

İNGİLİZCE hikâyeler

ADVENTURE ON THE RIVER NEHIRDE MACERA

DERECE 2

Hazırlama Kurulu

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ÖNSÖZ

Bu kitap, belli bir sözcük çerçevesi içinde ve basit gramer bilgileri dışına çıkmadan yazılmış hikâyeler dizisinin ikinci kademesini oluşturan kitaplardan biridir.

İkinci derece olarak isimlendirilen ve birincisine oranla daha ileri bir düzeyde olan bu hikâye kitapları dizisinin diğer iki kitabı "The Mystery of the Island - Adanın Esrarı" ve "Seven Plays - Yedi Oyun" isimlerini taşımaktadır.

İkinci derece hikâye kitaplarında da, birinci derecelerde olduğu gibi, hikâyeler Türkçeye çevrilirken güzel bir Türkçe yerine, karşılaştırarak izlemeyi kolaylaştırmak amacıyla, iyi bir ifade şekli olmasa da, metne sadık ve mümkün olduğu oranda sözcük sözcük çeviri tercih edilmiştir.

Hikâyelerin sonunda o hikâye ile ilgili sorular vardır. Bunların cevapları kitabın sonunda verilmiştir.

FONO

Mektupla Öğretim Kurumu

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ADVENTURE ON THE RIVER

CHAPTER: 1

It was the first day of the holidays. Hans was standing on the bank of the river. His friends, Karl and Otto, were with him.

The boys were throwing stones across the river.

"What are we going to do?" Otto asked. "We can't stay here all day."

"You're our leader," Karl said to Hans. "What shall we do? Tell us."

Both the boys looked at Hans. Hans was fourteen years old. He was older than Karl and Otto, so he was their leader.

"I have an idea," Hans told them. "It came to me last night. My father was telling me about an adventure. He had his adventure when he was a

NEHİRDE MACERA

BÖLÜM: 1

Tatilin birinci günüydü. Hans ırmak kıyısında duruyordu. Arkadaşları Karl ve Otto da onunlaydı.

Çocuklar ırmak üzerinden karşıya taş atıyorlardı.

Otto, "ne yapacağız?" diye sordu. "Bütün gün burada kalamayız."

Karl, Hans'a "Sen bizim önderimizsin," dedi. "Ne yapacağız? Söyle bize."

İki çocuk Hans'a baktılar. Hans on dört yaşındaydı. Karl ve Otto'dan büyüktü, böylece onların önderiydi.

"Bir fikrim var," dedi Hans onlara. "Dün gece aklıma geldi. Babam bana bir macera anlatıyordu. Çocukken bu macerayı geçirmişti. O ve iki arkadaşı boy. He and two friends got a boat and they sailed down the river."

"Did they go far?" Otto asked.

"Yes, they went through the forest," Hans answered.
"They spent about a week on the river."

"I like the idea," Karl said. "But we haven't got a boat, so how can we go down the river?"

"My uncle has a boat," Otto said. "It's an old boat but it's strong. My uncle doesn't use it now, so perhaps he will let us have it. We can ask him."

"We must go and look at the boat," Hans said. "Where does your uncle live?"

"His house isn't far from here," Otto replied. "I'll take you there."

Otto led them along the river bank. His uncle lived near the river and he kept his boat in his garden. Otto took his friends into the garden and showed them the boat.

"It's old but it's a good boat," Hans said. "But will your uncle let us use it?"

"I'll go and ask him," Otto said. He ran into the

bir kayık bulmuş, ırmaktan aşağıya inmişlerdi."

"Uzağa gitmişler mi?" diye Otto sordu.

"Evet, ormanın içinden geçmişler," diye cevapladı Hans. "Irmak üzerinde bir hafta kadar kalmışlar."

"Fikri beğendim," dedi Karl. "Fakat kayığımız yok ki, bu yüzden nasıl ırmaktan aşağıya inebiliriz?"

"Amcamın bir kayığı var," dedi Otto. "Eski bir kayıktır, ama sağlamdır. Amcam onu şimdi kullanmıyor, belki bize verir. Ondan isteyebiliriz."

"Gidip kayığa bakmalıyız," dedi Hans. "Amcan nerede oturuyor?"

"Evi buradan uzakta değil," diye Otto cevapladı. "Oraya götüreyim sizi."

Otto onları ırmak boyunca götürdü. Amcası ırmak yakınında oturuyor ve kayığını bahçesinde tutuyordu. Otto arkadaşlarını bahçeye soktu ve kayığı onlara gösterdi.

"Eski fakat iyi bir kayık," dedi Hans. "Fakat amcan onu kullanmamıza izin verecek mi ki?"

"Gidip sorayım ona," dedi Otto. Koşarak eve girdi

house and asked his uncle. When he came back, he was laughing.

"He says that we can have the boat," Otto shouted. "But we must clean and paint it. There may be a hole in the boat. We must put it in the water. If there is a hole in it, the water will come in."

The boys pulled the boat to the river and put it in the water. Hans sat in the boat. Only a little water came in.

"It's only a small hole," Hans said. "We can soon mend it."

The boys pulled the boat out of the water. Then they took off their shirts and began to work. They worked hard all the morning.

They cleaned the boat. Then Otto went to his uncle's house and got some paint. After that the boys painted the boat. While Otto and Karl were painting, Hans filled up the hole.

"The water can't come in now," he said.

At last the boys finished their work. They sat near the boat and rested.

"It's like a new boat now," Otto said. "That will please my uncle."

ve amcasına sordu. Geri döndüğü zaman, gülüyordu.

Otto bağırdı, "Kayığı alabileceğimizi söylüyor. Fakat onu temizleyip boyamalıyız. Kayıkta bir delik olabilir. Onu suyun içine koymalıyız. Eğer içinde bir delik varsa su içeri girecektir."

Çocuklar kayığı ırmağa çektiler ve suyun içine koydular. Hans kayığın içine oturdu. Sadece birazcık su içine girdi.

"Yalnızca ufak bir delik," dedi Hans. "Hemen onu onarabiliriz."

Çocuklar kayığı sudan dışarı çektiler. Sonra gömleklerini çıkarıp işe başladılar. Bütün sabah sıkı çalıştılar.

