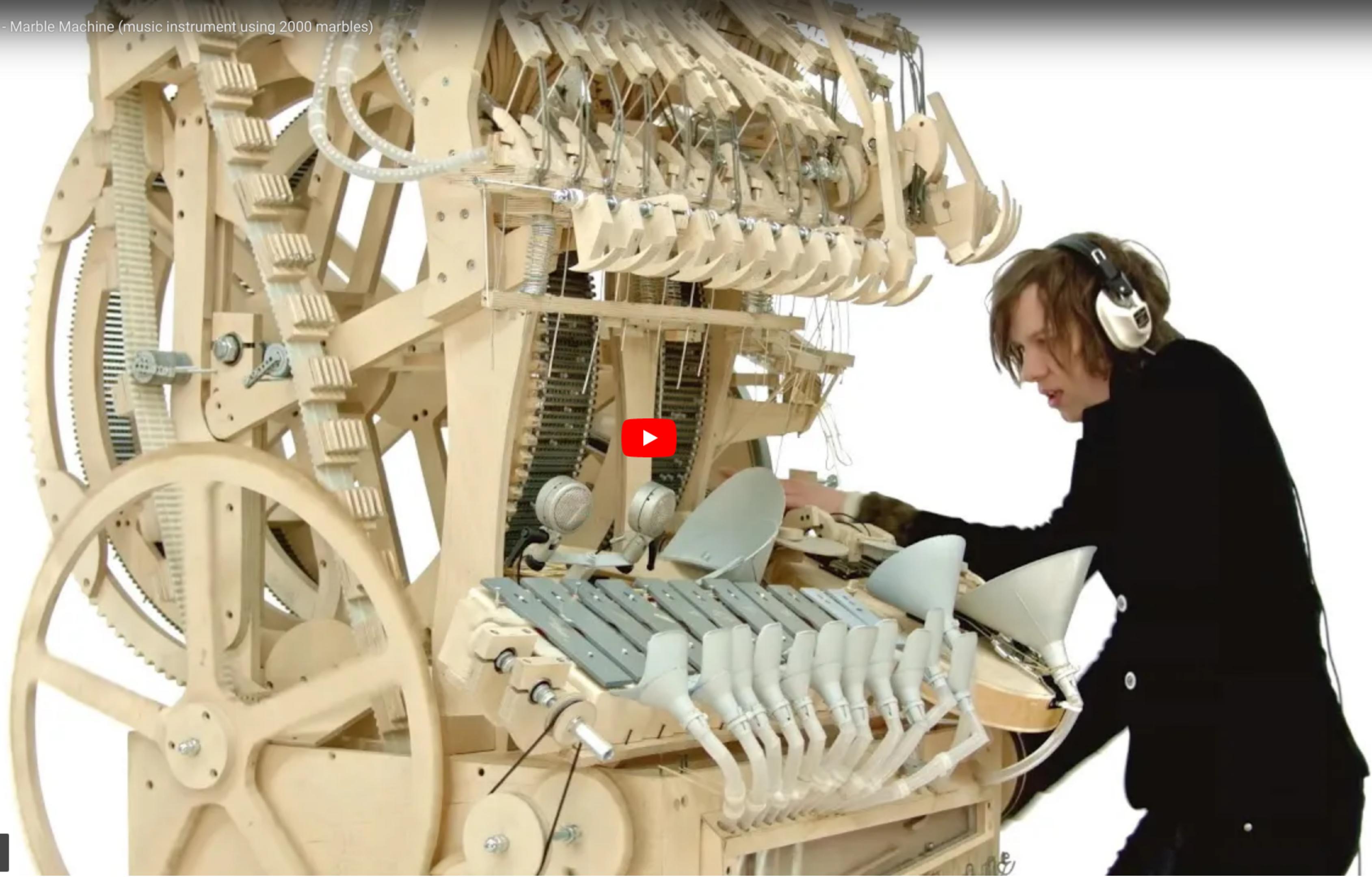


WINTERGATAN MARBLE MACHINE

A Symphony of Music and Engineering
Soojin Lee | Machine Lab Class





The Artist

MARTIN MOLIN

- Swedish composer, producer, multi-instrumentalist
- Musician, Lego Enthusiast and the founder of the band Wintergatan



