

WikidataCon Auckland 2021 45 min Presentation

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How editors can contribute to #Wikipedia, #WikiCommons & #Wikidata through the lens of @aucklandmuseum content, publications & data.

Slide 1

Kia Ora, I'm Siobhan Leachman or User:Ambrosia10. With Victoria, I help run the Wellington Wiki meetup as well as the online Aotearoa New Zealand user group meetup. Both of these are held monthly. I'd highly encourage you to attend Wiki meetups to connect with and learn from your community members. If there are no Wiki meetups in your area please consider setting up your own!

In my presentation today I'm aiming to show you how editors can contribute to Wikipedia, WikiCommons & Wikidata through the lens of Auckland Museum content. Now I recognise I am speaking to a room containing editors with years of experience as well as editors who are just beginning their contribution journey.

So I'm going to attempt to give you a brief overview of the many methods and tools that editors can use to contribute. I'm hoping that by skipping over a lot of ground quickly there will be something for everyone.

There will also be a 15 min question time after my presentation. And of course the rest of the conference will be an opportunity to learn more about what I'm covering. There will be significant time slots during the conference to allow for a deep dive into any subject I cover. So note down anything you are interested in learning about and let the conference organisers know.

However there is no way I can cover everything. So if you also think of anything that others might be interested in, please also note it down and share it.

So let's get started!

Slide 2

I'm going to cover editing in the three "big" wikiprojects - English Wikipedia, WikiCommons and Wikidata. But you should be aware there are many other wikimedia projects that you can contribute to. If you are multilingual you can edit in other language Wikipedias There are projects like WikiSource, Wikivoyage and Wikispecies. The list goes on. I've put a link in the slide for the [complete list](#) of projects that you might be interested in exploring.

Slide 3

But let's start with editing English Wikipedia. As I'm sure you are aware English Wikipedia is an online encyclopedia. Editors contribute to Wikipedia by researching and then creating, or

adding content to, articles in their own words. Those words need to be backed up by references that support the statements editors make. If you are a new editor or need a refresher there will be a session directly after this presentation just for you, to help you to learn more about editing Wikipedia.

Slide 4

Now Auckland Museum provides multiple sources of information you can use to inform your research and editing. The most obvious source is their extensive website.

The three areas of the website I personally find most useful are their Collections Online, their Research section and their Blog. These portions of the website can be found via the “discover” tab but it’s well worth exploring more widely as there are wikiworthy gems all throughout the site.

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[Collections online](#) is the museums catalogue record and image repository. And it is extensive! If you are editing Wikipedia articles with a focus on New Zealand I’d highly recommend making use of it.

The Auckland Museum website also links to a more specialised biographical database, the [Online Cenotaph](#). This links to records of those who served Aotearoa New Zealand during conflicts and again can be a very useful resource for research and references.

Slide 6

Be aware that there are also other Galleries, Libraries, Archives and Museum (GLAM) websites worth investigating to help your Wikipedia editing. Just a few examples include [Te Papa Collections Online](#), the [Alexander Turnbull Library Tiaki catalogue](#), and the [New Zealand Archives website](#), [PapersPast](#) and [DigitalNZ](#). Believe me I could go on!

Slide 7

The Auckland Museum online catalogue itself can be used as a reference to support numerous statements made in Wikipedia. Examples might be that Auckland Museum holds the work of a particular artist, or the type specimen of a species. It is also the fabulous source of images that have already been or should be added to WikiCommons but more on that later.

Slide 8

You can also use research generated by Auckland Museum and highlighted in the Research section of their website. They have “featured projects” that can help inform research for Wikipedia articles. You can also find digital versions of some of the volumes of their journals - Records of the Auckland Museum and the Bulletin of the Auckland Museum. These give links to scholarly articles published by staff.

There is also a section on their website about “our people” that can help with research on biographies of Auckland Museum staff and importantly gives links to staff publications in independent journals.

