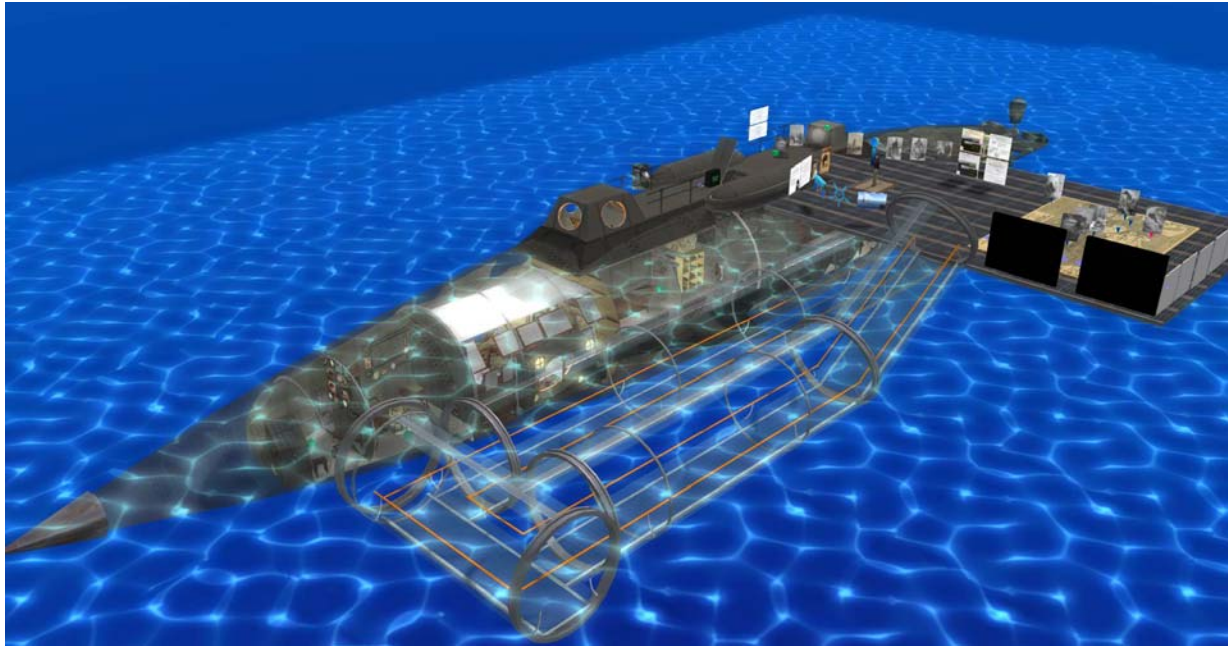


# Verne's Nautilus re-construction



Date and Time: 18 March (Sat) at 8 am PDT/ 15:00 GMT/ 24:00 JST

Location: St. Michell- The Jules Verne Museum

<http://maps.secondlife.com/secondlife/Lily/191/216/1507>

Speaker: Hajime Nishimura, Japan Marine-Earth Science and Technology (JAMSTEC), Yan Lauria in SL, Abyss Observatory, The Modern Museum and The Education Portal

Abstract: It is believed that Jules Verne made a rough arrangement of Nautilus when he wrote "20,000 leagues Under the Sea". many researchers tried to reconstruct the arrangement but didn't success enough due to several deviations in the novel.

Yan, motoko Moonwall and Aley (Arcadia Ashylum) reconstructed Nautilus based on both the novel and feasible design and operation of submarine.

Organizer: The Science Circle

Jawsome (Jes Cobalt), Chantal Jager (Nymf Hathaway)

Participants: AdrienneUmstick Resident, アンドレ (andregood Resident), Arianne (ArianneJP Resident), Beragon Betts, Dae Miami, Dirlandaa Pfeffer, Fumon Crystal, John Noone (JohnNoone Resident), れいちえる (Ley Tachikawa), Mike Shaw (Shawza Tunwarm), Neuro Wonder, OliveTree Lighthouse, Petrvs Cornelivs Silvanvs (peter Woody), ryofuz Quan, Symeon Siamendes, Tagline Resident, Talliver Hartnell, panni (upad Resident), Wolwaner Jervil, Youri Ashton

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### (Remarks)

Yan: Can you hear my voice? Please check on voice by these panels. Upper is official viewer and lower is Firestorm viewer.