Sandalı temizlediler. Sonra Otto amcasının evine gitti ve bir miktar boya aldı. Bundan sonra çocuklar kayığı boyadılar. Otto'yla Karl boyarken Hans deliği doldurdu.

"Şimdi su içeri giremez," dedi.

Sonunda çocuklar işlerini bitirdiler. Sandalın yanına oturup dinlendiler.

"Şimdi o yeni bir kayık gibi," dedi Otto. "Bu amcamı memnun edecektir." "We haven't finished yet," Hans said. "When the paint is dry, we must paint the boat again. We'll do that tomorrow."

"When shall we leave?" Karl asked.

"It's Friday," Hans said, "We must work tomorrow. Shall we leave on Monday?"

"Yes, I can go then," Otto said.

"I must ask my father," Karl told them. "But I think that he well let me come."

"Good," Hans said. "We've done enough work today. But we must start early tomorrow."

After that the three boys went home.

CHAPTER: 2

The boys came back the next morning. When they went into the garden, they saw a girl there. She was standing near the boat.

"Who's that?" Hans asked.

- "Henüz bitirmedik," dedi Hans. "Boya kuruduğu zaman kayığı tekrar boyamalıyız. Bunu yarın yaparız."
- "Ne zaman yola çıkacağız?" diye Karl sordu.
- "Bugün cuma," dedi Hans. "Yarın çalışmalıyız. Pazartesi yola çıkalım mı?"
- "Evet, o zaman gidebilirim," dedi Otto.
- "Babama sormalıyım," dedi Karl onlara. "Fakat gelmeme izin vereceğini sanıyorum."
- "İyi," dedi Hans. "Bugün yeterince iş yaptık. Fakat yarın erkenden başlamalıyız."

Bundan sonra üç çocuk evlerine gitti.

BÖLÜM: 2

- · Çocuklar ertesi sabah geri döndüler. Bahçeye girdikleri zaman orada bir kız çocuğu gördüler. Kayığın yanında duruyordu.
 - "Kim o?" diye Hans sordu.

"That's my cousin Elsa," Otto explained. "She knows that we want to use the boat. My uncle has told her."

"What do you want here?" Hans asked Elsa. "We have a lot of work to do."

"I want to help," Elsa said. "I'll paint the boat if you like."

"Let her do it if she wants to," Otto said quietly to Hans. "Or she may go and tell my uncle."

"All right," Hans said. "But you must understand. We're going to take this boat down the river, but you can't come with us. Is that clear?"

"I didn't ask to come, did I?" Elsa said.

So while Elsa was painting, the boys talked.

They talked about the journey.

"We'll need a lot of things for the journey," Hans told them. "I'll make a list."

Hans took a pencil and some paper from his pocket.

"We must take a lot of food," Otto said. "That is very necessary on a journey."

Otto açıkladı, "Kuzenim Elsa'dır o. Sandalı kullanmak istediğimizi biliyor. Amcam ona söylemiş."

"Burada ne arıyorsun?" diye Hans, Elsa'ya sordu. "Yapılacak çok işimiz var."

"Yardım etmek istiyorum," dedi Elsa. "Dilerseniz sandalı boyarım."

Otto sessizce Hans'a "Diliyorsa bırak yapsın," dedi. "Yoksa gidip amcama söyleyebilir."

"Peki," dedi Hans. "Fakat anlamalısın. Bu kayığı ırmaktan aşağıya indireceğiz ama, bizimle birlikte gelemezsin. Anlaşıldı mı?"

"Geleyim mi diye sormadım, değil mi?" dedi Elsa.

Böylece Elsa sandalı boyarken çocuklar konuştu.

Yolculuk hakkında konuştular.

"Yolculuk için bir sürü şeye ihtiyacımız olacak," dedi Hans onlara. "Bir liste yapacağım."

Hans cebinden bir kurşun kalemle bir parça kâğıt çıkardı.

"Epey yiyecek almalıyız," dedi Otto. "Yolculukta bu pek gereklidir.."

"And we must cook, so we'll need pots." Hans added. "Who can bring those?"

"My mother has some old pots." Karl said. "I'll ask her for them."

Hans wrote these things on his list.

"What about blankets?" Otto asked.

"Bring two blankets," Hans said. "That will be enough."

"My uncle has a map of the river," Otto said. "I'll ask him for it."

"Yes, we'll need a map," Hans said. He had quite a long list now. He read it to them. "What have we forgotten?" he asked.

"Matches," Elsa said. "Don't forget to take some matches, or you won't be able to light a fire."

Hans wrote matches on his list. Then he put the list in his pocket. "Good," he said. "We'll get the food today."

After that they helped Elsa. The boat was soon ready. Then they went home.

Elsa went home too, but she came back to the boat. She wanted to hide the paddles. She took the "Hem yemek pişirmeliyiz, bu yüzden kaplara ihtiyacımız olacak," diye Hans ekledi. "Bunları kim getirebilir?"

"Annemin bazı eski kapları var," dedi Karl. "Ondan onları isteyeceğim."

Hans bu şeyleri listesine yazdı.

"Peki ya battaniyeler?" diye sordu Otto.

"İki battaniye getir," dedi Hans. "Bu yetecektir."

"Amcamda ırmağın bir haritası var," dedi Otto. "Ondan onu isteyeceğim."

"Evet, bir haritaya ihtiyacımız olacak," dedi Hans. Şimdi oldukça uzun bir listesi vardı. Onlara okudu onu. "Ne unuttuk?" diye sordu.

"Kibritleri," dedi Elsa. "Birkaç kibrit almayı unutmayın, yoksa ateş yakamazsınız."

Hans kibritleri listesine yazdı. Sonra listeyi cebine koydu. "İyi," dedi. "Yiyeceği bugün alırız."

Ondan sonra Elsa'ya yardım ettiler. Çok geçmeden sandal hazırdı. Sonra eve gittiler.

Elsa da eve gitti, fakat tekrar kayığa döndü. Kürekleri saklamak istiyordu. Kürekleri aldı ve onları

paddles and hid them under some leaves.

CHAPTER: 3

It was Monday morning. Hans arrived early. He brought his food and blankets. Then Karl came. The two boys pulled the boat to the river and put it on the water.

"It's almost six o'clock," Hans said. "Why hasn't Otto come? He isn't usually late."