There are even eBooks on their site - For example the [Director's Choice](#) book has a digital version that you can use for your research. In fact via Auckland Museum Collections Online link you can find “online resources” that link to an array of digital content with amazing amounts of wiki worthy information.

Slide 9

Unfortunately, as far as I'm aware, the Auckland Museum doesn't have a repository of preprints of all research published by their staff or even a list of all articles and publications generated by their staff each year.

However, there are alternative ways to find these publications, as well as many others like them. And of course once you find them, you can use them to inform your editing. One way is to use a “[Google scholar](#)” search, looking for all scholarly publications by a staff member or on a topic.

The great thing about a Google Scholar search is that it can lead you to accessible versions of paywalled articles. So it is a great tool for finding information on all sorts of topics to inform your editing.

Auckland Museum has also uploaded some of its publications into JSTOR. JSTOR is an extensive digital repository of scholarly research on all sorts of topics. Now it is true that you have to pay to access some JSTOR content but JSTOR does provide an [open repository](#) with open access research that can be very useful.

Slide 10

But there is a way to gain access to ALL the scholarly content held by JSTOR, paywalled or not, as well as SO much more. That is the [Wikipedia Library card](#). This library card is issued by the Wikimedia Foundation and enables you to access scholarly publications that might otherwise be paywalled. There are some requirements to get access to this card but it's well worth attempting to log in to see if you've hurdled the qualification bar.

Once you have a Wikipedia Library card you not only have automatic access to all of JSTOR, you will also have automatic access to an amazing array of scholarly journal collections that might otherwise charge you for access.

Importantly the Wikipedia Library card ALSO empowers you to apply for access to specific publishers paywalled content. Organisations who produce such content often donate access accounts to the Wikimedia Foundation. Access to these gifted accounts is awarded to selected editors after they apply for access via their Wikipedia Library card. For example I have applied for and received access to the Ancestry website via this.

I'd highly recommend investigating this more if you need access to paywalled articles for your Wikipedia editing.

Slide 11

But let's get back to the Auckland Museum website as there is one more research resource that you shouldn't overlook. And that is the [Auckland Museum blog](#).

Slide 12

Now citing blogs in Wikipedia is often discouraged as they are regarded as not being reliable. But there are exceptions to this rule. A blog is regarded as a reliable source for Wikipedia where the material is written by professional researchers writing within their field and the blog is hosted and edited by a reputable organisation, such as a museum. So the Auckland Museum blog is definitely a citable source for the purposes of Wikipedia. There is an exception to this though. If the blog deals with content which has already been published in scholarly journals, it is those journal articles that should be cited rather than the blog.

Auckland Museum has had staff writing blogs since 2012 so there is a lot of content just waiting to be cited in Wikipedia articles.

Slide 13

The Auckland Museum also publishes content in other sources that can also be used when editing Wikipedia.

They publish books, like this example in the slide. Remember you can cite books in a Wikipedia article even if those books haven't been digitised and aren't on the web! You just have to be able to read and refer to them yourself.

Auckland Museum also publishes resources in web based third party aggregators such as the Internet Archive and the Biodiversity Heritage Library.

Slide 14

The Internet Archive is a digital repository contributed to by multiple content providers. For example the Auckland Museum contributes their Annual Reports here.

The Internet Archive is SUCH a great resource for Wiki editors. It has so many "out of copyright" publications that can be of use for research, for referencing and for obtaining out of copyright images for upload to Wikicommons.

If you sign up for an Internet Archive account you are also able to check out digital copies of "in copyright" books. Again, fabulous for research. And then there is the marvellous invention that is the Internet Archive Wayback Machine.

Slide 15

The Wayback Machine is an archive for websites. It is a way to access older versions or even dead websites. Importantly it is also a tool you can use to archive a website you are citing in a Wikipedia article.