If you still can't hear my voice, please check audio device by these panels. Upper is Windows PC and lower is MAC PC

[07:50] Arianne: Now Yan is in front of poster explaining voice setting for the audience

Yan: Now, I'll start today's tour. Welcome everyone.

At first, this exhibit uses Shared Media or Web on a prim. Please check by these panel.

Yan: And we uses particle type image displayers. Can you these images without twinkling? .

If you see these images are twinkling, please change your Graphics settings by this panel and re-log.

Are you OK?

[07:56] Fumon: Toggle on the media, plz

[07:58] Chantal: Clearing cache regularly really helps, John

[07:58] Jes: true that ☺

[07:59] John: I did it some hour ago, Chantal. I do it every 3 days, more or less

[07:59] Beragon: I heard from FS support that rather than clearing cache its better to max out the cache slider

[08:00] Chantal: Great tip Beragon

[08:00] Beragon: when you clear cache your viewer has to retrieve more from the sl servers

Yan: Last remark: Don't use double click teleport. If you do so, you will teleport to ground side entrance of Jules Verne Museum. Hi Jes, can I start presentation?

[08:01] Jes: Please do ☺

### (The Jules Verne Museum)

Yan: Then I'll start. Here is The Jules Verne Museum at Lily.

Here is maintained by Veritas Raymaker, National Institute of Education, Singapore.

Veritas is also provided us Farwell for Abyss Observatory.

[08:02] Neuro: Is this the Science Circle?

[08:04] Chantal: Neuro... the location is elsewhere but yes this is a SC meeting ☺

Yan: Jules Verne museum is one of oldest museum in Second Life.

You can teleport to ground side by this panel, There is a UK nuclear attack submarine, almost same size of this Nautilus. So please compare two submarines later.

Yan: This panel is a teleporter to Design project of Around the World Under the Sea. There are many design of original Nautilus and submarines in TV and movie at Farwell. So please visit later.



### (Pronunciation of Nautilus)

Yan: By the way, one question. How was Captain Nemo pronouncing Nautilus? In French or in English?

Nemo was East Indian prince but learned naval architecture in London, Paris and New York.

And crews looked like French, Irish, Slav, Greek, etc.

Yan: Then, how was Captain Nemo pronouncing Nautilus? in French, English or other language? Please type in nearby chat.

[08:08] Mike: I think that the pronunciation was like how you have said?

[08:09] Dae: yes I always pronounced it the way said

[08:09] Fumon: in French , cuz Jules Gabriel Verne is a French.

[08:09] Dae: but I am in USA so would hear English version

[08:09] Arianne: "How was Captain Nemo pronouncing Nautilus? In French or in English? "

[08:09] Youri: Netherlands for me, but I understand English perfectly and even a few words Japanese

[08:09] Mike: I am Quebecker, so **not-ee-lose**?

[08:10] Dirlandaa: **nau-ti-lus** in Finnish

[08:10] Chantal: same as Dirlandaa for the netherlands

Yan: We believe he pronounced his submarine in Latin language, **nau-ti-lus**. Because Jules Verne wrote Nautilus was not belong any powerful countries, and at that time, European people felt internationality for Latin language.

[08:10] Fumon: Latin!

[08:10] Yan: Latin language

[08:10] John: yes, right

[08:11] Mike: Interesting!

[08:11] Jes: ☺

[08:13] Chantal: Tagline ☺ great timing

### **(20,000 leagues journey)**

Yan: This is World map of 20,000 leagues journey.