Then Otto appeared. But he was not alone. Elsa was with him.

- "What does that girl want?" Hans cried. "She can't come with us. I told her that."
- "But we can't go without her," Otto said.
- "Your uncle gave the boat to us. We needn't take Flsa."

bazı yaprakların altına sakladı.

BÖLÜM: 3

Pazartesi sabahıydı. Hans erkenden geldi. Yiyeceğini ve battaniyeleri getirdi. Sonra Karl geldi. İki çocuk kayığı ırmağa çektiler ve onu suya koydular.

"Saat neredeyse altı," dedi Hans. "Otto niçin gelmedi. O genellikle geç kalmaz."

Sonra Otto görüldü. Fakat yalnız değildi. Elsa yanındaydı.

"Bu kız ne istiyor?" diye Hans haykırdı. "Bizimle gelemez. Ona bunu söyledim."

"Fakat onsuz gidemiyoruz," dedi Otto.

"Niye gidemiyoruz," diye Hans sordu. Biraz kızgındı. "Amcan kayığı bize verdi. Elsa'yı almamızın gereği yok."

"But she's hidden the paddles," Otto explained. "She won't give them to us."

The boys looked for the paddles, but they could not find them.

- "What have you done with them?" Hans asked. "Tell us."
- "I'll tell you if you promise to take me," Elsa answered.
- "The boat is big enough."
- "Oh, all right," Hans said. "We'll take you."
- "Do you promise?" Elsa asked.
- "Yes, we promise," Hans replied. "Now go and get the paddles. Bring your food and blankets, too. Be quick."
- "My things are ready," Elsa said and she ran off. She soon came back. She was carrying a bag and some blankets.
- "You haven't brought the paddles," Otto said.
- "Wait a minute," Elsa said. "They're under those leaves. I'll go and get them." Elsa got the paddles and gave them to the boys.
- "Now we must put the things in the boat," Hans told them. "We're already late."

"Fakat kürekleri saklamış," diye Otto açıkladı. "Onları bize vermiyor."

Cocuklar kürekleri aradılar ama bulamadılar onları.

- "Onları ne yaptın?" diye Hans sordu. "Söyle bize."
- "Beni götürmeye söz verirseniz size söylerim," diye Elsa cevapladı.
- "Kayık yeteri kadar büyük."
- "O, peki," dedi Hans. "Seni alacağız."
- "Söz veriyor musunuz?" diye Elsa sordu.
- "Evet, söz veriyoruz," diye Hans cevapladı. "Şimdi git ve kürekleri bul. Yiyeceklerini ve battaniyelerini de getir. Çabuk ol."
- "Eşyalarım hazır," dedi Elsa ve koşarak uzaklaştı. Çok geçmeden geri döndü. Bir çanta ve birkaç battaniye taşıyordu.
- "Kürekleri getirmedin," dedi Otto.
- "Bir dakika bekle," dedi Elsa. "Onlar şu yaprakların altındadır. Gidip onları alacağım." Elsa kürekleri aldı ve çocuklara verdi.
- "Şimdi bu eşyaları kayığa koymalıyız," dedi Hans onlara. "Zaten geç kaldık."

They put their things in the boat. Then the boys and Elsa got in. Hans sat at the back of the boat. He took a paddle and pushed the boat to the middle of the river. The water flowed quickly and carried the boat with it. It was not hard work.

They went past their village. They could see the forest in front of them. The sun was coming up when they reached the forest.

Their adventure was beginning.

CHAPTER: 4

It was cold in the forest. The river flowed between the trees. The trees were thick, like great walls. The sun did not come through them. The river flowed slowly now and the boys had to use the paddles.

After an hour Otto said, "I'm getting hungry. Can't we stop and have some breakfast?"

Eşyalarını kayığa koydular. Sonra (erkek) çocuklarla Elsa bindi. Hans kayığın arkasına oturdu. Küreği alıp kayığı ırmağın ortasına itti. Su hızlı aktı ve kayığı da birlikte taşıdı. Zor iş değildi.

Köylerini geçip gittiler. Önlerinde ormanı görebiliyorlardı. Ormana ulaştıklarında güneş yükseliyordu. Serüvenleri başlıyordu.

BÖLÜM: 4

Ormanda hava soğuktu. İrmak ağaçların arasından akıyordu. Büyük duvarlar gibi ağaçlar sıktı. Onların arasından güneş geçmiyordu. İrmak şimdi yavaş akıyordu ve çocuklar kürekleri kullanmak zorunda kaldılar.

Bir saat sonra Otto, "Acıkıyorum," dedi. "Durup biraz kahvaltı edemez miyiz?"

"Good idea," Hans said, "I'm rather hungry too. We can light a fire and make some tea. But we must find a place to land."

"There's a good place over there," Karl said. He was sitting in the front of the boat. He pointed to the right bank of the river. "Look over there. There aren't many trees."

They paddled the boat to the bank. Karl jumped out and tied up the boat. He tied it to a small tree.

"I'll light the fire," Hans said. "Go and get some wood," he told Karl and Otto. "Elsa, you can get food out of the boat. Then get a pot and fill it with water."

Karl and Otto went and looked for wood. Hans took some paper and some small dry sticks.

"Who has the matches?" he asked Karl and Otto when they came back. The two boys were carrying a lot of wood.

"You made the list," Otto said. "Didn't you bring them?"

"I haven't got any," Karl said. "Now what shall we do?"

"İyi fikir," dedi Hans. "Ben de biraz acıktım. Bir ateş yakar, biraz çay pişiririz. Fakat yanaşacak bir yer bulmalıyız."

"Orada iyi bir yer var," dedi Karl. Kayığın önünde oturuyordu. "Irmağın sağ kıyısını gösterdi. "Oraya bakın. Çok ağaç yok."

Kürek çekerek sandalı kıyıya götürdüler. Karl sıçrayıp çıktı ve sandalı bağladı. Onu küçük bir ağaca bağladı.

"Ateş yakacağım," dedi Hans. "Gidip odun getirin biraz," dedi Karl ile Otto'ya. "Elsa, yiyecekleri sandaldan alabilirsin. Sonra bir kap alıp onu suyla doldur."

Karl ile Otto gidip odun aradılar. Hans biraz kâğıtla birkaç küçük kuru çalı çırpı aldı.

