



# 吉娃斯 愛科學

吉娃斯愛科學繪本

第03集

飛魚的夜曆

邵族語

翻譯  
Diktha Tanakyuwan(丹俊傑)  
配音  
Tumi Tanakyuwan(丹菁)

# 吉娃斯愛科學

第03集 飛魚的夜曆

## 邵族語



族語全文朗讀



華語全文朗讀



英語全文朗讀



吉娃斯

Tumi

飛卉

Diklha

乃奈

Ruthun

里昂

Punul



marfaz rusaw lhuan lhupiqali a qahil

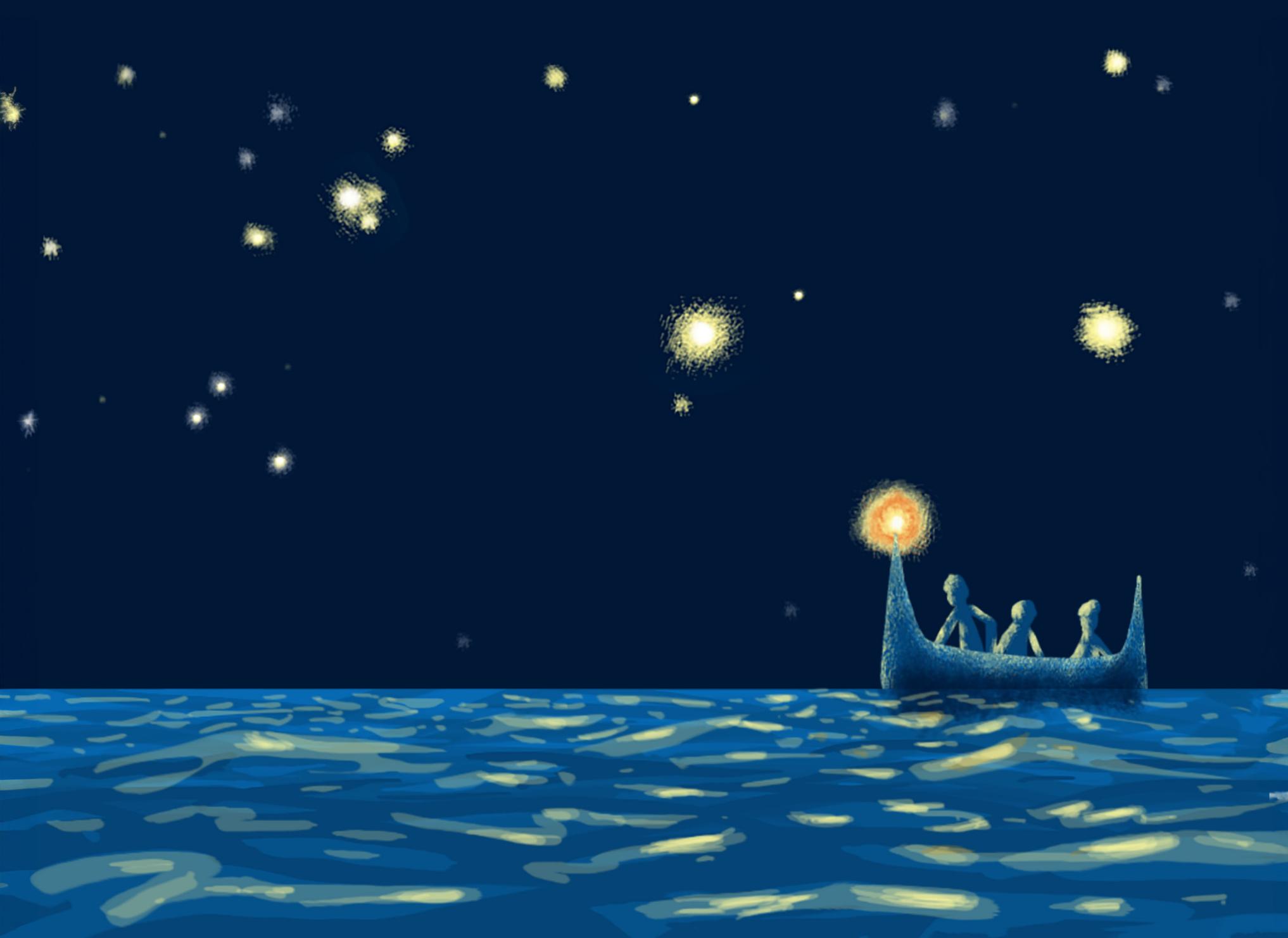


飛魚的夜曆



The Flying Fish Calendar







marfaz rusaw a kazash munaiza!



飛魚季來了！



The flying fish season has arrived!







ya marfaz rusaw a kazash munai, Tao itanlhuān amu'apaw wazaqan  
smapuk marfaz a rusaw.



每到飛魚季，達悟族人就要在夜間出海夜捕飛魚。



Every year during the flying fish season, Tao people go out to sea at night  
to catch flying fish.

慢

原







isa mahumhum a qali, shaunalhias marfaz a rusaw shaqtun pinkawi a  
ruza wa apuy.