- Journey started from 300 miles off-Japan coast, Aronnax et al. were thrown into ocean from sinking frigate ship “Abraham Lincoln” and arrived at broaching Nautilus
- First Undersea walk experience at Crespo Island,
- Encounter with a swarm of Argonauts at Timor Sea,
- Battle with unknown enemy and visit undersea graveyard
- Red sea and Arabian underground tunnel,
- the Mediterranean Sea and Atlantic Ocean,
- Visit Sunken Atlantis civilization
- Secret Island, mother port of Nautilus
- 16,000 m depth dive
- Antarctic Sea and Arrive at South Pole and trapped in Iceberg
- Attacked by a Pod of Krakens
- At last, Escape from Maelstorm at off-Norway coast



Yan: Then, Let's talk about Nautilus re-construction.

### **(Disney Nautilus)**

Yan: At first, Please understand Disney movie's Nautilus is quite different from Jules Verne's novel. Disney's Nautilus didn't consider description of original novel except Salon only.

[08:18] Fumon: Yes, Tokyo Disney Sea is fun:)

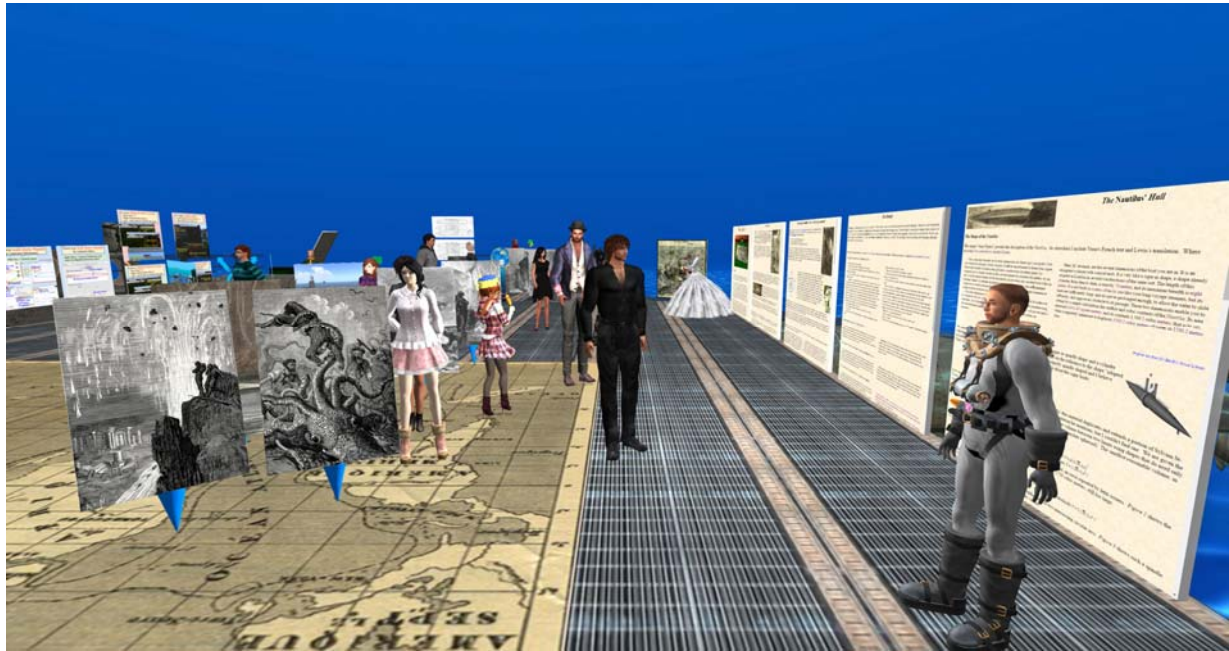
[08:19] Chantal: yes

[08:19] John: my surname here in second life comes mainly from Captain Nemo! I love this character

**(Michael Crisafulli)**

Yan: Many researchers believe Jules Verne made a rough arrangement of Nautilus when he wrote "20,000 leagues Under the Sea". And I think many fans tried to draw arrangement plan of Nautilus. Me too.

Yan: These panels use shared media. Can you see?