When you edit Wikipedia and you cite a reference to support your edits you will likely be using the automatic citoid tool to place that citation in the article. It's the automatic tool that uploads and formats the citation you are adding. You may not even realise you are using this tool.

Once you've placed the website citation in Wikipedia via the citoid tool you can then manually edit that citation. This is your opportunity to create and then add the archive link to the citation. This results in users of Wikipedia NEVER coming across the dreaded 404 error when clicking on the link or seeing the "dead link" template in the Wikipedia article.

There is even a [google chrome extension](#) for the Wayback Machine you can install to make this archiving process easier. The link is in the slides to help you. But even if you don't use Chrome as your browser you can still archive website urls to the Wayback Machine. I'd be happy to show folks how this works as I find this workflow invaluable.

Slide 16

Another example of a repository the Auckland museum contributes to is the Biodiversity Heritage Library or BHL. Like the Internet Archive, BHL is a digital library which aggregates digitised copies of biodiversity publications from numerous organisations. It is an amazing resource for editing biodiversity and species articles.

I've added a link to the slide so you see BHL content contributed by the Auckland Museum. But again like the Internet Archive, Auckland Museum contributions to BHL are only the tip of the iceberg. I'd highly recommend using BHL to inform your research on any Wikipedia article or Wikidata item that is biodiversity related.

Slide 17

"But wait there's more". BHL also has the most amazingly extensive Flickr feed. Over 300,000 stunningly beautiful digitised public domain or openly licensed images, only some of which are uploaded into [WikiCommons](#).

Slide 18

And this leads us nicely onto our next big project - Wikimedia Commons. Wikicommons is an image repository for public domain and openly licensed images. It is where you HAVE to add images before reusing them in Wikipedia or Wikidata. It is also where many folk around the world source their images for numerous reuse purposes. This is because images uploaded into Wikicommons must be freely reusable for any purpose, including commercially.

Slide 19

Now as I'm sure you are aware Auckland Museum is prolific in producing images. And they are generous enough to openly license many of them. Their policy is open by default, closed by exception. They license many of their images under the Creative Commons Attribution license. As a result many of the Auckland Museum images have already been bulk uploaded into WikiCommons.

You can find them here in this massive category "Auckland War Memorial Museum". But Auckland Museum continues to produce images and many may still need to be uploaded to Wikicommons. You can find them on the Auckland Museum collections online and also on third party platforms like Flickr.

Slide 20

But remember Auckland Museum isn't the only GLAM holding public domain images or publishing its images under an open license. If you need an image, make sure you also check out other repositories such as the aggregator platform DigitalNZ, or websites like Te Papa online, the Alexander Turnbull catalogue Tiaki, and as I've previously explained and my personal favourite the Biodiversity Heritage Library flickr feed. Also be aware that "The Commons on Flickr" is currently undergoing a renaissance. This is the part of Flickr where many GLAMs around the world place their public domain images. It is a fabulous source for reusable images.

Slide 21

There are many contributions editors can make to Wikicommons. These are just some of the tasks I'm going to attempt to add a little more detail to during this presentation.

As I've mentioned, editors can upload images to Wikicommons. These can be images they've either created themselves or that third parties have created and are either in the public domain or openly licensed.

Editors can categorise images, helping them to become more discoverable in Wikicommons. Editors can add structured data about those images to WikiCommons. That is, add data explaining things about the image that helps both people and computers find and reuse them.

And finally editors can reuse the images found in Wikicommons in Wikipedia articles and in Wikidata items.

Slide 22

Just a quick word about copyright. If you are interested in learning how to add images to wikicommons you WILL need to make sure you understand the copyright and licensing requirements.

Very basically if you are uploading images not taken by yourself those images should either be in public domain or openly licensed. And when I say "public domain" I mean that the images should be out of copyright in both New Zealand AND in the US, because the rules are different in each jurisdiction. You need to obey copyright law in both jurisdictions as when you upload the image into Wikicommons, you are reusing the image in NZ. And, as you are adding it to computer servers in the US, you are also reusing the image in the States.