在夜色裡，趨光性的飛魚看到拼板舟上的火光。

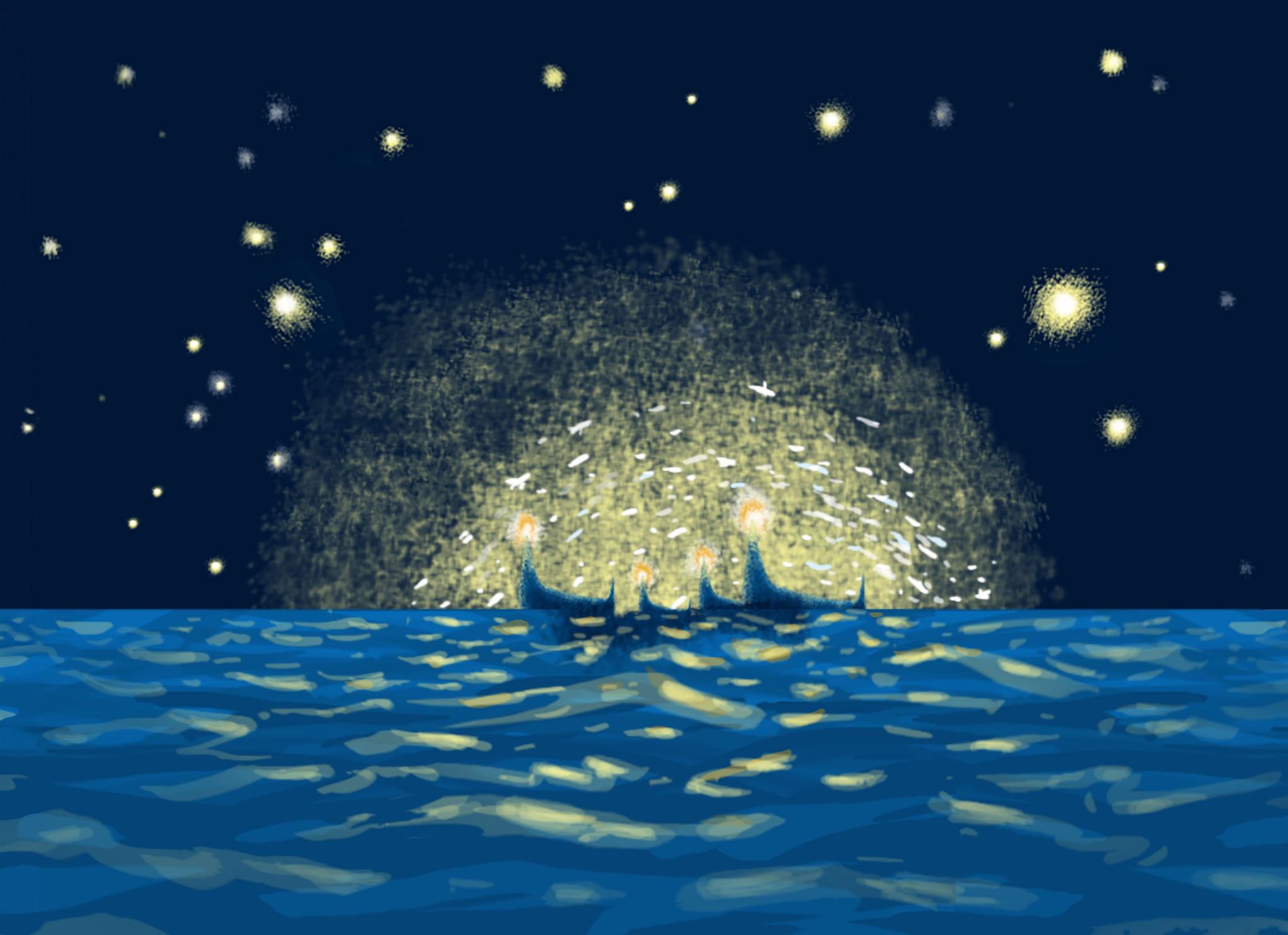


In the dark of the night, flying fish are attracted to the light of torches on  
tatala boats.

慢

原







manasha wa marfaz a rusaw shmuharan sa paku a pali isai wazaqan  
mafarfaz.



數以百計的飛魚就會展開胸鰭在海面滑翔。



Hundreds of flying fish open their pectoral fins and glide above the surface  
of the ocean.

慢

原







shaunalhias, thaithuy amushuqish.



一直到天快亮了，他們才會返航。



The fishermen only return to the shore when dawn approaches.







si Masagaz matinhumhum isai wazaqan a shirshir mitalha mu'apaw  
wazaqan a ama manasha u'araan mushuqish.



si Masagaz 很早很早就在海邊等著出海的父親滿載而歸。



si Masagaz wakes up really early to go to the beach to await his father's return with a full catch.

慢

原







muntatal Tao a kazakazash si Masagaz wa ama isa thithu pinalhi'azazakiniza  
amingqtha lhanaz zain syaman Masagaz, mzai Masagaz a ama.