[08:19] Jes: I see

Yan: These are website of Italian researcher Michael Crisafulli. His website is our start point. He studied various problems of Nautilus design

[08:19] Youri: Disney Paris has some Jules Verne stuff as well, including a small version of the submarine

[08:19] Arianne: <http://www.vernianaera.com/Nautilus/>

Yan: And he is collecting 255 original design of Nautilus in the world including our Nautilus.

[08:19] John: you're right Youri

[08:20] ryofuz: www

Yan: Researchers were annoyed by deviation of description in the novel. Some description is difficult in submarine arrangement and some description is contradictory with other page.

**(Reitsuki)**

Yan: In Second Life, US creator, Reitsuki Kojima reconstruct Nautilus faithfully on the novel at Vernian Sea and installed at Abyss Observatory. Reitsuki's Nautilus is more

feasible than former trials, but when Abyss Observatory moved from Second Earth 3 to current Farwell, we couldn't contact him, so we lost his works.

**(motoko and Aley)**

Yan: Then, I and motoko Moonwall decided to reconstruct more feasible Nautilus by ourselves. I and motoko exchanged 173 messages for this reconstruction.

Yan: We got lot of help from other collaborator Aley (Arcadia Ashylum), because she made Disney type Nautilus with many furniture and machines inside of submarine. But she was banned about two years ago, and we and anyone of her friends couldn't contact her in RL, so we disassembled her Nautilus and reused as much as possible.

Yan: So Aley doesn't know our completed Nautilus. And motoko died one year ago by lung cancer, So I lost two collaborator for this Nautilus. Motoko's mother asked me to utilize her works forever. So I can show you today.

[08:23] Chantal: Beautiful how you keep her spirit alive, Yan ☺

[08:23] Fumon: RIP , motoko.

[08:23] John: it's a wonderful initiative by you

[08:23] John: I read about her just arrived here

[08:25] Arianne: We had her annual memorial ceremony a month ago , john

[08:25] Youri: RIP Motoko-san

Yan: Let's go down.



[08:26] Arianne: Yan helps and take care of motoko's mm very kindly, it's awesome.

[08:27] John: wow

[08:27] Chantal: Incredible work Yan :))))

[08:27] ryofuz: I have motoko's PC

[08:28] Dae: beautiful model Yan

[08:28] Mike: Wow!

### **(Crews number and boat)**

Yan: Most important condition for submarine design is crews number. We carefully read description of the boat missions, fishing work on the top deck and diving works in iceberg, Then, there were at least 2 set of 10 crews if they are working on 12-hour shift. Including Captain, Chief officer and 3 guests, total is 25 person.

Yan: We suppose another several crews were on board at initial period but they died judging from description of underwater graveyard of Indian ocean. So Nautilus has capability for 30 people.

[08:31] Arianne: Now Yan is explaining how he and motoko estimated the number of crews were on the nautilus.

[08:31] Chantal: Thank you, Arianne ☺

[08:32] Youri: I can understand a few words, but the context was a bit fuzzy to me. My Japanese is far from basic level haha

[08:32] Youri: thanks for explaining ArianneJP

[08:32] Arianne: my pleasure lol

[08:33] Youri: take your time :)

[08:33] Chantal: yay ☺

Yan: In anyway, If Nemo prepared enough boats for evacuation of all crews, 1 boat of 25 person is too big and difficult to arrange on top deck, and quick launch/ recovery is also difficult. So I arranged 2 boats on both side of top deck. It is also easier for launch/ recovery quickly.

Yan: In the end of story, Aronnax at al. escaped by a boat, but according this arrangement, another one boat was remained for Nautilus crews.

Yan: Then, next is Crew's bed number. Bed can be shared for 12-hour shift in submarine, but Nautilus is refugee nation and very long voyage, so I thought one bed for one crew.

Yan: Then size and arrangement of crew bunks and number of Toilets are determined. Then, let's go to inside of Nautilus.

