

Ahmed Al-Damlakhi, a 65-year-old fabrics merchant, stands outside his shop in the 'Souq Khan Al-Harir' (Silk Khan covered market) in Syria's northern city of Aleppo. — AFP photos



People walk about in the reopened "Souq Khan Al-Harir" (Silk Khan covered market) in Syria's northern city of Aleppo.



An historic building undergoes restoration in the 'Souq Al-Habil' (ropes market) in Syria's northern city of Aleppo.

Shadow of Syria's exiled hangs over revived Aleppo souk

The historic Khan Al-Harir souk in war-torn Syria's erstwhile economic capital of Aleppo has reopened following restoration work, but much of the former workforce that energized it remains exiled. "Reconstruction works are done and this is great, but it's not enough," said Ahmed Al-Shib, a 55-year-old textile merchant who had hoped to pass his business onto his sons. "What we want is for our sons to return to these stores," he told AFP during the reopening of the covered market this week, showing pictures he had sent to his eldest who moved to Algeria three years ago to join his brother.

Khan Al-Harir (silk souk) - one of 37 markets surrounding Aleppo's famed citadel - attracted thousands of tourists and merchants before the onset of Syria's conflict in 2011. It was hit hard in fighting between rebels and regime forces that damaged as much as 60 percent of Aleppo's Old City, according to estimates by the UN's cultural agency, UNESCO. The market officially reopened on Sunday - five years after the Syrian government regained control of Aleppo.

Restoration works erased traces of some of the conflict's most brutal battles but it did little to console traders who have lost much more than just their stores. In Ahmed's fabric shop, a portrait of his father - the founder of the family business - adorns a freshly painted wall. Like many others in Khan Al-Harir, Ahmed fears the family's store may die with him. "My children live in Algeria, and the children of other traders are scattered between Egypt, Erbil" in northern Iraq and elsewhere, he said. "There are a lot of trades that will be threatened if our sons continue to emigrate."

Economic exodus

Syria's conflict has killed nearly half a million people, forced half of the pre-war population from their homes, and decimated the economy and infrastructure, with more than 80 percent of its residents now living below the poverty line. As a result, Aleppo, long considered one of Syria's main commercial hubs, has lost many of the merchants and businessmen who once gave the city its economic edge. Many have sought business opportunities elsewhere, with neighboring Iraq and Turkey popular destinations.

Ahmed al-Damlakhi took over a fabric shop in Khan Al-Harir from his brother who emigrated to Turkey with his children several years ago. Under a freshly renovated arch dotted with white and black stones, the 65-year-old greeted neighbors he hadn't seen in years. He started a video call with his brother in Turkey to show the scene in the market, where traders had gathered outside their shops amid a trickle of customers. "I am optimistic about the reopening of the market ... but we are missing merchants and investors who are now scattered across the Arab world and have established businesses there," he said.

Although he wished his brother was

of the Old City to the gates of the citadel in the east, covering an area of around 160,000 square meters. For centuries, they were the commercial heart of the ancient city and served as a key trading hub between the East and the West. Restoration works began two years ago after Syrian authorities signed a partnership agreement with the Aga Khan Foundation in Syria. The renovation of Khan Al-Harir - home to some 60 stores - took around a year to complete, and preparations are underway for two other markets to also be restored.

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An historic building undergoes restoration in the "Souq Al-Habil" (ropes market) in Syria's northern city of Aleppo.

with him to celebrate the reopening, Damlakhi said the reasons that initially pushed him out had not changed. "We used to depend on tourists and visitors coming from the countryside and other provinces... but the economic situation is now very difficult," he said. "Western sanctions, meanwhile, create obstacles in relation to imports, exports and overall trade," Damlakhi added. "So long as the situation doesn't change, it will be hard for my brother and his sons to return."

Vacant shops

The vast souks, the oldest of their kind in the world, stretch from the western part

of the Old City to the gates of the citadel in the east, covering an area of around 160,000 square meters. For centuries, they were the commercial heart of the ancient city and served as a key trading hub between the East and the West. Restoration works began two years ago after Syrian authorities signed a partnership agreement with the Aga Khan Foundation in Syria. The renovation of Khan Al-Harir - home to some 60 stores - took around a year to complete, and preparations are underway for two other markets to also be restored.