依照達悟族人的傳統, si Masagaz 的父親在他出生後就改名為 syaman Masagaz,  
意思是 Masagaz 的父親。

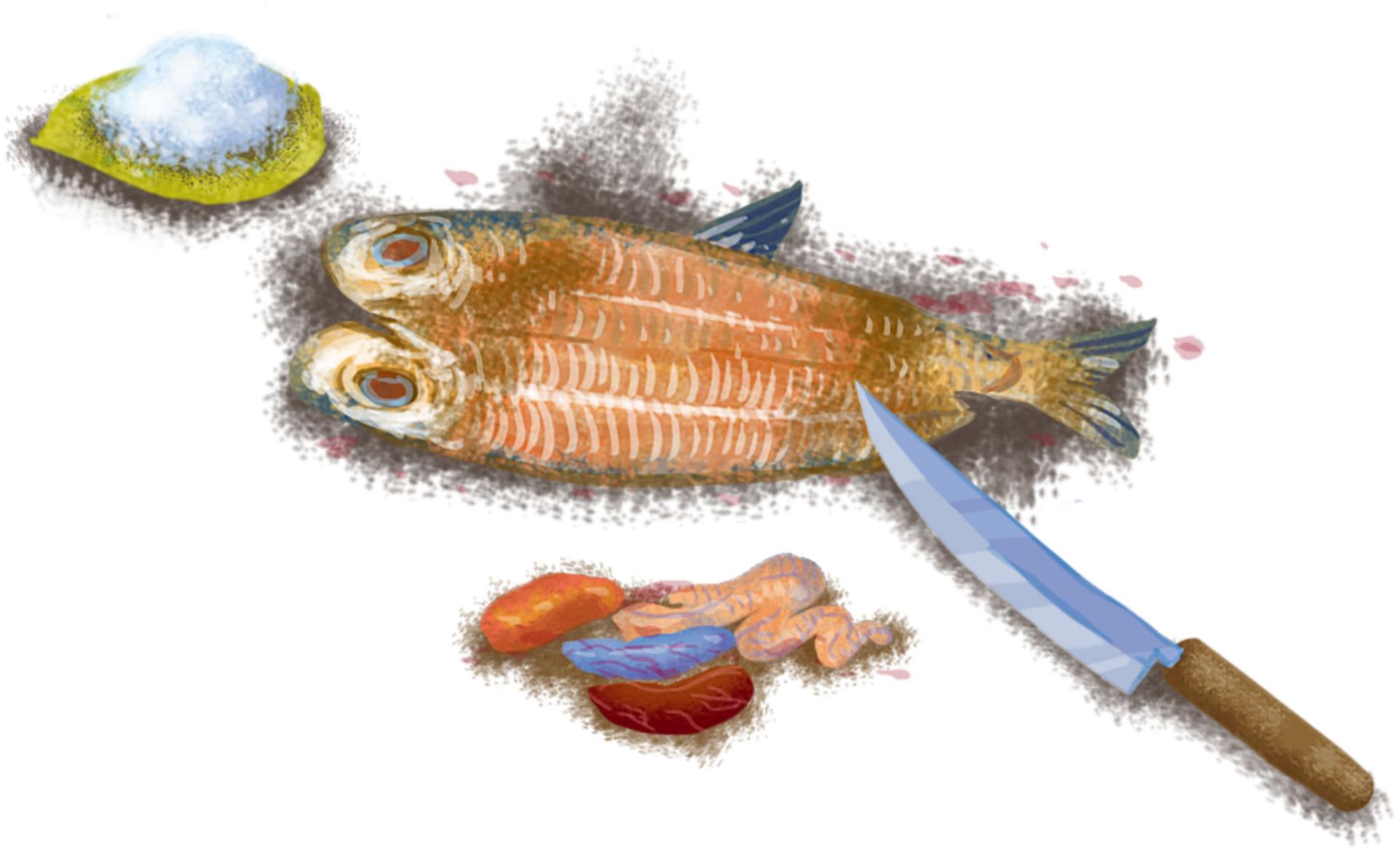


According to Tao traditions, when si Masagaz was born, his father's name  
became Syaman Masagaz, which means the father of Masagaz.

慢

原







sakpiniza wa marfaz a rusaw amuhiaw kmalawa, numa kmilkil kushzap masa rumrum, apiaqitan minqalhiw a rusaw ya kahiza.



捕上岸的飛魚要迅速處理，還要去除魚鱗和內臟，方便之後做成魚乾。



The flying fish caught by the fishermen must be processed quickly after reaching shore, removing the scales and organs in order to dry the fish.

慢

原







shaunatilhaz mutantu punuq afafaw, Tumi masa Punul numa mutusi wazaqan mindahip.



直到太陽快到頭頂時，吉娃斯和里昂才到海邊幫忙。



Giwas and Leon don't arrive at the beach to help until the sun is high in the sky.

慢

原







si Masagaz panaqa Tumi tata wa binanau'az a rusaw, anuniza thithu sa mindahip.



si Masagaz 送給吉娃斯一條女人魚，感謝她的幫忙。



si Masagaz gives Giwas a women' s fish to thank her for her help.







Tao a rusaw ianan ayuzi a rusaw, ianan binanau'az a rusaw numa ianan tantuqash a rusaw laturu a athan. binanau'az a rusaw sa lakazima'un a rusaw, numawan tnashan lhai binanau'az numa azazak makaan.



達悟族人把魚分成男人魚、女人魚和老人魚三種。女人魚是最好吃的一種魚，所以留給女人和小孩們吃。



The Tao people split fish into three categories: men's fish, women's fish, and elder's fish. Women's fish are the most delicious, so they are saved for women and children to eat.

慢

原







Tumi mangqtu pasain haya wa rusaw piaqitan puil, amakathu rutawqalian masa Diklha patara. miakuza ya amakalawa?



吉娃斯想把這條魚好好保存，以便帶到太空站與飛卉分享。該怎麼做呢？



Giwas wants to preserve the fish so she can take it to the space station to share with Behuy. How can she do that?







Punul mangqtu imuhalu rutawqalian udadin faqlhu tilhaz a kawi aminfazaq sa infazaqin.

