comes from other languages anyway?

MURDO:

Absolutely, and especially when you consider for example the terms for the different parts of the human body, often, the medical terms, you can't say they are in English and we can use them when teaching science through the medium of Gaelic because everyone understands them and they are already established to a great degree. At other times, it's possible to create new terms that are sensible. But we must also remember, that every language, unless it changes and unless it incorporates words from other languages, that language is going to die out. And if Gaelic is to survive, it must incorporate words from other languages.

JAMES:

So there has to be consistency and balance when it comes to terminology when it is being taught in schools and so on.

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MURCHADH:

O, gu dearbha. Ma tha sinn a' dol a bhith a' teagasg, agus 's e seo an amas a th' againn, gum bi a h-uile cuspair air a theagasg tro mheadhan na Gàidhlig gu Àrd-Ìre air feadh na dùthaich gu lèir anns a h-uile sgoil anns a bheil iarrtas air a shon. Ma tha deuchainnean gu bhith agad aig Àrd-Ìre 's aig ìrean eile, a tha gu bhith air an suidhe le clann air feadh an dùthaich air fad, feumaidh briathrachas - an aon bhriathrachas - a bhith agad ge bith ca'il thu ga ionnsachadh.

SEUMAS:

Mar sin, ciamar a tha sibh a' tighinn gu co-dhùnadh a thaobh cothromachd a thaobh dè na facail a thèid a chleachdadh? Ciamar a tha sin ga rèiteach?

MURCHADH:

Uill, tha Stòrlann, tha iad air pannal a chur air bhonn agus tha pròiseact aca ris an can iad An Seotal, agus tha, anns a h-uile cuspair, tha tidsearan a' cur a-staigh faclan chun a' phannail a tha seo 's tha am pannal a' co-dhùnadh dè am facal a bhios air a chleachdadh, agus bi am facal sin an uair sin stèidhte.

SEUMAS:

Am bi thu fhèin ag aontachadh san fharsaingeachd ris an rud a chanas am pannal?

MURCHADH:

Uill, chan eil a h-uile turas. Bidh mi gu ìre mhòr ag aontachadh leotha oir 's e fìor sgoilearan Ghàidhlig a th' anns a' chuid mhòr dhiubh, ach uaireannan nuair a bhios mi a' cur suas faclan saidheans, bho thaobh Saidheans, cha bhi mi a h-uile turas ag aontachadh leotha.

MURDO:

Oh, absolutely. If we are going to teach, and this is our aim, that every subject will be taught through the medium of Gaelic to Higher level all around the whole country in every school in which there is demand for it. If you are going to have exams at Higher level and at other levels, that are going to be sat by children all around the country, you need terminology - the same terminology - wherever you may be learning it.

JAMES:

So, how do you come to a decision and achieve a balance in the terminology that will be used? How is that agreed?

MURDO:

Well, Stòrlann has set up a panel and they have a project that is called An Seotal, and in every subject, teachers submit terms to this panel and the panel decides which of them will be used, and then that term will be established.

JAMES:

Do you agree in general with what the panel decides?

MURDO:

Well, not every time. I do agree with them to a great extent because most of them are fine Gaelic scholars, but sometimes when I submit scientific terms, from a scientific point of view, I don't always agree with them.

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MURCHADH:

Ma bheir mi dhut eisimpleir: tha cuimhn' agam a bhith ag eadar-theangachadh Saidheans airson a' chiad bliadhna san àrd-sgoil agus bha sinn a' tighinn gu a bhith a' seòrsachadh beathaichean agus mar a tha fhios agad, uill, anns a' Bheurla, 's e a' chiad sgaradh a tha iad a' dèanamh gu bheil iad gan cur ann an dà bhuidheann, anns a' Bheurla, "vertebrates" agus "invertebrates". Smaoinich mi, uill, tha "vertebrate" a' ciallachadh gu bheil cnàimh-droma aca, ach ma tha cnàimh-droma aca, tha cnàimhean eile aca cuideachd agus mar sin, chleachd mi am facal "beathaichean cnàmhach" airson "vertebrates" agus "beathaichean neo-chnàmhach" airson "invertebrates", ach gu mì-fhortanach cha do dh'aontaich am pannel rium. Bha iadsan ag ràdh gur e druim-altachan a' Ghàidhlig airson "vertebrate" agus neo-dhruim-altachan airson "invertebrate", agus cò chanas dè am facal as fheàrr?