Döndükleri zaman Karl ile Otto'ya sordu:

"Kibritler kimde?" İki çocuk bir sürü odun taşıyordu.

"Listeyi sen yaptın," dedi Otto. "Onları getirmedin mi?"

"Bende hiç yok," dedi Karl. "Şimdi ne yapacağız?"

Then Elsa came with the pot of water.

"What's the matter?" she asked. "Aren't you going to light the fire?"

"We forgot to bring any matches," Hans told her. His face was very red.

"Oh, I have some," Elsa said. She went to her bag and took out a box of matches. She gave the matches to Hans.

Hans thanked Elsa and lit the fire. When it was burning well Elsa put the pot on it. Then she made some tea. While they were eating, the boys looked at the map.

"Can we go far today?" Otto asked.

"We can go about fifteen miles," Hans replied. "It won't be hard." He pointed to a place on the map. "We can stop here. The warden of the forest has a house near the river. The warden knows my father. We can go and see him in the morning. Perhaps we can explore the forest with him."

"Yes, I want to explore the forest," Otto said. "There are a lot of strange birds in the forest and I want to see them."

After that they put out the fire and continued their journey down the river. They stopped again at noon

Sonra Elsa su kabıyla geldi.

"Ne var?" diye sordu. "Ateşi yakmayacak mısınız?"

"Kibrit getirmeyi unutmuşuz," dedi Hans ona. Yüzü pek kırmızıydı.

"O, bende birkaç tane var," dedi Elsa. Çantasına gitti ve bir kutu kibrit çıkardı. Kibritleri Hans'a verdi.

Hans Elsa'ya teşekkür edip ateşi yaktı. O iyi bir şekilde yanarken Elsa kabı onun üstüne koydu. Sonra biraz çay yaptı. Onlar yerlerken çocuklar haritaya baktılar.

"Bugün uzağa gidebilir miyiz?" diye sordu Otto.

"On beş mil kadar gidebiliriz," diye cevapladı Hans. "Zor olmayacak." Haritadaki bir yeri işaret etti. "Burada durabiliriz. Orman bekçisinin ırmak yakınında bir evi var. Bekçi babamı tanır. Sabahleyin gidip onu görebiliriz. Belki ormanda onunla birlikte keşif yapabiliriz."

"Evet, ormanı keşfetmek istiyorum," dedi Otto. "Ormanda bir sürü garip kuş var ve ben onları görmek istiyorum."

Ondan sonra ateşi söndürüp ırmağın aşağısına doğru yolculuklarına devam ettiler. Acıktıkları için öğ-

because they were hungry. They had some food but they did not light a fire. There was a small hill near the river and the boys climbed it. When they reached the top, they could see over the trees.

"Can you hear a noise?" Karl asked. "It's an engine, isn't it?"

The boys listened.

"I think that it's a plane," Hans said.

He was right. Soon they saw a small plane. It was low in the sky and it was flying over the trees. The plane flew past them. It flew among the trees and after that the boys could not see it.

"Is the plane going to land?" Karl asked. "Perhaps the pilot is in trouble."

"The pilot can't land in the forest," Hans replied. "There isn't any place to land. Look, there it is again."

The plane flew over their heads. It was high in the sky and it did not come back. After that the boys went down the hill.

"I don't understand it," Hans said. "What is a

leyin yine durdular. Biraz yiyecek yediler ama ateş yakmadılar. Irmağın yakınında küçük bir tepe vardı ve çocuklar ona tırmandılar. Üst ucuna ulaştıklarında ağaçların üzerini görebiliyorlardı.

"Bir ses duyabiliyor musunuz?" diye sordu Karl. "Bir motor, değil mi?"

Çocuklar dinlediler.

"Bir uçak sanırım," dedi Hans.

Haklıydı. Çok geçmeden küçük bir uçak gördüler. Gökte alçalmış, ağaçların üzerinde uçuyordu. Uçak onları geçip uçtu. Ağaçlar arasında uçtu ve bundan sonra çocuklar onu göremediler.

"Uçak konacak mı?" diye sordu Karl. "Belki de pilotun başı derttedir."

"Pilot ormana inemez," diye cevapladı Hans. "İnilecek hiçbir yer yok. Bak yine orada."

Uçak başlarının üzerinden uçtu. Gökte yükselmişti ve geri dönmedi. Ondan sonra çocuklar tepeden aşağı indiler.

"Anlamıyorum," dedi Hans. "Uçak ormanda ne

plane doing in the forest? What does the pilot want here?"

CHAPTER: 5

It was afternoon. Hans was sitting at the back of the boat and he was looking at the map.

"The warden's house isn't far from here," he said. "About four or five miles. We may arrive there before night."

Elsa was at the front of the boat. She was watching the river. Suddenly she shouted: "Stop the boat. There's a big tree across the river."

The boys stopped the boat with the paddles. The tree was very large. They could not get past it with their boat.

"We can't move the tree," Hans said. "We can lift the boat over the tree but it won't be easy. And we may make a hole in the boat." yapıyor? Pilot burada ne istiyor?"

BÖLÜM: 5

Öğle sonrasıydı. Hans kayığın arkasında oturmuş haritaya bakıyordu.

"Korucunun evi buradan uzak değil," dedi. "Dört veya beş mil kadar (ötede). Geceden önce oraya varabiliriz."

Elsa kayığın önündeydi. Irmağı gözlüyordu. Birden bağırdı: "Kayığı durdurun. Irmağın üzerinde büyük bir ağaç var."

Çocuklar küreklerle sandalı durdurdular. Ağaç pek büyüktü. Kayıklarıyla onu geçemezlerdi.

"Ağacı oynatamayız," dedi Hans. "Kayığı ağacın üzerinden kaldırıp geçirebiliriz ama bu kolay olmayacaktır. Ve kayıkta delik açabiliriz."

"What shall we do then?" Otto asked.

"We'll have to lift the boat out of the river and carry it through the forest," Hans said.

"We can't do it here," Karl said. "The banks are high and there are thick bushes on them."

"Then we must go back," Hans said. "We'll find a place without bushes."

So they turned the boat and went up the river again. But the bushes were thick on both sides and they could not find a place.