Please be careful for 3D sick. And Don't use double click teleport. If you do, you will teleport to ground side entrance of Jules Verne Museum

[08:34] Tagline: This is a magnificent model!

[08:34] Chantal: ☺ Tagline. I agreeeee ☺

[08:35] Chantal: that's an experience ☺

[08:35] Chantal: Left mouse pressed... together with pressing Shift and Alt... makes it able to zoom around

### **(Diver Lock-out room)**

Yan: Here is Diver Lock-out room and cloth changing room. Disney Nautilus, lockout by moon pool but original Nautilus. Lockout through watertight door.

[08:37] Chantal: if you loose track on your av like me... click Esc hhehehehe

[08:37] Jes: ♦♦%□⑤♦♦♦

[08:37] Jes: genius

[08:37] Chantal: hehehhee

[08:37] Chantal: all the fun of a field trip ☺

[08:37] Jes: true ☺

**(Prison)**

Yan: Here is Prison where Aronnax et al. spent first night on Nautilus. I think this room was used for multi-purpose, medical room when someone get injured, and dry lab when Nemo got underwater samples.



Yan: Next day, Captain Nemo guided them inside of Nautilus

Yan: Here is Stair Case.



### (Mobilis in Mobili)

Yan: There is a mark of N and "Mobilis in Mobili" around N. Perhaps, N means Nautilus.

Motoko teach me mark of N was common in Paris at that age.

Yan: Why? Napoleon's N. Napoleon remains N mark at his Achievements in Paris.

Yan: Then, what is Latin word "Mobilis in Mobili". "Mobile in a mobile" in English.

Yan: 2nd question. What do you think this motto means?



[08:38] Mike: Movement in motion? No idea really...

[08:39] Dirlandaa: moving within an moving thing?

[08:39] Beragon: my motto as i live and learn is dig and be dug in return

[08:39] Chantal: ☺

[08:40] Dae: googling lol

[08:40] Dae: The motto of the Nautilus was Mobilis in mobili, which may be roughly translated from Latin as, "moving amidst mobility", "moving within the moving element", or "changing in the changes"

[08:40] Chantal: you sneak, Dae ☺

[08:40] Dirlandaa: from Wikipedia

[08:40] Dae: yup

[08:40] Chantal: :)))

[08:40] Beragon: very meta

[08:40] Dae: my son said if in doubt Google

[08:40] Chantal: hehehhee

Yan: Aronnax said this means "moving submarine in moving ocean". But a French researcher found Verne referred a mathematics teacher's words, floating ship in the storm ocean is safer than fixed rock in the storm ocean. So this motto is applause of technology.

[08:41] OliveTree: :)

[08:41] Tagline: I like that notion. It brings to mind the philosophy of Herodotus (ancient Greek)

[08:42] Dae: did Herodotus google too?

[08:42] Fumon: ヘロドトスですかー

[08:42] Fumon: Are you? helodotos or.

[08:42] Tagline: only with his hands and probably his mind, lol

[08:42] Chantal: :))))

[08:42] Beragon: Herodotus was the google of his day. The first historian

Yan: But this motto can have another interpretation.

Yan: We can think Nautilus was an independent government in exile or refugee nation and they were working for oppressed people in the world. "Le Miserables" was published 7 years before "20,000 leagues under the Sea". I think Jules Verne must have considered this most popular novel.

Yan: So I want to interpret this motto as "moving independent nation Nautilus will change the World".

[08:44] Fumon: あいあい。かわぐちかいじ の 沈黙の艦隊

[08:44] Fumon(ja>en): whispers: It fits each other. Fleet of keeping quiet of KAWAGUCHIKAIJI

[08:44] Beragon: das boot

[08:44] Tagline: there is a dialectic element to his thinking

[08:44] Beragon: I agree tagline

[08:45] Tagline: Octagonal china



[08:46] Beragon: hmmm there's probably a packing problem in math for octagonal china :)

[08:46] Arianne: The motto is free boat not belong any countries, he said it is similar to the submarine Yamato in a comic of "Silent Service from the sea".