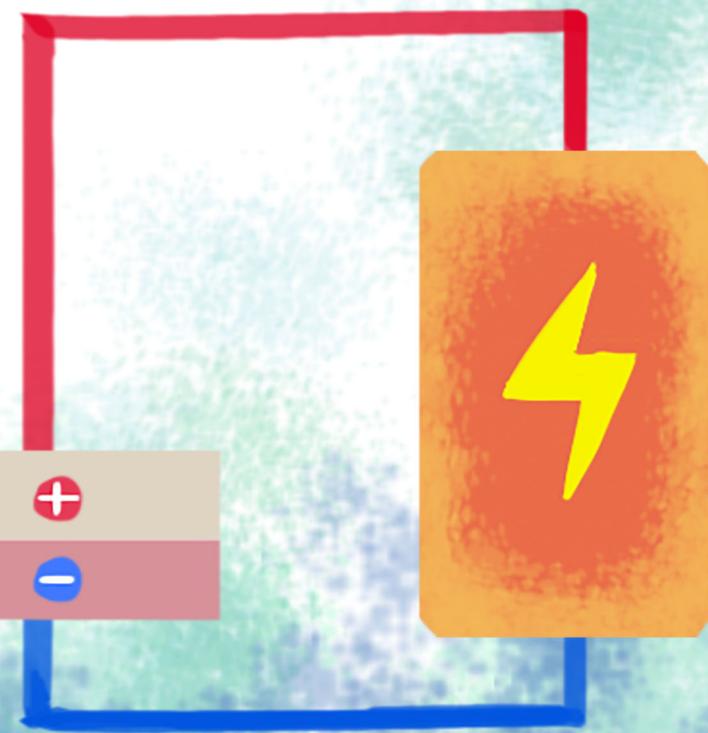


里昂想起上次太空站安裝新的太陽能板所學習到的知識。



Leon recalls what they learned when the space station installed new solar panels.







aniamin ya shini'uth'uthiza lhias amu'apaw sa ti-aan a kalawan zain “shanrariwan”. tilhaz a kawi pasai tilhaz a lhias a mu'apaw sa ti-aan a kushwit a aniamin.



物質吸收光子後放出電子的現象叫做「光電效應」。太陽能板就是利用太陽光的光子產生電力的一種工具。

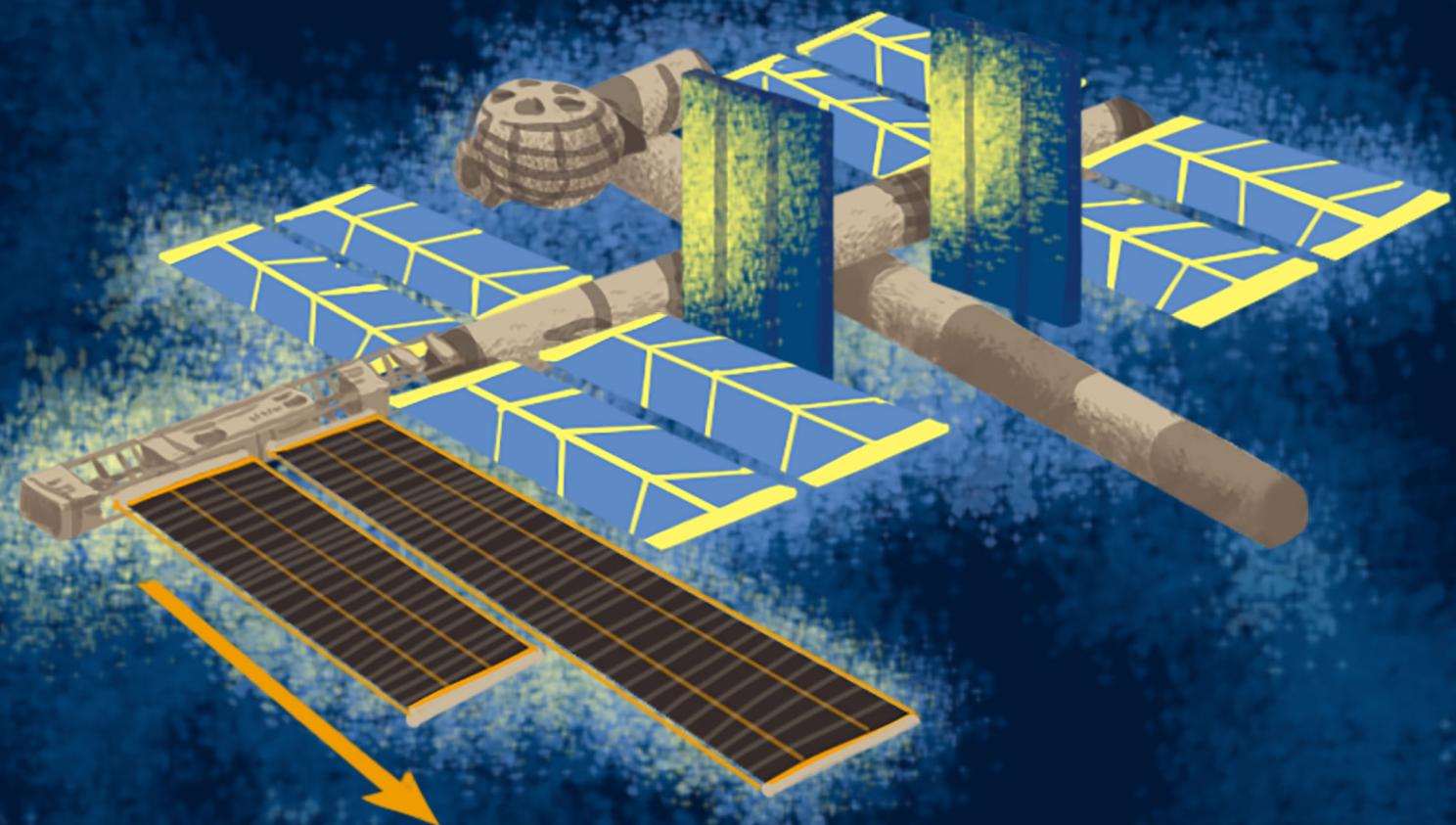


The phenomenon where a substance emits electrons after absorbing photons is called the “photoelectric effect.” A solar panel is a tool that uses the photons of sunlight to generate electricity.