"I'm sorry," Hans said. "We'll have to lift the boat over the tree. I don't like the idea, but we must try."

So they went back to the tree again. Hans got out of the boat and climbed on the tree.

"These branches are quite small," he told them. "I can cut them off. Then we can lift the boat over the tree."

Hans took the axe and cut off the branches.

"Now give me two blankets," he said. He put the blankets over the tree.

"I'm ready now," Hans said. "One of you must

- "Öyleyse ne yapacağız?" diye Otto sordu.
- "Kayığı kaldırıp ırmaktan çıkarmak ve onu taşıyarak ormandan geçirmek zorunda kalacağız," dedi Hans.
- "Burada yapamayız onu," dedi Karl. "Kıyılar yüksek ve üzerinde sık çalılıklar var."
- "Öyleyse geri gitmeliyiz," dedi Hans. "Çalılıksız bir yer buluruz."

Böylece kayığı çevirip ırmaktan yukarı çıktılar yine. Fakat her iki yanda da çalılıklar sıktı ve bir yer bulamadılar.

"Üzgünüm," dedi Hans. "Sandalı ağacın üzerinden kaldırıp geçirmek zorunda kalacağız. Fikir hoşuma gitmiyor ama, denemeliyiz."

Böylece yine ağaca döndüler. Hans kayıktan çıktı ve ağaca tırmandı.

"Bu dallar oldukça ufak," dedi onlara. "Kesebilirim onları. Sonra kayığı ağacın üzerinden kaldırıp geçirebiliriz."

Hans baltayı aldı ve dalları kesti.

"Şimdi bana iki battaniye verin," dedi. Battaniyeleri ağacın üstüne koydu.

"Şimdi hazırım," dedi Hans. "Biriniz suda dur-

stand in the water. Then he can push the boat from behind."

"I'll do that," Karl said. "I'm taller than Otto."

They took their bags out of the boat and put them on the tree. Then Otto and Elsa climbed on the tree. Otto was ready to help Hans. Karl jumped into the water.

"It's cold," he said, "but it's not very deep."

Then Hans held the front of the boat and lifted it. Karl pushed the boat from the back. Slowly the boat came out of the water. It was hard work, but soon the boat was resting on the tree.

Then Karl swam under the tree. He took the front of the boat and pulled it slowly. The boat came down into the water. Soon the boat was on the river again. They put their bags in it and climbed in.

Karl did not get into the boat. "I'm going to stay in the water," he said. "If I get into the boat, you'll all be wet."

"We can't reach the warden's house this evening," Hans said. "It's almost dark and we must find a place for the night."

malıdır. O zaman kayığı arkadan itebilir.

"Ben yapayım onu," dedi Karl. "Boyum Otto'dan uzundur."

Çantalarını kayıktan alıp ağacın üzerine koydular. Sonra Otto ile Elsa ağaca tırmandı. Otto, Hans'a yardıma hazırdı. Karl suyun içine atladı.

"Soğuk," dedi. "Fakat pek derin değil."

Sonra Hans sandalın önünü tutup onu kaldırdı. Karl sandalı geriden itti. Yavaşça kayık sudan çıktı. Zor işti, fakat çok geçmeden kayık ağaç üzerinde oturuyordu.

Sonra Karl ağacın altından yüzdü. Kayığın önünü alıp yavaşça çekti onu. Kayık tekrar suya indi. Çok geçmeden kayık yine ırmak üzerindeydi. Çantalarını içine koyup tırmanarak girdiler.

Karl kayığa girmedi. "Ben suda kalacağım," dedi. "Kayığa girersem siz hepiniz ıslanırsınız."

"Orman bekçisinin evine bu akşam varamayız," dedi Hans. "Ortalık karardı nerdeyse ve gece için bir yer bulmalıyız."

At last, they found a good place among the trees. They lit a big fire and cooked dinner. Karl put his wet clothes near the fire and they were soon dry.

It was already dark. They sat near the fire and talked for a time. But they were all tired. They covered themselves with their blankets and fell asleep.

Before he fell asleep, Hans remembered the aeroplane. "What was it doing in the forest?" he asked himself. But Hans was tired too. He pulled his blanket over his head and fell asleep.

CHAPTER: 6

Hans woke up first. He could see the sun through the trees.

He looked at his watch. It was eight o'clock.

"Wake up," he shouted. "It's late." He threw

Sonunda ağaçlar arasında iyi bir yer buldular. Koca bir ateş yakıp yemek pişirdiler. Karl ıslak elbiselerini ateşin yanına koydu ve çok geçmeden onlar kurumuştu.

Artık ortalık kararmıştı. Ateşin yanına oturup bir süre konuştular. Fakat hepsi yorgundu. Battaniyelerine sarıldılar ve uykuya daldılar.

Uykuya dalmadan önce Hans uçağı hatırladı. "Ormanda ne yapıyordu?" diye kendi kendine sordu. Fakat Hans da yorgundu. Battaniyesini başına çekti ve uykuya daldı.

BÖLÜM: 6

Önce Hans uyandı. Ağaçların arasından güneşi görebiliyordu.

Saatine baktı. Saat sekizdi.

"Uyanın," diye bağırdı. "Geç oldu." Battaniye-

off his blankets and got up. Then he ran to the river and washed his face in the cold water. Elsa and the boys did the same.

They had a quick breakfast. Then they pushed the boat into the river and set off. They sang while they were sailing down the river.

"There are a lot of fish in the river," Elsa said. "Some of them are quite big."

"We need a fishing line," Otto said. "Then we can catch some fish for dinner."

"Perhaps the warden will give us some hooks," Hans told them. "If we have a hook, we can make a fishing line. It's quite easy."

Hans was looking at the map of the river.

"The warden's house is not far from here," he said. "I'm certain that he has a boat. It may not be in the water, so watch the bank of the river."

After a few minutes, Karl saw a boat. But it was a big boat and it had an engine.

"The warden has a boat," Hans said, "but it's not like that. That's a motor boat."

"Look," said Elsa. "There's a second boat. It's

lerini fırlatıp attı ve kalktı. Sonra ırmağa koşup yüzünü soğuk suda yıkadı. Elsa ile çocuklar da aynını yaptılar.

Çabucak kahvaltı ettiler. Sonra sandalı suya itip yola çıktılar. Irmak üzerinde giderken şarkı söylediler.