If the images are still under copyright, very generally, you can only add the images into Wikicommons if they have been licensed for reuse under an open license. In practical terms that means they are licensed for reuse under either a Creative Commons Zero, Creative Commons Attribution or Creative Commons Attribution Share Alike license.

Also, and very importantly especially in New Zealand, just because an image is in the public domain doesn't necessarily mean it should be available for reuse by anyone for anything. Rights other than copyright may apply. For example in New Zealand the cultural status of the work may be an issue.

If you want to learn more about this we've got one of New Zealand's top GLAM copyright experts in the room (I'm looking at you Victoria). So if you want to know more please ASK.

I've also put a link in the slides to a guide for [contributing content to Wikicommons](#) that may be helpful. You can reach it by clicking on the "Adding images" title in the slide.

Slide 23

Once you've worked out that you can upload particular images to Wikicommons, there are two ways to go about it. You can add images individually or in batches of up to 50 via the upload wizard tool on the main page of Wikicommons. You get to it via the blue "upload" button on the right of the main page. This takes you through a step by step process which will ensure images are correctly loaded with the correct information.

The other way is bulk uploading multiple images. There are tools that can help you to bulk upload images. However you should be aware that this is an area that is in flux. The structured data on commons project, which I'll talk about more soon, has meant that some of the upload tools I'm about to mention are coming to the end of their lives. So I'm going to give you information on what currently works but be aware if you are thinking of a big project you may want to take this state of flux into account.

At the moment the tool I personally prefer to use for bulk uploads is called [Pattypan](#). This is the tool that is coming to the end of its life but I've been reassured it won't be going anywhere until there is a replacement. So I'm happy to help anyone who is interested, to learn how to use it. There are other tools such as [ComeOn!](#) and [URL2Commons](#) which also work but I haven't used these before. However there may be editors in the room who might be able to help.

Excitingly there is currently a proposal to integrate uploads to Wikicommons from OpenRefine. OpenRefine is a tool that is used by many to clean messy data and is currently frequently used by the Wikidata community. I've mainly been exposed to it for editing Wikidata, which I'll explain more on later. But I understand Wikicommons editors are keen to adapt it to allow bulk uploads of images and data relating to them into Wikicommons. However currently this is just a proposal.

I've put links in the slide to assist if you are interested in learning more. And again feel free to add bulk uploads to commons to a list of topics you'd like to discuss further if you are curious.

See [twitter thread](#)

Slide 24

Once images are added to WikiCommons there are multiple ways editors can improve the information stored about the images. One important contribution is to categorise the images in Wikicommons. Editors add categories to help people find what they need amongst the over 60 million images that exist in Wikicommons. An image can have multiple categories. I've added a link to guidance on categories best practice on this slide, if you want to know more.

Slide 25

There are plenty of images that need categories. I've put a link in this slide first to the complete list of images in Wikicommons that need categories. The second link is to the list of Auckland Museum images that desperately need categories added. This is an easy task to start dipping your toes into Wikicommons editing and can be really impactful. However I'd highly recommend reading the instructions linked to on the previous slide before diving in.

Slide 26

Once you get used to manually adding categories you can level up and start learning to use tools to help you bulk edit categories. I've put a screenshot of three tools that may be of use. I've recently learned how to use Cat-a-lot myself and think it's fabulous. A great way to categorise multiple images.

Hot-Cat is a tool that once included in your preferences allows you to easily add and remove multiple categories to particular images.

Finally GLAMerous gives you "view metrics" for those images that have been reused in Wikipedia or Wikidata. I'll explain more about this tool in a few slides.

I've also put a link in the slide to the page that lists all the Wikicommons tools that may be of use to editors. This links to pages that explain the various tools in detail.