慢

原







faqlhu a tilhaz a kawi amashikaritkit, kitataan mazangqaw antu qmalaw sa ianan, numa pasain piaqitanin sa tilhaz a kushwit.



新型的太陽能板甚至是捲動式的，更輕更不佔空間，更能有效利用太陽能。



A new type of solar panels can even be rolled up. They are lighter and take up less space so they can more effectively capture solar energy.

慢

原







Tumi masa Punul mangqtuqtu, thaithuy shiruan piaqitanin mani pasain tilhaz a malhias numa matata, apaqalhayqay sa rusaw, shduuiza kmathu mutantu rutawqalian.

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吉娃斯和里昂想到，他們也可以好好利用太陽的光和熱，把魚曬乾，就可以帶到太空站了。

---



Giwas and Leon remembered that they can utilize the light and heat of the sun's energy to dry the fish so they can take it to the space station.

慢

原







kanuniza shmpiza ya patilhazan?



可是到底要曬多久呢？



But, how long does it take to dry a fish in the sun?

慢

原







antu mararabaza kilhimin sa mara'in a fatu, si Masagaz mzai, rusaw antu miazithu patilhaz.



好不容易才找到的大石頭, si Masagaz 却說, 魚不是這樣曬的。



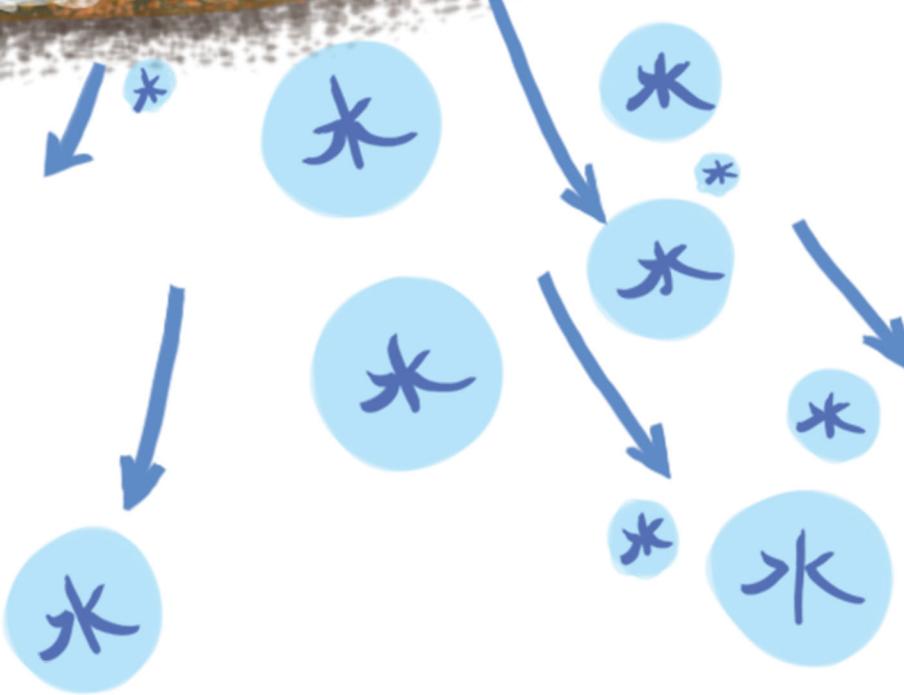
They finally found a big enough stone to place the fish, but si Masagaz said that's not how to sun dry a fish.

慢

原



鹽





Tao patilhaz sa marfaz a rusaw ianan tataiza shaba wa kawash, ya kinalawaiza wa marfaz a rusaw arinishup mara'in a qtilha, pasain qtilha wa makashqut a kushwit matra'in marfaz a rusaw a makashqut a kushwit, shduuiza patara sa marfaz a rusaw uhiaw paqlhayqay.



達悟族人曬飛魚已經有不只一百年的歷史。處理好的飛魚抹上粗鹽，利用鹽的滲透壓大於飛魚的滲透壓，可以讓飛魚乾得更快。



Tao people have been drying flying fish in the sun for over a hundred years. Once they have prepared the fish, they cover it with coarse salt. The osmotic pressure of salt is greater than that of the fish, so this makes the fish dry even faster.

慢

原







Tao a inithawan masa marfaz a rusaw mathuaw mashulwaz, numa lhupiqali a qahil az'az muntatal sa marfaz a rusaw ya marium a qali ininthawan.



達悟族人的生活與飛魚密切相關，就連曆法也都是照著飛魚的汛期來作息。



The lives of the Tao people are closely connected with flying fish, so even their calendar and periods of work and rest are determined by the flying fish season.