"Irmakta çok balık var," dedi Elsa. "Bazıları oldukça büyük."

"Bir oltaya ihtiyacımız var," dedi Otto. "O zaman akşam yemeği için birkaç balık yakalayabiliriz."

"Korucu belki bize birkaç iğne verir," dedi Hans onlara. "İğnemiz olursa olta yapabiliriz. Oldukça kolaydır bu."

Hans ırmak haritasına bakıyordu.

"Korucunun evi buradan uzak değil," dedi. "Bir kayığı olduğuna eminim. Suda olmayabilir, bu yüzden ırmak kıyısını gözleyin."

Birkaç dakika sonra Karl bir kayık gördü. Fakat büyük bir kayıktı ve motoru vardı.

"Korucunun bir kayığı var," dedi Hans. "Fakat bunun gibi değil o. Bu bir motorlu kayıktır."

"Bakın," dedi Elsa. "ikinci bir sandal var. Ça-

under the bushes. It's smaller than the motor boat."

"That's the warden's boat," Hans said. "But who owns the big boat?"

"Perhaps friends are visiting the warden," Otto said.

"Then he has rich friends," Hans said. "A motor boat costs a lot of money."

The boys tied up their boat near the motor boat.

"Who will look after our boat?" Hans asked. "Our things are in the boat, so one person must stay here."

"I'll stay," Elsa said.

"I won't come to the warden's house," Otto said. "I want to explore the forest. Shout when you are ready, and I'll come back."

"All right," Hans said. "Karl and I will go to the warden's house."

The two boys set off through the trees. They followed a path. The path led to a small field. They could see the warden's house from there. It was across the field.

lılıkların altında. Motorlu kayıktan daha ufak."

"O, korucunun kayığıdır," dedi Hans. "Fakat büyük kayığın sahibi kim?"

"Arkadaşları belki korucuyu ziyaret ediyorlardır," dedi Otto.

"Öyleyse zengin arkadaşları var," dedi Hans. "Bir motor hayli para eder."

Çocuklar sandallarını motorun yanına bağladılar.

"Sandalımıza kim bakacak?" diye Hans sordu. "Eşyalarımız kayığın içinde olduğu için bir kişi burada kalmalıdır."

"Ben kalacağım," dedi Elsa.

"Ben korucunun evine gelmeyeceğim," dedi Otto. "Ormanı keşfetmek istiyorum. Hazır olunca bağırın, geri dönerim."

"Peki," dedi Hans. "Karl ile ben korucunun evine gideceğiz."

İki çocuk ağaçların arasında yola çıktılar. Bir patikayı izlediler. Patika küçük bir çayıra çıktı. Oradan korucunun evini görebiliyorlardı. Çayırın karşısındaydı. "The warden's at home," Hans said. "Look at the black smoke. He has a big fire."

"But what's he burning?" Karl asked. "The smoke is very black."

"Perhaps he's burning some old things," Hans answered. "Shall we go and see him?"

"Wait," Karl said. They were among the trees. "Can you hear a noise? Listen."

It was the sound of an engine. It was coming nearer.

"It's the plane again," Hans said. "Look, it's coming over the trees."

The plane was very low. The boys could see the pilot's head. The plane was flying in a circle.

"Quickly," Hans said. "Get behind those bushes. We can watch from there."

The two boys hid behind the bushes. They had a good view of the field.

Two men came out of the warden's house. One had a flag in his hand. He waved the flag three times. Then the pilot waved his hand and flew very low. The plane was over the middle of the field. Then "Korucu evde," dedi Hans. "Kara dumana bak. Koca bir ateş yakmış."

"Fakat ne yakıyor?" diye Karl sordu. "Duman çok kara."

"Belki eski şeyleri yakıyordur," diye cevapladı Hans. "Gidip onu görelim mi?"

"Dur," dedi Karl. Ağaçların arasındaydılar. "Bir gürültü duyabiliyor musunuz? Dinleyin."

Bu bir motor sesiydi. Gittikçe yaklaşıyordu.

"Yine uçaktır," dedi Hans. "Bak, ağaçların üzerinden geliyor."

Uçak pek alçaktaydı. Çocuklar pilotun başını görebiliyorlardı. Uçak daire (çizerek) içinde uçuyordu.

"Çabuk," dedi Hans. "Şu çalılıkların arkasına geçin. Oradan seyredebiliriz."

İki çocuk çalıların arkasına gizlendi. Çayırı iyice görüyorlardı.

İki adam korucunun evinden çıktı. Birinin elinde bir bayrak vardı. Bayrağı üç kere salladı. Sonra pilot elini sallayıp pek alçaktan uçtu. Uçak çayır ortasının üzerindeydi. O zaman pilot uçaktan kırmızı the pilot threw a red thing from the plane. After that the plane flew off.

The red thing fell through the air. It fell slowly and it landed in the middle of the field. One of the men ran and picked it up. He took it back to the house and then both men went inside.

"What was it?" Karl asked. "Could you see?"

"It was round like a ball," Hans answered. "But it wasn't a ball because it fell slowly. Perhaps it was a small balloon. There was a bag under it. But why did the pilot throw it from the plane? And who are these men at the warden's cottage? Why have they come here in their boat?"

"And then there was the black smoke," Karl added. "The black smoke was for the pilot. It showed him the place in the forest."

"I think that you're right," Hans said. "Then perhaps the warden is in trouble. These men can't be his friends. We must help him."

The two boys stood up. "We must go back to the boat," Hans said, "and tell Otto and Elsa."

"Stay there," a voice said. The boys turned slowly. Two men were standing behind them. "You must

bir şey fırlattı. Ondan sonra uçak uçarak uzaklaştı.

Kırmızı şey havadan düştü. Yavaşça düşerek çayır ortasına indi. Adamlardan biri koşup onu yerden aldı. Onu eve götürdü ve sonra her iki adam da içeri gittiler.

"Neydi?" diye Karl sordu. "Görebildin mi?"

"Top gibi yuvarlaktı," diye Hans cevap verdi. "Fakat yavaş düştüğü için top değildi. Belki küçük bir balondu. Altında bir torba vardı. Fakat pilot niçin onu uçaktan fırlattı? Hem korucunun kulübesindeki bu adamlar kim? Tekneleriyle niçin buraya gelmişler?"