[08:46] Youri: some people are out of range for typing

[08:47] Tagline: Hexagonal china could have been packed without wasted space between stacks

Yan: Go down stair,

Yan: Next is Officer's Dining room, Library, and famous Salon.

(Salon)

Yan: We think these Paintings are 70% correct.

Yan: And this is famous organ.

Yan: 3rd question, whose was playing Captain Nemo? Please type in nearby-chat.

[08:47] Dirlandaa: Nightwish performs Nemo

[08:47] Tagline: Nemo had exquisite taste in art

[08:47] Youri: nightwish is a Dutch music band, think he doesn't mean that ;)

[08:47] Fumon: Water Music by Händel lol

[08:48] Dirlandaa: Youri, I was joking, and nightwish is a Finnish band

[08:48] Beragon: L) fumon

[08:48] Beragon: °\_°

[08:48] Dirlandaa: their singer may be Dutch

[08:49] Youri: oh wait, yeah you are right. Nightwish is from Finland indeed. Mistaken with another group

[08:49] Dirlandaa: °\_°

[08:49] Beragon: not to be confused with night rider ;)

[08:49] Tagline: Der Fliegende Hollander by Wagner might work

[08:49] Fumon: ahaha

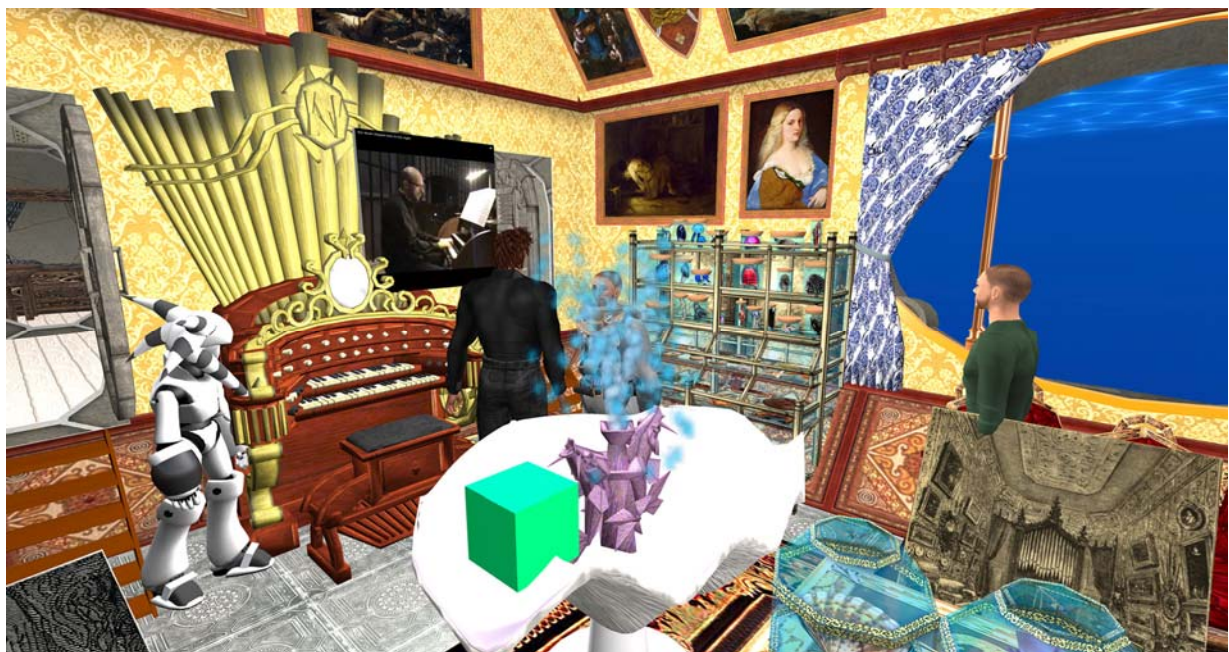
[08:50] Fumon: ワーグナー の さまよえる オランダ人と おっしゃいましたwww

[08:50] Fumon(ja>en): whispers: www which was called the Dutch who can wander Wagner

Yan: In the various movies, Nemo played Bach's toccata and Fuge, but in the novel, there are musical score of Weber, Rossini, Mozart, Beethoven, Haydn, Wagner, Gounod, etc., but there isn't Bach.