Slide 27

But, despite their usefulness and importance, categories do have their limitations. For example they aren't multilingual. The solution to this and many other issues, is a movement that is currently sweeping through WikiCommons called "structured data on commons". It adds much more detailed information and data to the images, information that both humans and computers can read, that can be queried. Structured Data on Commons makes the images easier to view, search, edit, organize and re-use. If you want to learn more on structured data on commons I've added a link to the project page in the slides and again, write it down as a subject to discuss.

Slide 28

You can add structured data to each image in Wikicommons by opening the structured data tab and adding statements. These statements can give information about what is depicted in the image, the copyright status of the image, the reuse licence for the image, geo location data, even the type of camera taking the image and so much more.

Slide 29

And as usual there are also tools to help you make such edits in bulk. I particularly enjoy using a tool called SDC which allows you to add "depicts" statements to all images in one category. I'd be very happy to show you how to install and use this tool. If you are interested in WikiCommons as a project I'd highly recommend learning more about these tools.

Slide 30

The reason this information is being added to images in this structured way is so that it can be queried. In this simple example I've asked the Wikicommons query service to find all images that have structured data indicating they depict the Auckland Museum. Obviously searches like this make Wikicommons much more usable. And because the structured data is multilingual these queries can take place in any of the 300 languages included in Wikiprojects.

Slide 31

Finally, once images are in Wikicommons, editors can use those images to illustrate both Wikipedia articles and Wikidata items. Again if you don't know how to do this write it down as something you'd like to learn. There are plenty of folk in the room who can teach you how. This is a relatively easy but high impact way to contribute and is definitely much needed.

Also reusing GLAM sourced images can make a significant difference to the GLAMs that generously make their content available for and in Wikicommons. GLAMs can generate reports that show how many people look at those articles and see the images used there. These reports can be shared with the GLAM funders to show the impact of a GLAM's open strategy. Strategically this in turn can have a REALLY IMPORTANT impact for us.

For example if the report metrics are high for Auckland Museum, this helps show the impact of the Auckland Museum open by default policy. It adds to the evidence that helps justify their policy. And this in turn can be used by us as a community, to persuade and encourage other GLAM organisations to go open. Resulting in us having even more content available to help enrich Wikipedia, Wikicommons and Wikidata. It is in our interest to help those who are helping us.

Slide 32

One tool that GLAMs can use to show the impact of their sharing is a tool called GLAMerous. This generates a report giving the page views of Wikipedia articles featuring the GLAM's images. Now yes, this can be a very blunt tool for impact metrics but currently it is one of the few we have.

As you can see from the slide this portion of the GLAMerous report for Auckland Museum also gives the number of images used in English Wikipedia and Wikidata. What these figures do show is how much of an opportunity we have to help Auckland museum broaden the impact of its open by default policy. By reusing appropriate images sourced from Auckland Museum in Wikipedia and Wikidata we can show support for that policy and help encourage other museums and institutions around New Zealand to adopt it.

Slide 33

Images from Wikicommons can ALSO be reused in wikidata to illustrate wikidata items. This is particularly important as many of the smaller language wikipedias automatically produce their articles via wikidata. This means that if you add an image to a wikidata item it is likely to be automatically ingested into multiple language wikipedias. Take for example this Auckland Museum image of a New Zealand wasp. Although this species doesn't have an English wikipedia article, this image has been reused on 6 other language wikipedias that DO have an article. So adding images to Wikidata is another really impactful way to reuse GLAM content.

Slide 34

Before we leave this there is one Important tool I want to tell you about if you are reusing images in Wikipedia and Wikidata. This is the crop tool. This is an efficient way to create a cropped version of an image already in Wikicommons. This can help you to create a more appropriate image for upload into articles and items. The link to the slides will explain more and helps you activate the tool. Again if you want to learn how I and others in the room would be happy to show you.

Slide 35

The final project I'll be talking about today is Wikidata.

