Gabriola and Manhattan—two islands

by Barrie Humphrey, Shelagh Huston, Phyllis Reeve, Kit Szanto, Jack Ruitenbeek, and Nick Doe, based on an idea of Catherine Humphrey

If you have reached this point in your reading of *SHALE* without looking at the front cover, take a look now. The maps show two islands drawn to exactly the same scale. The top one is the familiar island of Gabriola; and the bottom one is Manhattan, one of the five boroughs of New York city.

The islands are surprisingly similar in size and shape. Gabriola is 53 square kilometres in area, and Manhattan is just a fraction larger—57 square kilometres.[1] Gabriola is 160 metres high, and Manhattan, 120 metres high. What will of course come as absolutely no surprise is the huge difference in populations. At the time of the last census, Gabriola was home to about three and a half thousand permanent residents; while the resident population of Manhattan was over one and a half million.

Just to give one example of the differences that these population numbers engender, think of our transportation system. While Gabriolans wonder and worry about vague plans for a bridge, Manhattanites don't. They already have eighteen of them…and they throw in a few extra ferries and some tunnels for good measure.

But not all such statistics are predictable. Which of the two islands has the most parkland, raccoons, deer, and peregrine falcons, for example? Which the most writers and publishers per capita? Which the most…well you get the general idea. Here's what we came up with in comparing and contrasting the two islands.

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[1] Manhattan is 22 km long compared to Gabriola's 14.5 km, and is between 1.5 and 3.7 km wide compared to Gabriola's 4 km.

The rules

Although we didn't have any exhaustive plan in doing our research—we all just investigated whatever it was that aroused our curiosity—we had to have a few general rules for comparisons.

Some contrasts between the islands are simple consequences of simple differences that are not unique to the islands. Gabriola, for example, is in Canada, and Manhattan is in the States. It would scarcely be a surprise to learn that, on average, Gabriolans use home computers more than Manhattanites. That's a national difference, true for most places in the two countries.

Also, differences based on differences in population are not really significant when they arise from either *critical mass limitations* at one end of the scale, or *saturation limitations* at the other. Gabriola for example has exactly zero National Hockey League teams, but this is not necessarily because there's no interest in hockey here. It's just that you can't have 0.2% of a NHL team or whatever the per capita figure works out to be. That's a critical mass limitation. Another example is that there may be more public libraries per capita on Gabriola than on Manhattan, but that's not what counts when public libraries come in such a variety of sizes. It makes no sense (to most people) to build a library every few blocks—you just make the existing ones bigger. That's a saturation limitation.

Beyond that though, we were free to look at whatever we wanted.

Natural history—Barrie Humphrey

Let's start with the natural history comparisons. "Super-natural" BC ought to do well in these, even though Manhattan has 10.9 square kilometres (2700 acres) of dedicated parkland compared to Gabriola's 1.2 square kilometres (294 acres).[2] But then, who, living on Gabriola, needs parkland?

Both islands are home to three species of rat—black (*Rattus rattus*), brown (*Rattus norvegicus*), and "feathered" on Manhattan; black, brown, and "hoofed" on Gabriola.[3]

Manhattan has more raccoons than Gabriola, but fewer deer. There are more peregrine falcons in Manhattan (12 breeding pairs in 2000) than Gabriola, but Gabriola, ironically, with 23 nests, has more (American) bald eagles.

More than half of all plant species in Manhattan are exotic (non-native), while Phyllis Fafard tells me that she and Jane James, in their list of Gabriola species, found only a third were exotic. Perhaps that's not surprising when you realize that Gabriola has been exposed to exotic species for less than half as long as Manhattan.

Contact history—Nick Doe

Italians and a Northwest passage are what connect the two islands. Manhattan Island

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[2] Provincial Parks—Drumbeg, Sandwell, and Twin Beaches, including beach and ocean areas, (42 hectares); Regional Park—Descanso Bay (14 hectares); and Community Parks (63 hectares). Central Park in Manhattan is 340 hectares.