Yan: We selected Mozart's Requiem

<https://www.youtube.com/watch?v=7kam3kokvXg>



[08:50] Yan: Can you see YouTube movie?

[08:50] Tagline: just such a sorrowful piece

[08:50] Beragon: /me sings "motoring..."

[08:50] Beragon: ;)

[08:50] Tagline: The Flying Dutchman was the translation of that Opera

[08:50] Youri: yeah, seeing it now

**(Guest room)**

Yan: Next is guest room for Aronnax. Aronnax said this room was elegant bedroom compared to the humble room of Captain Nemo.



Yan: Whose room is this room originally?

[08:51] Chantal: Claustrophobia on a higher level in this submarine

[08:52] Tagline: love this desk and its seafaring decks

[08:52] Beragon: I'm too tall for the door I think

Yan: At first I thought Nemo designed this deluxe room for his wife and children. But motoko found in the novel that Nemo started to develop Nautilus after he lost his wife and child.

[08:52] Chantal: ok

[08:53] Tagline: I was thinking he was left alone in the world in a sense

**(Captain's room)**

Yan: Next is Captain's room. I think these portraits of heroes on a wall are 90 % correct.

Yan: And please remark photograph above Nemo's desk.



Yan: I said Captain Nemo was an Indian prince, but originally, Jules Verne wrote Nemo as a Pohland prince. But publisher changed to Indian prince in considering book marketing.

Yan: In any way, motoko found nice photo of indian mother and child.

[08:54] Dae: Yan how was the nautilus powered?

[08:54] Tagline: There is a picture of John Brown hanging by the neck

[08:54] Dae: I saw something about electricity

[08:55] Youri: nice British map on the desk

[08:56] Tagline: there was always sunlight on the British Empire back in those days

[08:56] Chantal: ☺

### **(Control room)**

Yan: Return to Salon, through passage along ship side, come to Control room although there isn't description of control room.

Yan: Next door is Steering house.

Yan: I arranged Chief Officers room here. I thought this bed was shared with Nemo when 12-hour shift in emergency. This can explain reason why Nemo sometime didn't show up for several days.

Yan: Staircase, Front room is Conseil and Ned Land's room.

Yan: Down stair, Galley, Bath room, Crew's cabin and At last, Engine room,

### **(Engine Room)**

Yan: Motoko found Solenoid Engine is most match with Jules Verne's description about Engine room. Please touch this panel. You can see YouTube of Solenoid engine.

<https://www.youtube.com/watch?v=2wfo2QqkXMU>



[08:57] Arianne: Radial Solenoid Engine is thought to be a power for Nautilus

[08:57] Arianne: <https://vimeo.com/101758029>

[08:57] Dae: Thanks Arianne

[08:58] Dirlandaa: the far left door

[08:59] Youri: may need to wait. rest is too far away

[08:59] Chantal: incredible Yan

[08:59] Chantal: Yan... please remember chat range

[09:00] Youri: hold on Yan, wait for a few still on the other side of the submarine

[09:00] Mike: Amazing!

[09:00] Youri: outside voice range

### (Conclusion)

Yan: This is the end of today's tour. There are still small differences from description of the novel. but I think such a differences can be explained by wrong memory of Aronnax.

Yan: So I conclude our Nautilus is most faithful on the novel and feasible as real submarine than past trials, and it can be possible by reconstruction using virtual world and by two women's contributions.

Yan: I'll show you another motoko's achievement in my next Science Circle Seminar on May.

Yan: For Aley, I'm sad I can nothing to do for her but I hope she will find this Nautilus someday.

Yan: Thank you for your participation today! Thank you!