Steal Like an Artist

INSPIRATION & THE PROCESS



Matthias Wandel's Marble Machine



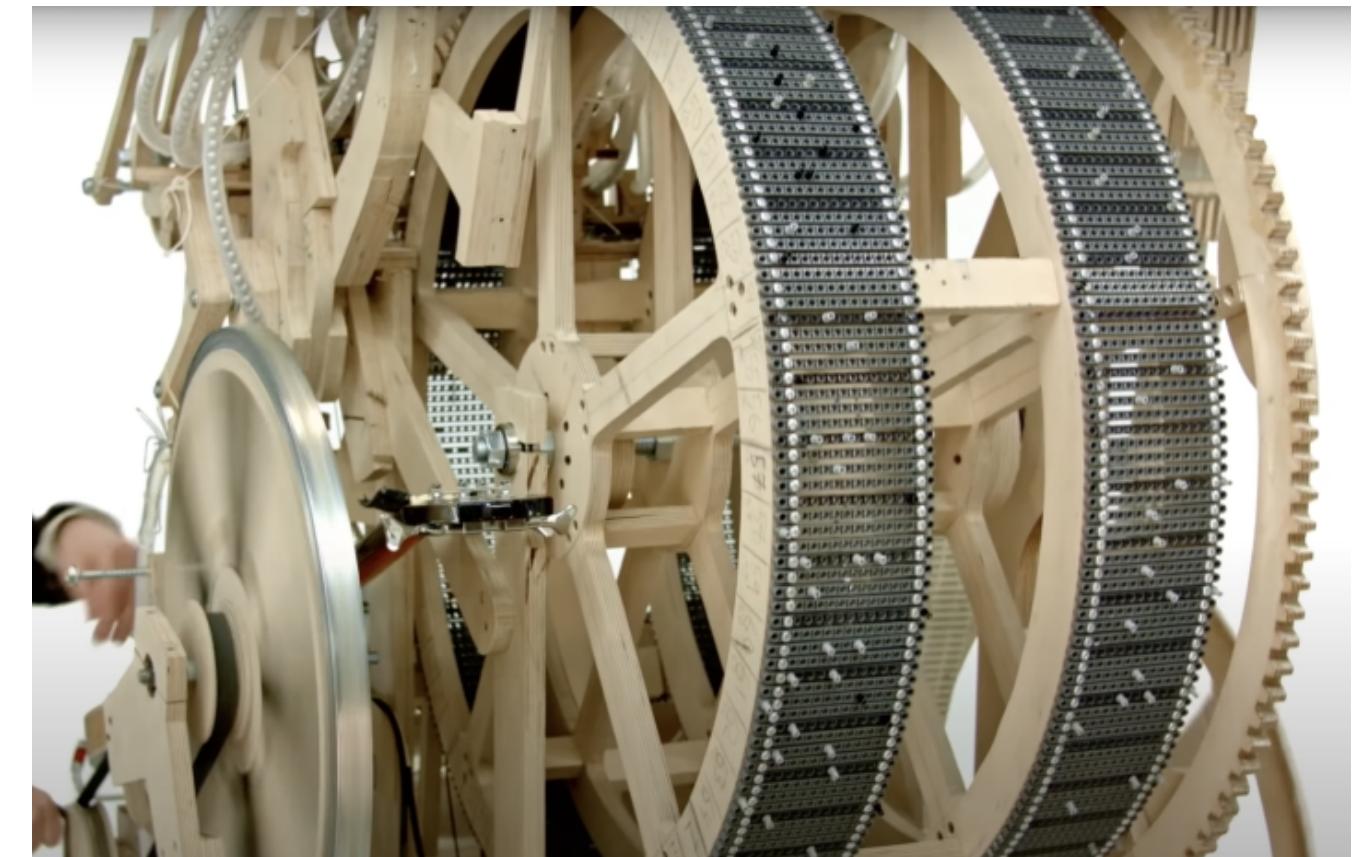
Simple Prototype

Steal Like an Artist

HOW DOES IT WORK



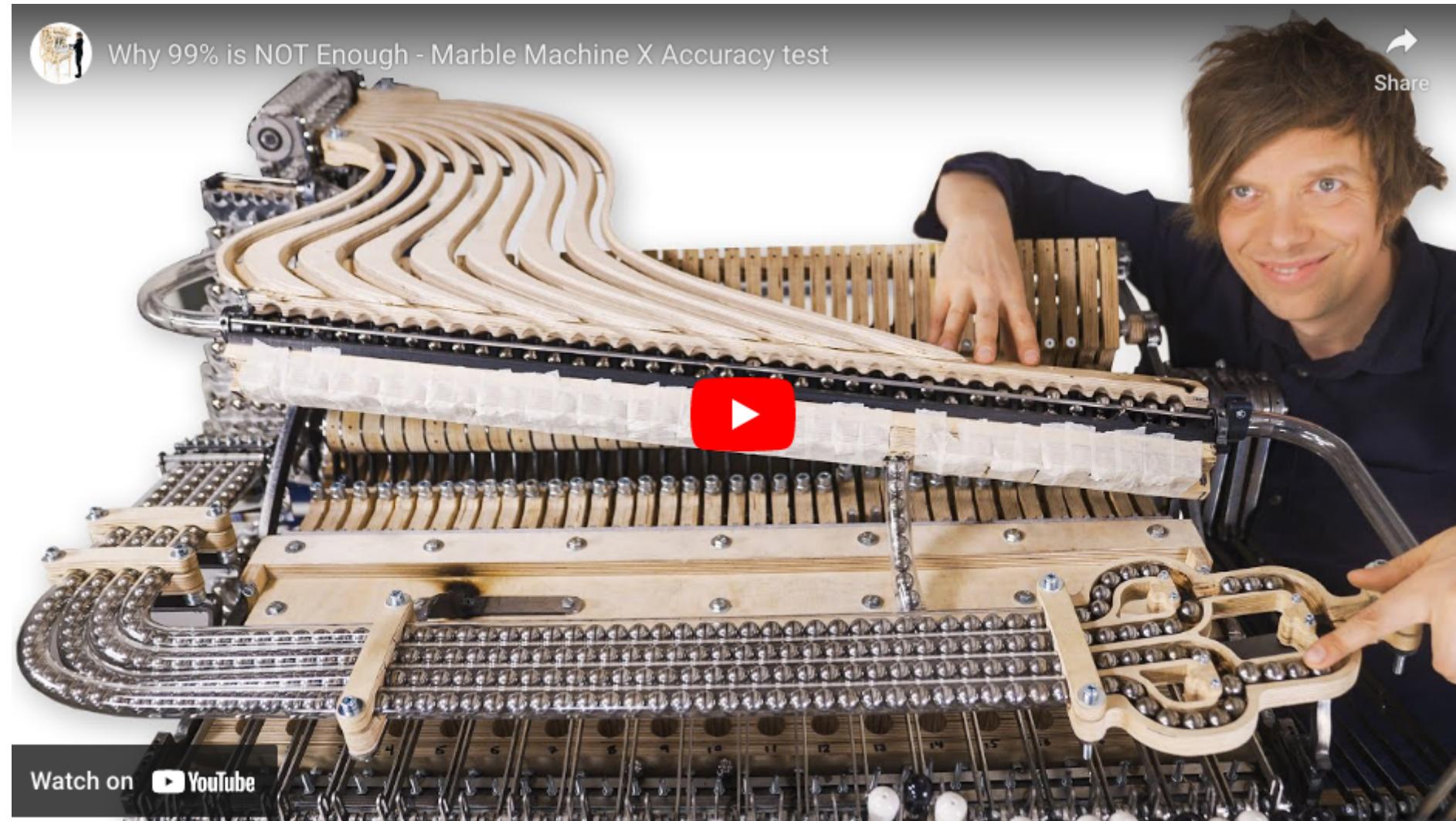
Marble and Programmable Gate



Programmable Wheels for Melody

My Favorite Mechanic

WHEN 99% IS NOT ENOUGH



Marble divider: responsible for equally dividing the marbles into four channels

Small imbalance can make marbles get stuck after some periods of time

Watch from 2:02 - 3:22

My Favorite Mechanict

SIMPLE BUT CLEVER SOLUTION

Adding plastic rocking flip and flop features at each dividing path controls the flow of the marbles