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Unfinished Beethoven symphony reimagined in a click

As conductor Guillaume Berney marks the opening downbeat, the first chords ring out in a Lausanne concert hall of what could conceivably be an extract of Beethoven's Tenth Symphony-if the great German composer had ever managed to complete the piece. The classical music world has often speculated what Ludwig van Beethoven (1770-1827) would have gone on to write after his monumental Ninth Symphony. And a number of musicologists and composers have already ventured to orchestrate and complete some of the scraps of notation they believe were his first sketches for his next symphonic masterpiece.

But to mark their 10th anniversary season this year, Berney and the Nexus orchestra have decided to use artificial intelligence to create a four-minute extract which they have dubbed BeethovANN Symphony 10.1. "That is not a typo," Berney told the audience at the first night, with a second performance scheduled in Geneva on Friday. Berney explains that the ANN refers to the artificial neural network that created it, basically without human intervention.

"We don't know what it will sound like," Berney acknowledged to AFP ahead of the Lausanne concert. The final score was only generated and printed out hours before the performance, after computer programme designer Florian Colombo oversaw the final step in what for him has been a years-long process.

'Like watching a birth'

Seated in his small apartment with a view over the old city of Lausanne and the Alps in the distance, Colombo made a

couple small changes before clicking a button to generate the score. "It's like watching a birth," Berney said as he picked up the first pages emerging from the printer. The excitement was palpable as the freshly created sheet music was presented to the orchestra. The musicians



Nexus orchestra performs in Lausanne.

eagerly began rehearsing for the evening concert, many smiling with surprise as the harmonies unfolded. "This is an emotional experience for me," said Colombo, himself a cellist, as the sound filled the hall. "There is a touch of Beethoven there, but really, it is BeethovANN. Something new to discover." Berney agreed.

"It works," he said. "There are some very good parts, and a few that are a bit out of character, but it's nice," the conduc-

tor said, acknowledging though that "maybe it lacks that spark of genius." Colombo, a computer scientist at the EPFL technical university, developed his algorithm using so-called deep-learning, a subset of artificial intelligence aimed at teaching computers to "think" via struc-



ture modeled on the human brain or ANNs. To generate something that might possibly pass as an extract from Beethoven's Tenth, Colombo first fed the computer all of the master's 16 string quartets, explaining that the chamber works provided a very clear sense of his harmonic and melodic structures.



He then asked it to create a piece around one of the theme fragments found in Beethoven's sparse notes that musicol-

ogists believe could have been for a new symphony. "The idea is to just push a button to produce a complete musical score for an entire symphonic orchestra completely without intervention," Colombo said. "That is, except for all the work I put in ahead of time," added the computer

'Not blasphemous'

programmer who has been working for nearly a decade towards deep-learning-generated music.

cal composition more accessible and for broadening human creation. While the program "can digest what has already been done and propose something similar," he said the aim was for "humans to use the tools to create something new."

"It is not blasphemous at all," Berney



Computer program designer Florian Colombo (right) speaks to members of Nexus orchestra next to conductor Guillaume Berney (second right) during a rehearsal in Lausanne.

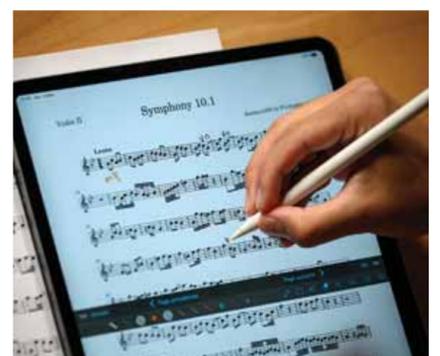
agreed, stressing that "no one is trying to replace Beethoven." In fact, he said, the German composer would likely have been a fan of the algorithm. "Composers at that time were all avantgarde," he said, pointing out that the best were "always eager to adopt new methods." — AFP



Computer program designer Florian Colombo (right) and conductor Guillaume Berney look at a music score on a computer screen in Lausanne. — AFP photos



Computer program designer Florian Colombo (right) and conductor Guillaume Berney look at a music score freshly printed in Lausanne.



A member of Nexus orchestra annotates a music score on his tablet computer during a rehearsal in Lausanne.