慢

原





RAYON  
MIVANWA  
召魚祭



四月



ya puhubuqiza wa qali, Rayon (marfaz rusaw a kazash), Tao mihalawan kmalawa Mivanwa (palalawa rusaw a kazash) palalawa sa marfaz a rusaw munai, numa lhazawan itanlhuan smapuk sa marfaz a rusaw, shanakashpat a furaz shduuiza ilhialhias a qali smapuk sa rusaw.

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春天的時候，是 Rayon (飛魚季)，達悟族會先舉行 Mivanwa (招魚祭) 召請飛魚來，然後就開始了夜捕飛魚，一直到四月才可以在白天捕魚。

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During the spring, it is Rayon (flying fish season) and the Tao people hold Mivanwa (the fish festival) to invite the arrival of the flying fish. Then, they begin to catch flying fish at night until April when they can resume fishing during the day.

慢

原





TEYTEYKA





Rayon lhmasawan larimaiza wa furaz shaunakashpat a furaz a teyteyka (isa wazaqan lhmaush rusaw a kazash) izai a qali muqay smapuk antu marfaz a rusaw, pangqaiza sa marfaz a rusaw.



Rayon 開始後的第五個月到第八個月是 teyteyka (海上魚撈的季節)，這個時候只能捕捉飛魚以外的魚種，讓飛魚休養生息。

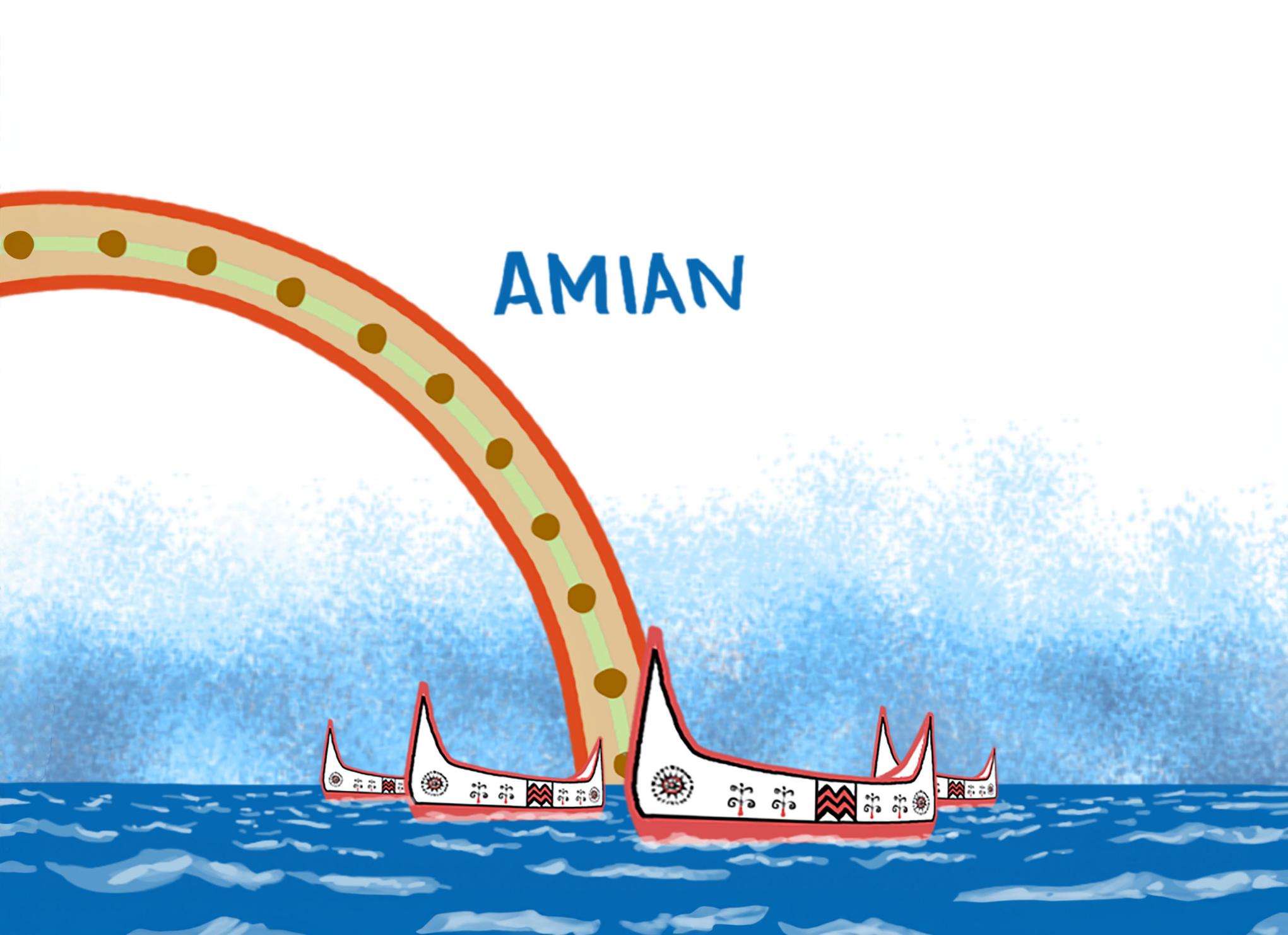


From the fifth to the eighth months after the start of Rayon, it is Teyteyka (the season of fishing on the ocean). During this time, they can only catch fish other than flying fish to give flying fish a chance to recover.