SEUMAS:

A bheil thu a' faicinn gu bheil cothrom ann an obair seo a leudachadh leis an amas gum biodh a h-uile cuspair cha mhòr ga theagasg tro mheadhan na Gàidhlig anns na sgoiltean?

MURCHADH:

Uill, tha gu dearbha. Tha sinn, mar a thuir mi, tha sinn ag amas gum bi a h-uile cuspair air a theagasg gu Àrd-ìre anns a h-uile sgoil far a bheil iarrtas, agus, uill, tha e follaiseach nach bi tidsearan gu leòr, nach bi gu bràth tidsearan gu leòr againn airson sin a dhèanamh anns a h-uile sgoil far a bheil iarrtas, agus 's e mo bheachd-sa gu feum sinn a bhith a' cleachdadh an teicneòlas ùr, an eadar-lìon agus goireasan mar sin, a' teagasg aig astar. Tha sinn air dearbhadh mar-thà gu bheil sin soirbheachail, oir bha Gillebrìde MacIlleMhaoil a' teagasg Bith-eòlas ann an grunn mhath sgoiltean ann an Alba agus bha e fhèin a' fuireach anns an Spàinn aig an àm sin.

MURDO:

I'll give you an example: I remember translating Science for the first year in secondary school and we were coming up to sorting animals and as you know, well, in English, the first division that occurs is that they are separated into two groups, in English, "vertebrates" and "invertebrates". I thought, well, "vertebrate" means they have a backbone, but if they have a backbone, they also have other bones and so I used the term "beathaichean cnàmhach" (animals with bones) for "vertebrates" and "beathaichean neo-chnàmhach" ("boneless animals") for "invertebrates", but unfortunately, the panel didn't agree with me. They decided that "druim-altachan" ("spine-jointed") would be the Gaelic for "vertebrate" and "neo-dhruim-altachan" ("non-spine-jointed") for "invertebrate", and who's to say which is better?

JAMES:

Do you see an opportunity to expand this work with the aim that almost every subject would be taught through the medium of Gaelic in schools?

MURDO:

Well, yes, absolutely. Our, as I said, our aim is that every subject will be taught to Higher level in every school where there is demand for it, and, well, it's obvious that there won't be enough teachers that there will never be enough teachers to achieve that in every school in which there is demand, and it is my belief that we must utilise new technologies, the internet and similar resources, distance learning. We have already proved that can be successful, because Gillebrìde MacMillan was teaching Biology in quite a few schools in Scotland and he was living in Spain at that time.

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SEUMAS:

Ciamar a tha thu a' faicinn an obair a tha seo a' leudachadh ma-thà?

MURCHADH:

Tha tòrr obair ri dhèanamh, agus, uill, chan eil eòlas sam bith agamsa air dè cho fad 's a chaidh iad anns na cuspairean eile, ach a-mhàin Matamataig. Bho chionn dà bhliadhna, no trì bliadhna air ais, thòisich mise ag eadar-theangachadh pàipearan Matamataig aig Ìre Choitcheann agus aig Àrd-ìre gu Gàidhlig agus tha sgoilearan air Matamataig aig àrd-ìre a shuidhe tro mheadhan na Gàidhlig, agus tha sinn an dòchas gun tachair sin anns a h-uile cuspair, ach mus tachair e, tha an t-uabhas obair ri dhèanamh.

SEUMAS:

A Mhurchaidh, tapadh leat.

JAMES:

How do you see this work expanding, then?

MURDO:

There's a lot of work to be done, and, well, I have no knowledge of how far it has progressed in other subjects apart from Mathematics. Two or three years ago, I started translating Mathematics papers at Standard Grade and Higher into Gaelic and pupils have sat Higher Mathematics through the medium of Gaelic, and we hope that will happen in every subject, but before that happens, there's a lot of work to be done.

JAMES:

Murdo, thank you.