"Hem siyah duman da vardı," diye Karl ekledi. "Siyah duman pilot içindi. Ormandaki yeri ona gösterdi."

"Haklısın, sanırım," dedi Hans. "Öyleyse korucunun başı dertte belki de. Bu adamlar onun arkadaşları olamaz. Ona yardım etmeliyiz."

İki çocuk doğruldu. "Kayığa dönmeliyiz," dedi Hans. "Otto ile Elsa'ya söylemeliyiz."

"Orada kalın," dedi bir ses. Çocuklar yavaşça döndüler. Arkalarında iki adam duruyordu. "Bi-

come with us," one of them said. "Quickly." He pointed to the warden's house.

CHAPTER: 7

The two men led Hans and Karl across the field.

"Let me go," Hans said. "Why are you taking us to the house?"

The men did not reply. When they reached the house, one of the men opened the door and pushed the boys inside.

There were two men inside the room. One of them was fat and he wore good clothes. He had a large ring on his finger.

The flag was on the table, but there was no sign of the red balloon.

"Who are these boys?" the fat man asked. "What are they doing here?"

zimle gelmelisiniz," dedi onlardan biri. "Çabuk olun." Korucunun evini isaret etti.

BÖLÜM: 7

İki adam Hans ile Karl'ı çayırın karşısına götürdü.

"Bırakın beni," dedi Hans. "Bizi niçin eve götürüyorsunuz?"

Adamlar cevap vermedi. Eve vardıkları zaman adamlardan biri kapıyı açıp çocukları içeri itti.

Odanın içerisinde iki adam vardı. Onlardan biri şişmandı ve iyi elbiseler giymişti. Parmağında iri bir yüzük vardı.

Bayrak masanın üzerindeydi, fakat kırmızı balondan iz yoktu.

Şişman adam sordu, "Bu çocuklar kim? Burada ne yapıyorlar?"

"We found them near the field, sir," the man replied. "They were hiding behind some bushes and watching the house."

"Is this true?" the fat man asked the boys. He spoke quietly but Hans did not like his voice. "Were you watching the house? What are you doing here?"

"We weren't watching the house," Hans answered. "We were walking through the forest. Then we saw the plane. We were watching that."

"Ah, of course, you saw the plane," the fat man said. He laughed. "Yes, that was my plane. I'm a rich man and I have a big business in the city. So I have my letters brought every day. I'm on holiday, but I still have work to do."

The fat man pulled some letters from his pocket, and showed them to the boys. "The pilot brought these today."

"His story may be true," Hans thought. "But I don't like this man. I think that he's bad. And where is the warden?"

"But why were you coming to the house?" the fat

"Onları çayır yakınında bulduk, efendim," diye cevapladı adam. "Bir takım çalıların arkasına saklanmış evi gözetliyorlardı."

"Doğru mu?" diye şişman adam çocuklara sordu. Sakin konuşuyordu ama, Hans sesini beğenmedi. "Evi mi gözetliyordunuz? Burada ne yapıyorsunuz?"

"Evi gözetlemiyorduk," diye cevap verdi Hans. "Orman içinde yürüyorduk. Sonra uçağı gördük. Onu seyrediyorduk."

"A, elbette uçağı gördünüz," dedi şişman adam. Güldü. "Evet benim uçağımdı o. Zengin bir adamım ve şehirde büyük bir işe sahibim. Böylece her gün mektuplarımı getirtiyorum. Tatildeyim, fakat yine de yapılacak işim var."

Şişman adam cebinden birkaç mektup çıkardı, onları çocuklara gösterdi. "Pilot bugün getirdi bunları."

"Hikâyesi doğru olabilir," diye düşündü Hans. "Fakat bu adamdan hoşlanmadım. Kötüdür, sanırım. Peki, korucu nerede?"

"Fakat niçin eve geliyordunuz?" diye şişman adam

man asked. "You haven't told me that."

"We wanted to see the warden," Hans replied.

"Is the warden a friend of yours?" the fat man asked.

"He's a friend of my father's," Hans explained. "We wanted to spend the day with him. And we wanted some fishing hooks too."

"I'm afraid that you can't spend the day here," the fat man said. "The warden isn't here. He's gone into the forest. He won't come back today. But perhaps we can find some fishing hooks for you."

He turned to the man at his side. "Go and look for fishing hooks" he ordered.

Suddenly there was a loud noise. It came from the next room. A man was beating on the door. He was beating it hard and shouting. "Let me go. You can't keep me here. Let me go." He continued to beat on the door.

The fat man's face changed. He was very angry. He turned to his two men.

"Go and stop him," he ordered. "Quickly! He may escape."

sordu. "Bunu söylemediniz bana."

"Korucuyu görmek istedik," diye cevapladı Hans.

"Korucu dostunuz mu?" diye şişman adam sordu.

"Babamın arkadaşıdır," diye Hans açıkladı. "Günü onunla birlikte geçirmek istedik. Birkaç balık iğnesi de isteyecektik hem."

"Günü burada geçiremezsiniz korkarım," dedi şişman adam. "Korucu burada yok. Ormana gitti. Bugün geri dönmeyecek. Belki size birkaç balık iğnesi bulabiliriz."

Yanındaki adama döndü. "Git de balık iğnelerini ara," diye emretti.

Birdenbire büyük bir gürültü oldu. Bitişik odadan geldi. Bir adam kapıya vuruyordu. Sertçe vuruyor ve bağırıyordu: "Bırakın beni. Burada tutamazsınız beni. Bırakın beni." Kapıya vurmaya devam etti.

Şişman adamın yüzü değişti. Çok kızmıştı. İki adamına döndü.

"Gidip durdurun onu," diye emretti. "Çabuk! kaçabilir."

The two men ran out of the room. After that the noise stopped. The fat man sat there. He did not speak.

"So the warden is a prisoner," Hans said to himself. "These men have shut him in that room. The fat man won't let us go now because we know this. We're his prisoners too."

They were alone with the fat man. He was sitting behind the table. This war the moment to escape. The man was not watching them.

But suddenly he looked up. "You can't escape," he said. "One of my men is standing outside the door."

"But what are you doing to the warden?" Hans cried. "He's a prisoner here. You can't do this to him."