慢

原





AMIAN



makintanathu a furaz lhiazawan sa amian (mitilha marfaz a rusaw a kazash), Tao amakalawa Manoyotoyon (marfaz a rusaw minqarayza kmaan a kazash), munsai izai a qali, niza tu sa maqalhiw wa marfaz a rusaw, miazithu shduuiza lamaqitan a u'araan ya mapishkit.

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第九個月開始是 amian (等待飛魚的季節) , 達悟族人會舉辦 Manoyotoyon (飛魚終食祭) , 從這時開始, 連飛魚乾也都不能吃了, 這樣明年才會有更好的豐收。

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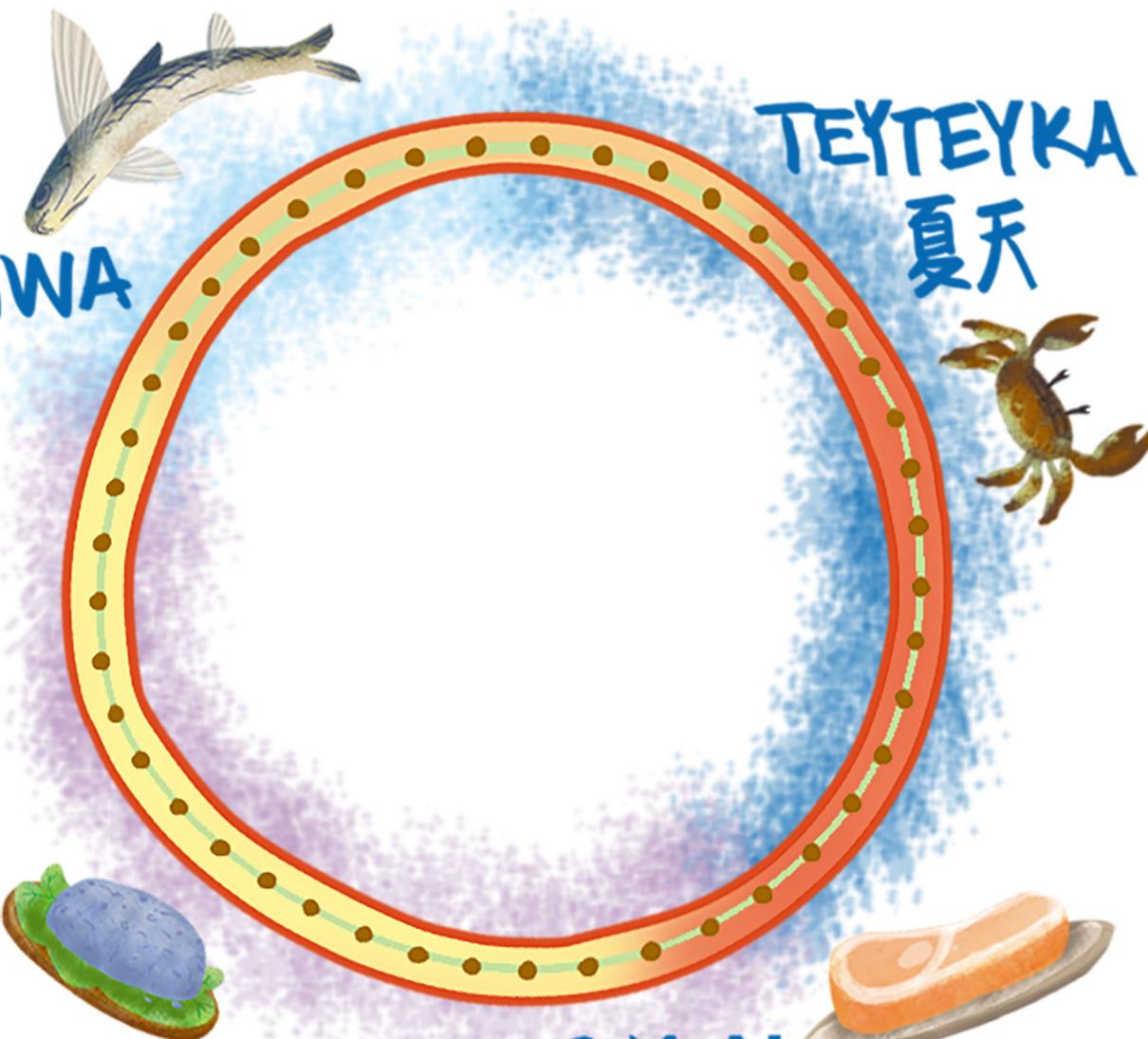
Starting with the ninth month, it is Amian (the season of waiting for flying fish). The Tao people hold the Manoyotoyon (festival of finishing the flying fish). From this point on, they cannot eat anymore dried flying fish to ensure that they will have another full harvest in the coming year.

慢

原



RAYON  
MIYVANWA  
召魚祭



TEYTEYKA  
夏天

MANOYOTONYON  
飛魚終食節



izai sa Tao “marfaz a rusaw lhuan lhupiqali a qahil”.



這就是達悟族「飛魚的夜曆」。



This is the Tao people's "Flying Fish Calendar."

慢

原







mitalha sa si Masagaz paqalhayqayza sa marfaz a rusaw, shduuiza kmathu sa maqalhiw wa marfaz a rusaw lhai Diklha kmaan, izai binanau'az a rusaw mihalawan pinshnir kmaan!