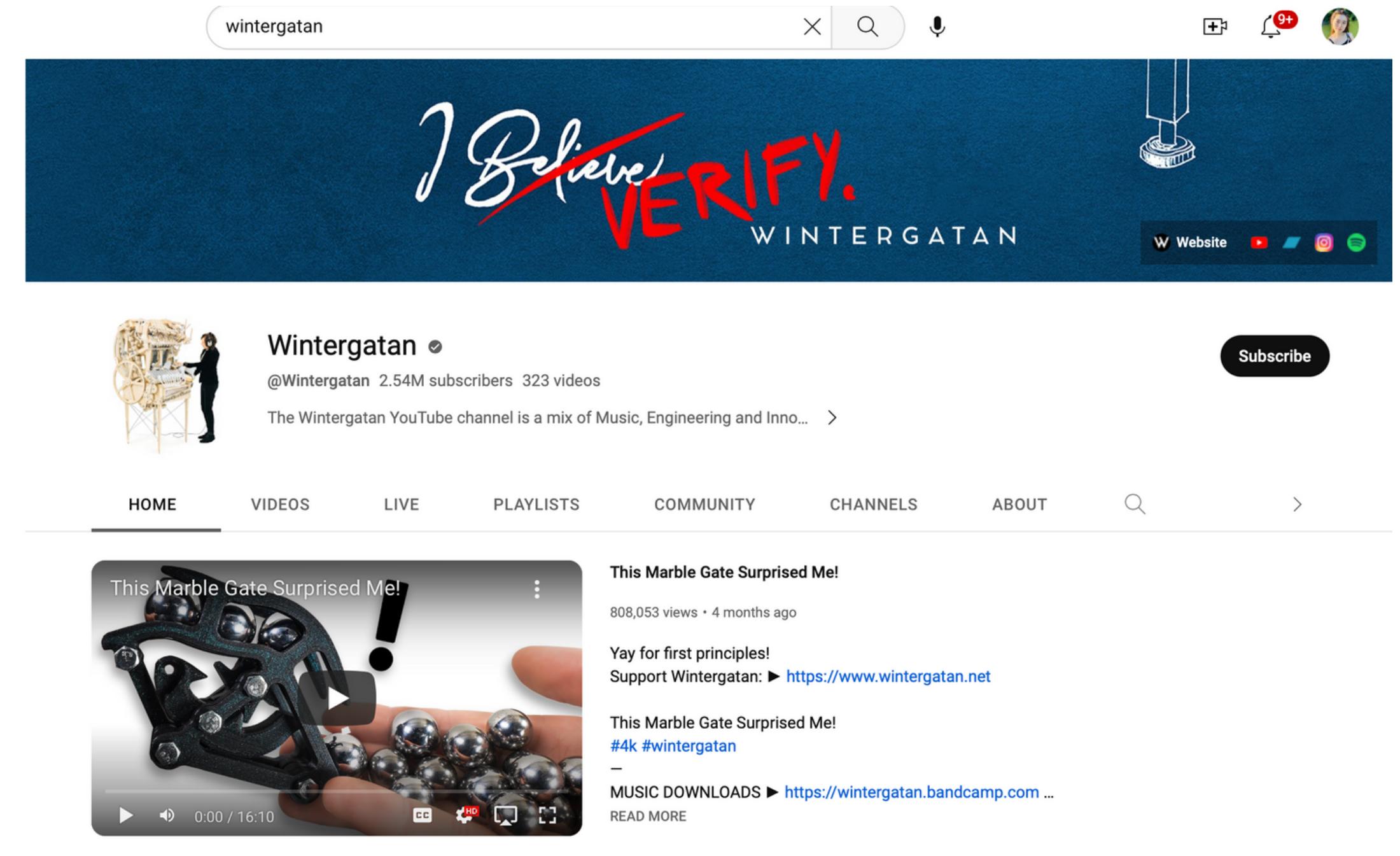
Great Design ≠ Complicated Design



Significance

PUBLIC EDUCATION

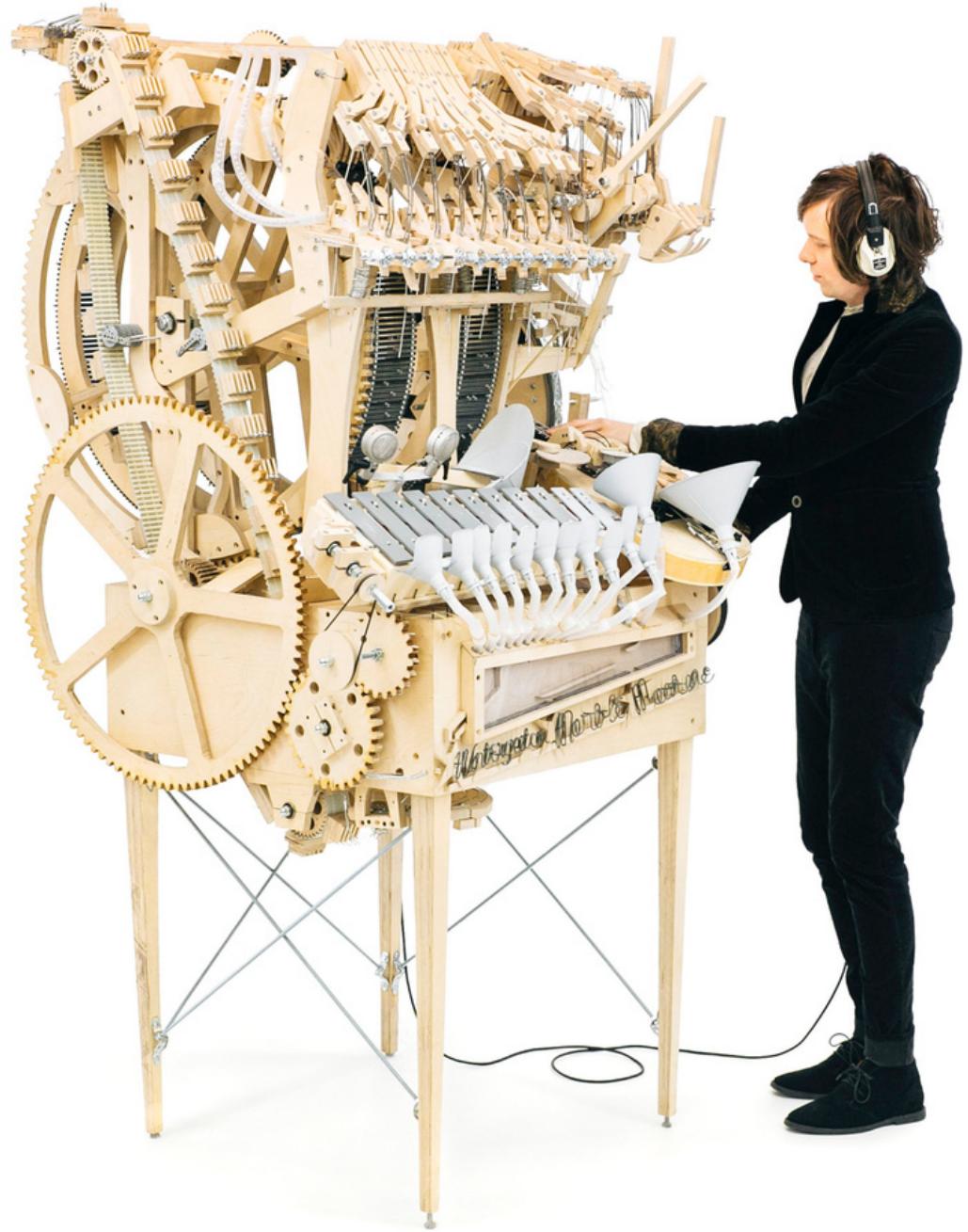
Molin document and explain and share the mechanisms behind the work on YouTube to educate and inspire public - make DIY and creative engineering accessible



The image shows a screenshot of the Wintergatan YouTube channel page. At the top, there's a search bar with the text "wintergatan". Below it is a large banner with the text "I Believe ~~VERIFY.~~" in red, with "WINTERGATAN" underneath. To the right of the banner is a small illustration of a tuning fork. On the left, there's a thumbnail of a person standing next to a complex wooden machine. The main channel information is displayed: "Wintergatan" with a verified checkmark, 2.54M subscribers, and 323 videos. A description below reads: "The Wintergatan YouTube channel is a mix of Music, Engineering and Inno... >". Below this, a navigation bar has "HOME" selected, along with links for "VIDEOS", "LIVE", "PLAYLISTS", "COMMUNITY", "CHANNELS", and "ABOUT". To the right of the navigation bar is a "Subscribe" button and a search icon. The main video thumbnail is titled "This Marble Gate Surprised Me!" and shows a hand interacting with a marble machine. Below the thumbnail, the video stats are "808,053 views • 4 months ago". The video description includes "Yay for first principles! Support Wintergatan: ► <https://www.wintergatan.net>". There are also links for "MUSIC DOWNLOADS ► <https://wintergatan.bandcamp.com...>" and "READ MORE".

If anything looks professional,
I learned it on YouTube

MARTIN MOLIN



**THANK YOU!
QUESTIONS?**