Now for many folk starting out, Wikidata may seem the most intimidating of the projects. But really it isn't. Wikidata is just a giant database, making statements and backing those statements up with references.

Slide 36

The powerful thing about wikidata is that the data is structured, that is linked to other data in a way that can be queried - both by humans and computers. Importantly Wikidata is also a hub, it links to other databases. It collects identifiers from third party databases such as GLAM catalogues, genealogy databases, geographic location databases. Wikidata becomes the place to obtain links to multiple cross-disciplinary datasets and in turn to knowledge about the subject.

Slide 37

Now there are three basic ways to edit Wikidata. The first is manual curation. Wikidata needs MANUAL curators. You don't have to be the type of person who bulk uploads whole databases into Wikidata to be a valuable contributor to the project. Individual manual curation of items is REALLY important and often not covered in Wikidata presentations. I say this because this is what I do so OF COURSE I say it's important.

The second way is to bulk upload data into Wikidata. This can be done by humans and by computers. You too can learn to make bulk edits via various wikidata tools without ever having to learn code. But I'd highly recommend getting your feet wet and learning about Wikidata first via manual curation and edits.

Finally if you are that way inclined, you can create computer programmes to make automated edits in Wikidata. These are called bots. There are administrative hoops to jump through before you are allowed free rein in Wikidata with bots but there is a thriving community of editors who automate edits via bot. Let me know if you are interested and I'll try and connect you to the community.

Slide 38

I think if you are a beginner, manual editing is the best way to start dipping your toes into the potential of Wikidata. Manually editing not only teaches you to add and curate the data, it will also help you learn about how data is structured. The great thing about Wikidata is that you can also contribute by saying how YOU think the data should be structured.

So these are just some of the types of manual edits you can make in Wikidata. I and I'm sure others in the room would be happy to do a demonstration later to show you how to do any or all of these if you are interested.

Slide 39

One of the easiest ways to start is to contribute to Wikidata is via the Mix'n'match tool. It's where I got my Wikidata journey underway. Mix'n'match is a tool that allows multiple datasets to be prepared for upload into Wikidata. Editors match the identifier provided by the dataset to the correct Wikidata item. Once confirmed by the editor that identifier is added to the item.

The example on the slide is the 2nd Alexander Turnbull Library mix'n'match dataset. By clicking on the blue link it opens a new tab to show you the Wikidata item for that person. You then compare the information there to the information provided by the Alexander Turnbull Library. You decide whether it relates to the same person or not. If yes you press confirm, if no you press remove. Once you press confirm, mix'n'match automatically adds the Alexander Turnbull library identifier to the Wikidata item.

Slide 40

Now the Auckland museum has several properties in Wikidata for their identifiers. The first is the Online Cenotaph id. This DOES have a mix'n'match set that you can work on.

The second is the identifier for a person or company in their collections online catalogue. Currently, this dataset isn't in mix'n'match, but you can add it manually to appropriate Wikidata items.

Slide 41

There are multiple other tools that exist to help with manual editing. Due to time constraints I'm only going to highlight two - Cradle and TABernacle.

Slide 42

The Cradle tool is useful if you want to create a new item in Wikidata and you are unsure how it should be structured and what data needs to be included. Cradle provides a form for you to fill out depending on what type of item you want to create. Once you've filled in the data it will then automatically create the item for you. It holds your hand and helps you create an appropriately structured Wikidata item.

Slide 43

The other tool I wanted to highlight is TABernacle. This is a tool that enables you to edit wikidata in a table format.

You will need to query Wikidata to get the information you want to put into the table to edit but again I'd be happy to give you a demonstration later.

Once you've got the data & set up the columns in TABernacle, it is a really useful and visual way to show what data is missing from Wikidata. It enables you to add that data in by directly editing the table. I use it to add depicts statements in Wikidata items describing paintings. The image in the slide shows some of the paintings from the Sarjeant Gallery that have Wikidata items. The same type of table could be generated for art works from Auckland Museum or Te Papa that are in Wikidata.