[3] Anne Matthews, *Wild Nights: Nature Returns to the City*, Farrar, Strauss & Giroux, New York, 2001. This is a delightful compendium of adaptable creatures, among whom my [BH's] favourites are the raccoons who enter your home through the cat door to steal milk from your refrigerator.

was probably first sighted by Europeans when Giovanni da Verrazzano, an Italian navigator in the service of France, entered the Hudson River in 1524. Another Italian navigator, Alessandro Malaspina, this time in the service of Spain, was commander of the 1792 expedition that landed on Gabriola. Both voyages had in mind the discovery of a Northwest Passage, a European obsession that endured for 300 years.

Since, Marijke Oudshoorn, the president of our Gabriola Historical and Museum Society is from the Netherlands, let me throw this one in too. When the Spanish first reached Nanaimo Harbour and the Northumberland Channel in 1791, they named the entrance *Boca de Winthuysen* in honour of Francisco Javier de Winthuysen, a Flemish lieutenant-general in the Spanish naval service. Although the name hasn't stuck, the area was known for a few years as "Wenthuysen Inlet". Manhattan also has Dutch-name connections. It was once *Nieuw Amsterdam*, and the present-day name of its neighbour, "Brooklyn", is derived from the Dutch *Breuckelen* meaning "Broken Land".

Ethnicity—Kit Szanto

My first impulse was to check out ethnic diversity since I was startled, given my Montreal mindset, when we first arrived to see how little diversity there is here. I assume the contrast with Manhattan is really just a standard small community versus big city difference, so in that sense not counter-intuitive at all. But it is still something that strikes me each time I am out and about.

According to the US Census Bureau, Manhattan's figures for ethnicity are very similar to those of New York City as a whole:

Manhattan	
	%
white	54
black/African-American	17
Asian	9
Aboriginal	1
others	18

27% are Hispanic/Latinos of all races.

For Gabriola and the whole of BC, the census records peoples' ethnic origins as follows:[4]

Gabriola & BC	% Gabriola	% BC
not members of a visible minority	96	75
African	0	1
Asian	1	20
Aboriginal	2	4
others	0	0

13% are not from Europe or Canada.

[RDN figure, Gabriola N/A]

Appearances, it seems, are supported by the facts. Gabriola not only has less ethnic diversity than Manhattan, it also has markedly less than the province as a whole.

What's it worth?—Jack Ruitenbeek

When I first heard of this exercise, my first thought and question was: "I wonder how the current proposed treaty settlement with the Snunéymux[w] on Gabriola stacks up against the proverbial Manhattan Purchase?"

Manhattan is said to have been acquired from the Algonquin[5] by Dutch governor Pierre Minuit in 1626 in exchange for trinkets valued at that time at 60 guilders (US $24). Most historians are aware of all of the controversy and rumour surrounding the purchase—did it actually happen?—and, if it did, were the Indians ripped off?—and were they really paid in beads? Some anthropologists even suggest that of the two parties, it was the Indians who got the better deal, not the other way round.

So how does the current Gabriola deal stack up against that? I'll spare you the theory but basically I did a few simple calculations to take into account exchange rate differences and changes in the real value of money over the time the Manhattan Purchase was done to today (2002). So this result may surprise you. It did me.

My best estimate is that the value of the Gabriola lands on the table now is between CDN $10 and $20 million, so let's call the value of the Gabriola lands US $10 million.

Now 376 years have passed since the Manhattan Purchase. For real, long-term yields, most of the economic literature asserts that they are something less than 5% per year, possibly as low as 2%. I checked up the at-the-time-of-writing (July 2002) one-year mortgage rates, and they were about 5.6% with inflation standing at 2.1%. That gives me a real return of 3.5%. Almost everybody I know would be content with a long-term, perfectly secure investment yielding 3.5% above inflation. Anyway, we shall use that...okay?