[09:01] Chantal: Applauds ☺

[09:01] Jes: great job Yan ☺

[09:01] Youri: applauds

[09:01] Arianne: 何人か迷子になっています

[09:01] Mike: A very impressive creation!

[09:01] Youri: your ship looks amazing, did some hard research to get this all so detailed!

[09:02] Jes: ☺

[09:02] Arianne: We are in the tale of a bot, Yan is announcing the closing remarks

[09:03] Fumon: by the way, Ley Tachikawa wears a cap of a Ichthyology (fish) scholar called " Sakana-kun ( fish guy ) " now:)

[09:03] Jes: Thank you for your work Yan

[09:03] Tagline: This was a fun and memorable experience! Thank you, Yan!

[09:04] Fumon: .\*♥""•Applause•""♥\*•.

[09:04] Arianne: おつかれさまでした

[09:04] Dirlandaa: Thank you!

[09:04] Chantal: Thank you Yan, wonderful work again ☺

[09:04] Ley: ぱちぱちぱち(\*°ー°)ノ

[09:04] Mike: Thank you for the great tour!

[09:04] Yan: Thank you for your participation today!

[09:04] Jes: Love the build ☺

[09:04] Youri: arigatou Yan

[09:04] Dirlandaa: arigatoo

[09:04] Tagline: whispers: And it was cool that you were dressed for the part, Yan!

[09:04] Chantal: yes ☺

[09:04] Symeon: arigatou gozaimashita, Yan San

[09:04] Arianne: ♥\*♪° —————ДррLдмsëëëë—————° ♪\*♥

[09:04] Symeon: Sumimasen I have to go

[09:05] Symeon: bye

[09:05] Yan: Symson, byebye

[09:05] Chantal: Is there a tp from your tp tower towards here, Yan?

[09:05] OliveTree: Thank you so much for the tour .. very impressive build :)

[09:05] Arianne:  
<http://arianne5.blogspot.jp/2017/03/vernes-nautilus-re-construction-science.html>

[09:05] OliveTree: /clap

[09:05] Chantal: Great you joined, Olivetree ☺

[09:06] Arianne: it might be your help Chantal

[09:06] Chantal: yes, Yan... is it there too? a landmark

[09:06] Youri: Nice post arianneJP

[09:06] Chantal: ok ☺

[09:06] Jes: I hope so ☺

[09:06] Fumon: Qusetion: Verne is a kinda of the Steam punk?

[09:06] Arianne: lol

[09:06] Chantal: :)))

[09:07] Dirlandaa: Fumon, I think that kinda yes

[09:07] Dirlandaa: ano

Yan: At that age, every inventors were sales man, and Jules Verne was good interpreter.  
So he is not steam punk. He lived at that age.

[09:07] Fumon: hmmm

[09:07] Fumon: yes

[09:07] Arianne: No he was like a Rocker with electrical instrument. lol

[09:10] Arianne: great job you done , cerebrate it , please accept my roses lol

[09:10] OliveTree: so sotty I gotta go .. have a meeting

[09:10] Jes: waves at those leaving ☺

[09:13] Chantal: I am sorry to leave early but I have to

[09:14] Fumon: cya , Nymf

[09:14] Yan: Byebye

[09:14] Chantal: Thanks everyone for joining and Yan for his great work and trip ☺

[09:14] Mike: me too... I enjoyed the tour very much, thank you!

[09:14] Yan: 1:15 am in Japan

[09:14] Yan: Time to sleep

[09:14] Youri: I'll be leaving as well, thank you very much for this tour Yan! Please keep up the good work! :)

[09:15] Yan: Thank you Youri^o^

[09:15] Dirlandaa: Thank you Yan and good night

[09:15] Youri: truly looks amazing!

[09:15] Yan: Ty Dirlandaa

[09:15] Youri: good night Yan

[09:16] Jes: waves all, see you around ☺

[09:16] Arianne: waves

[09:25] Tagline: Thank you again, Yan!

[09:26] Tagline: Goodbye.

[09:26] Arianne: bye Tagline

[09:26] Arianne: cya on circle