Slide 44

When you are ready to dive into bulk or batch edits to Wikidata there are numerous tools to help you. And again I'm just going to highlight a selection.

The first and most important tool is [Quick Statements](#). QuickStatements edits data in Wikidata with a simple set of commands. It is useful when you want to make batch edits to several items at once. It is the tool the majority of Wikidata editors use when bulk editing.

Another tool that is well worth getting your head around is OpenRefine. This is a tool that is used by wikifolk and non-wikifolk alike for cleaning data. It is used by wikifolk because it can also be used to reconcile (that is match) the data you are cleaning to Wikidata.

OpenRefine is being used more and more to edit Wikidata either directly from openrefine itself or by generating formatted statements that can be added to the Quick Statements tool for upload into Wikidata. I'd highly recommend learning more about OpenRefine if you are interested in learning how to bulk edit Wikidata or WikiCommons data. Again reach out if you want to learn more as there are editors in the room who can help.

Slide 45

There are also many tools that have been created to help with particular workflows. Take for example scholarly publications in Wikidata. Tools exist allowing you to automatically upload data about a scholarly paper into Wikidata by using the paper's Digital Object Identifier or DOI. This sounds complicated but once you've got your head around the workflow it really isn't.

If the publication doesn't have a DOI, editors can add the publication to the citation reference tool Zotero. Zotero can be used to generate statements that can be uploaded to Wikidata via the quickstatements tool.

Finally there is also the author disambiguator tool. This can help change a STRING ie just the typed name of the author, to a THING ie a link to the author's wikidata item. And the author disambiguator tool allows you to do this on multiple scholarly paper wikidata items at once.

Again let me show you how, cause this is a workflow I'm forever using and there is just so much to do!

Slide 46

The third way to edit Wikidata is by bots. Editors can create bots (that is computer programmes) and then set them free within the Wikidata ecosystem, editing as they go. I'm afraid that this is something I have yet to dip my toes into. But if you are interested I'm sure I can put you in touch with other editors who are more experienced than I who will hopefully be able to assist you.

Slide 47

Finally I want to give you just a taste of why Wikidata is so important. Wikidata can be queried by the Wikidata Query Service. This is where editors ask questions of the data that may not be able to be answered in any other way.

For example the top graphic in the slide shows a query about all the artworks of Charles Heaphy currently in Wikidata. It's a visualisation that gives information on such things as the number of watercolours vs oil paintings, or the number of his artworks that depict ships. All displayed in a way that is easy for folk to digest.

The second is a visualisation of coauthors of a particular researcher. It is derived from the Scholia website. This uses multiple queries of Wikidata to visualise the scholarly impact of an author, institution or topic. This is not only useful for the scholarly author but also for Wiki editors. Editors can add a link to the Scholia profile to the author's Wikipedia article.

Slide 48

Now as I'm coming to the end of my presentation I hope I haven't overwhelmed you with the numerous ways folk can contribute. You'll be reassured to know that no one knows everything about contributing to Wikiprojects. Each of us creates our own area of expertise. This presentation was meant to give you just a taste of the possibilities. So work out what you are interested in and concentrate on learning about that.

What I have done to help is put in some general resource links in this slide if you want to learn more about anything I've been discussing.

The first link is to a curated list of resources we've put together for the Aotearoa New Zealand Wikimedia meetup group. We've trawled through a lot of content to find some of the best documentation and presentations on subjects to help editors expand their skills.

You can also reach out to your fellow editors through the Wikiproject New Zealand talk page, or via twitter [@WikiprojectNZ](#) or on the Wikiproject New Zealand Facebook page.

Finally, can I again encourage you to attend Wiki meetups. If there isn't one near you, you can set up your own. It's relatively easy to do and there are folk experienced in administering meetups who can teach you how during the next breakout session. Please, just ask.

So thanks for listening and does anyone have any questions?