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[4] Ethnicity is a multifaceted attribute that includes race, ancestry, self-identity, and all the various aspects of culture—language, religion, customs, and so on. Although close enough for present purposes, categories used by the US Census Bureau (2000 census) are different from those used by Statistics Canada (2001 census). EDITOR

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[5] The Algonquin also gave us the word *ärähkun*, which we write as, "raccoon".

So, US $24 compounded at 3.5% for 376 years works out to be...? You've guessed it, 414545 × US $24 = US $10 million. Isn't that amazing! The value of the land on Gabriola that may form part of a treaty settlement is about the same as what the Dutch West India Company paid for Manhattan.

What do you suppose that means? Does it mean that the Aboriginal people are being treated as fairly—or as unfairly—now as they were 376 years ago? Does it mean that Gabriola will look like Manhattan in 376 years? Does it mean that there is some background conspiracy among the governments involved to pay no more for Gabriola than was paid for Manhattan? Or does it just mean that very little changes over all of these years?

Pick a number, any number—Jack Ruitenbeek

Maybe somebody can tell me what the following discovery might mean; apart from the fact that is that I may have too much time on my hands.

First, you'll all have to agree that the number "two" is an interesting number in several ways. It is the only even prime number, and, as the Pythagoreans discovered, the square root of two is an "irrational" number; that is, it cannot be represented by the ratio of two integers.[6]

We can write $\sqrt{2}$ = 1.41421356237..., but no matter how many digits we write, the value is never exactly right.

So here goes. Assign a number to each letter of the alphabet according to its abecedarian order: A=1, B=2, C=3,... M=13,...etc.

Let the value of any word be the sum of the values of the letters in the word. You will find that "Manhattan" has a value of 92 and that "Gabriola" has a value of 65. Take the ratio of these numbers: it is 1.41538.... This is remarkably close to the square root of two. In fact, it differs by only 0.083%. Moreover—

> —stop! stop! stop! Oh sure Jack, it is close, but not *that* close. How about for example "Manitoba" (value 75) and "Quebec" (value 53). The ratio is 1.415094... which differs from the square root of two by only 0.062%. If you can find a 70 and a 99, you can get it down to 0.005%. At this point, Jack is ruled out-of-order and numerology deemed bunk. But please carry on... EDITOR

For the literati—Phyllis Reeve

Even if they've never read it, many people know that Malcolm Lowry and his wife Margerie developed notes made on a visit to Gabriola in 1946 into, first, a short story, and then into a novel, *October Ferry to Gabriola*, published in 1970. What is less well known is that Malcolm Lowry, several years before finding the west coast, spent time in New York, including two weeks in

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[6] The word "irrational" meant in Greek times "unmentionable" or "unknowable". One legend is that Pythagoras sacrificed an ox to honour his discovery that the square root of two is an irrational number. Another, more credible, legend says that the Pythagoreans who made the discovery were at sea at the time and that they threw the member who made it overboard, and pledged to keep the discovery secret.

The proof that the square root of two is irrational is simple. If $A/B = \sqrt{2}$, where A and B are integers with no common factor, then $A^2 = 2B^2$, and A must be an even number. If we replace A with 2C, then $4C^2 = 2B^2$, or $B^2 = 2C^2$, and B must also be an even number. But having both A and B even numbers contradicts the supposition that they have no common factor. Hence the assumption that there is a solution to $A/B = \sqrt{2}$ must be wrong.