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等到si Masagaz 把飛魚乾曬好，就可以帶飛魚乾給飛卉吃，這條女人魚就先煮湯吃了吧！

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When si Masagaz is finished drying his flying fish in the sun, they can bring the dried flying fish to Behuy at the space station. But, it's best to make fish soup with this women's fish now!

慢

原







si Mazngang mia'awan pashtay pinshnir.



si Mazngang 替大家煮好魚湯。



si Mazngang makes a fish soup for everyone.







maqitan a rusaw a shnir mathuaw maqitan iqilhan!

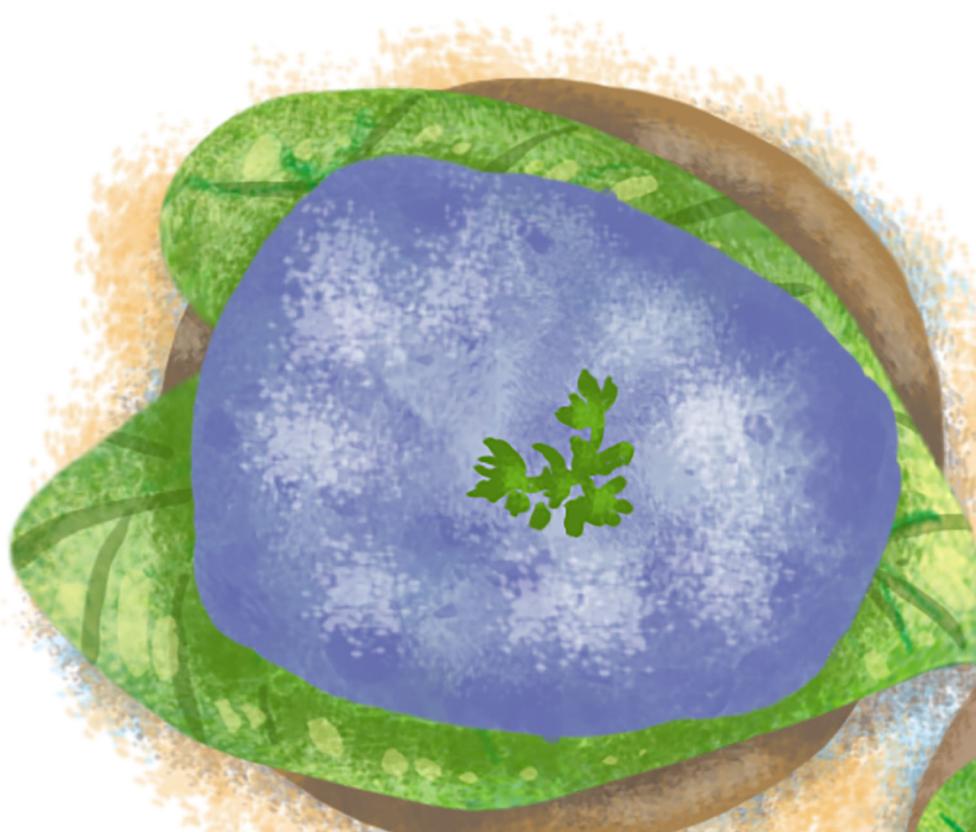


新鮮的魚湯真是太好喝了！



The fresh fish soup is so delicious!







si Mazngang mzai thithu ma'ania wa pania'an antu muqayza rusaw a shnir,  
miaqawan sa lhari a qmu numa putanalhiwan saran a kalhan.



si Mazngang 說她的拿手料理除了魚湯，還有芋頭糕和蒸陸蟹。



si Mazngang says in addition to fish soup, her specialties also include mashed taro and steamed crab.

慢

原







Tumi az'az amafazaq unduuan, apasain Tao maqitan a kakaanin ulhthkizin thithu kmathu mushqish rutawqalian, numa Diklha kunbuqthiwiza numa tiaz miazai sa hudun lhunbasqaw!



吉娃斯要全部學起來，她要把達悟族的美食通通帶回太空站，讓飛卉吃得肚子鼓起來像是一座小山！



Giwas wants to learn how to make all of those things to bring Tao culinary traditions back to the space station so Behuy can eat so much delicious food his belly sticks out!

慢

原



一般單詞

中文	詞性	族語
飛魚季	名詞	marfaz rusaw a kazash
捕	動詞	smapuk
飛魚	名詞	marfaz a rusaw
展開	動詞	shmuharan
返航	動詞	mushuqish
魚鱗	名詞	kushzap
魚乾	名詞	maqalhiw a rusaw
安裝	動詞	udadin
知識	名詞	infazaqin
曬乾	動詞	palhalhayqay
汛期	名詞	marium a qali
招魚祭	名詞	palalawa rusaw a kazash
夜曆	名詞	lhuan lhupiqali a qahil
鼓起來	動詞	lhunbasqaw

科學單詞

中文	詞性	族語
趨光性	名詞	shaunalhias
滑翔	動詞	mafarfaz
太陽能板	名詞	tilhaz a kawi
物質	名詞	aniamin
光子	名詞	lhias
光電效應	名詞	shanrariwan
滲透壓	名詞	makashqut a kushwit

# 吉娃斯愛科學 邵族語

## 第03集 飛魚的夜曆

補助單位一 教育部國教署（繪本紙本製作與族語翻譯配音）

計畫名稱 「發現天生科學家：原住民族文化科學學習實踐與發展十年計畫」（第二階段第二年）

補助單位二 國家科學及技術委員會（繪本繪圖製作）

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計畫主持人 傅麗玉

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族語配音 Tumi Tanakyuwan (丹菁)

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