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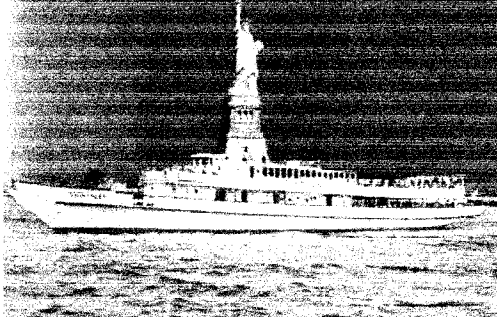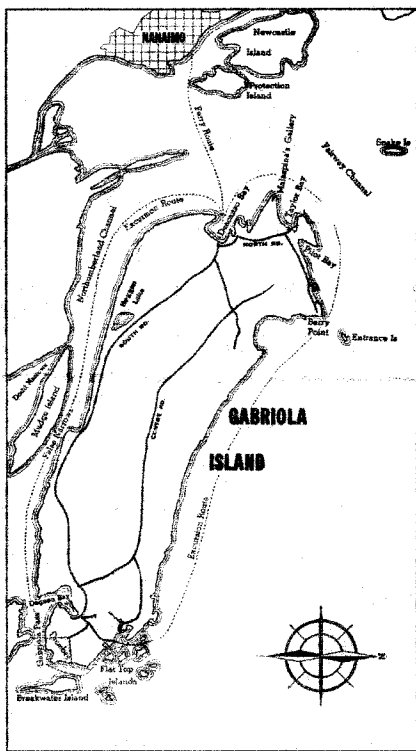C. P. R. Terminal.

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Any more for the skylark?…Round the island
tour brochures from left, 1953 (Gabriola), and
right, 1949 (Manhattan).

Courtesy Gabriola museum and Phyllis Reeve

the Bellevue Hospital in Manhattan, and composed the following "Epitaph":

Malcolm Lowry
Late of the Bowery
His prose was flowery
And often glowery
He lived, nightly, and drank, daily,
And died playing the ukulele.

Selected Poems, City Lights, 1962

So there you are. Malcolm Lowry visited and wrote on both islands.

Stop and...think about it—Kit Szanto

Manhattan has 2700 intersections with traffic signals, while Gabriola has only one, which, as we all know, changes from red to green, then back to red, only once per hour. Hmmm...number of traffic-light changes per day (assuming once per minute in the city): Manhattan: 4 million; Gabriola: 30.

According to ICBC figures, the number of registered vehicles on Gabriola (about 3000) actually exceeds the number of dwellings (2464) but according to the 2000 census, 77% of Manhattan households do not own (or lease) a motor vehicle.[7]

Professionals per capita?— Shelagh Huston

I decided to check out the claim that I've heard that there are more ecological economists (EEs) per capita on Gabriola than in many larger centres. Of course, as soon as one tries to get scientific and rigorous, one's data tends to melt away. I happen to "know" of six EEs on our island, but of course I have no comparable informal knowledge of "their" island. I was forced to turn to a source that is both comparable and reliable. In the 2001−2 Membership

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[7] Census 2000 Supplementary Survey Summary Tables, Table H041.

Directory of the International Society of Ecological Economics, Gabriola is listed as having three EEs. Of the six I informally know about, one does not appear in the directory but is married to one who does; one is retired and may never have been a member anyway; and the third is a member, who I believe has a summer home here, but who is listed in the directory as residing in Vancouver.

Manhattan, on the other hand, has twelve members. In arriving at that number, I checked several dubious zip codes with a reference librarian, and did not cheat by counting the lone members in Queens and in Brooklyn. If I take as given your statement that the population of Manhattan is 1.5 million and Gabriola's is 3522, that means that Manhattan has 0.008 EEs per thousand residents, compared to Gabriola's 0.86 per thousand residents. In other words, we beat them over one hundred times to one, assuming, that is, that more is better when referring to EEs. I decline to take on that topic.

> Actually, Shelagh, I believe that there are three, not two, possible conclusions. One is that Manhattan is desperately short of EEs; another is that Gabriola has far too many of them; and a third is that it is not the number per *human* resident that is significant but the number of EEs per Canada goose... EDITOR

Visitors—Barrie Humphrey

Did you know Manhattan gets three million commuters every day? In comparison, Gabriola's commuter count must be effectively negative given that more Gabriolans go to work in Nanaimo than the reverse. Gabriola does however get about 1500 summer visitors—fewer than Manhattan's commuters by a ratio of 2000:1. Maybe we should reflect on this before complaining about our summer "traffic jams". ◊