"It's not your business," the fat man replied. "You must stay here too. I can't let you go. You'll talk about this."

He shouted to his men and they came into the room again.

"Were these two boys alone?" he asked.

İki adam odadan dışarı koştu. Ondan sonra gürültü durdu. Şişman adam orada oturdu. Konuşmadı.

"Demek ki orman bekçisi tutuklu," dedi Hans kendi kendine. "Bu adamlar onu o odaya kapatmışlar. Bunu bildiğimiz için şişman adam bizi bırakmayacaktır şimdi. Biz de onun tutuklularıyız."

Şişman adamla yalnız kalmışlardı. O masanın arkasında oturuyordu. Bu kaçma anıydı. Şişman adam onları gözlemiyordu.

Fakat birdenbire başını kaldırıp baktı. "Kaçamazsınız," dedi. "Adamlarımdan biri kapının dışında duruyor."

"Fakat korucuya ne yapıyorsunuz?" diye Hans bağırdı. "Burada tutuklu o. Bunu ona yapamazsınız."

"Senin işin değil bu," diye cevapladı şişman adam. "Siz de burada kalmalısınız, Sizi bırakamam. Bunu anlatırsınız."

Adamlarına bağırdı ve onlar yine odaya girdiler.

"Bu iki çocuk yalnız mıydı?" diye sordu.

"We saw only these boys," one of the men replied.

"But how did they come here?" the fat man asked. "Is there a village up the river?"

"Yes, there is," the man answered. "But it's a long way from here and there isn't a path through the forest. So they came by boat."

"Go to the river and look," the fat man ordered. "And if they have any friends, bring them here."

The man went out of the room. Then the fat man turned to the second man. "Take the boys to the cellar," he told him. "They can't escape from there."

The man led Hans and Karl to the cellar and opened the door.

"Take off your shoes," he said. The boys took off their shoes and gave them to the man. He laughed.

"If you escape, you won't go far," he said. Then he pushed the boys into the cellar and shut the door.

"Bu çocukları gördük sadece," diye adamlardan biri cevap verdi.

"Fakat buraya nasıl geldiler?" diye şişman adam sordu. "Irmağın yukarısında bir köy var mı?"

"Evet, var," diye adam cevap verdi. "Fakat buradan hayli yoldur ve ormanın içinden geçen bir patika yok. Bu yüzden kayıkla geldiler."

"Irmağa git de bak," diye şişman adam emretti. "Ve arkadaşları varsa eğer onları buraya getir."

Adam odadan çıktı. O zaman şişman adam ikinci adama döndü. "Çocukları mahzene götür," dedi ona. "Oradan kaçamazlar."

Adam Hans ile Karl'ı mahzene götürdü ve kapıyı açtı.

"Ayakkabılarınızı çıkarın," dedi. Çocuklar ayakkabılarını çıkarıp adama verdiler. O güldü.

"Eğer kaçarsanız, uzağa gidemezsiniz," dedi. Sonra çocukları mahzenin içine itti ve kapıyı kapadı.

CHAPTER: 8

When Hans and Karl set off for the warden's house, Otto went into the forest. He wanted to watch the birds there. But he did not have a chance to watch any birds. He too heard the noise of the plane.

"It's the plane again," Otto said to himself. "It's very near here." He ran through the trees and came to the field. He could not see his friends but he saw the plane. It flew over the field and it dropped a red thing. A man ran from the house and picked up the red thing. Then he went back to the house. Otto saw all this.

"But where are Hans and Karl?" he asked himself. "Have they seen this? I'll call them."

He was going to shout when he saw his friends. Two men were taking them across the field. The men took them into the house. Otto waited for his friends

BÖLÜM: 8

Hans ile Karl korucunun evine gitmek üzere yola çıktığı zaman Otto ormana girdi. Oradaki kuşları seyretmek istiyordu. Fakat kuş seyretmek fırsatı bulamadı. O da uçağın gürültüsünü duydu.

"Yine uçak," dedi Otto kendi kendine. "Buranın pek yakınında." Ağaçların arasından koşarak geçti ve çayıra geldi. Arkadaşlarını göremedi ama, uçağı gördü. Çayırın üzerinde uçup kırmızı bir şey attı. Bir adam evden koştu ve kırmızı şeyi yerden aldı. Sonra eve döndü. Otto bütün bunları gördü.

"Fakat Hans ile Karl nerede?" diye kendi kendine sordu. "Bunu gördüler mi? Onlara sesleneceğim."

Bağırmak üzereyken arkadaşlarını gördü. İki adam onları çayırın öbür tarafına götürüyordu. Adamlar onları eve soktu. Otto arkadaşlarını bekledi ama,

but they did not come out again.

"They're in trouble," he thought. "I must go and tell Elsa. They may need help."

He ran back to the boat. He was almost there. But then he put his foot in a hole and fell down. He stood up again but his foot hurt him very much. But at last he reached the boat.

"What's the matter?" Elsa asked when she saw Otto. She ran and helped him. "What's wrong with your foot?"

"I fell in a hole and hurt it," Otto explained. "But that's not important. Hans and Karl are in trouble. Two men have taken them to the warden's house. I waited but they did not come out again."

"Are you certain that they are in trouble?" Elsa asked. "Perhaps the men are the warden's friends."

Otto told her about the plane and the red thing.

"I may be wrong," he said. "But listen, I have an idea. We can hide here and watch. If Hans and Karl are in trouble, they won't come back and perhaps

tekrar dışarı çıkmadı onlar.

"Başları dertte," diye düşündü. "Gidip Elsa'ya anlatmalıyım. Yardıma ihtiyaçları olabilir."

Tekrar kayığa koştu. Neredeyse oraya varmıştı. Fakat o sırada ayağı bir çukura girince düştü. Yine kalktı fakat ayağı pek çok acıyordu. Fakat sonunda kayığa ulaştı.

Otto'yu görünce Elsa sordu, "Ne var?" Koşup ona yardım etti. "Ayağına ne oldu?"

"Fakat bu önemli değil. Hans ile Karl'ın başı dertte. İki adam onları korucunun evine götürdü. Bekledim ama, tekrar çıkmadılar."

"Başlarının dertte olduğundan emin misin?" diye Elsa sordu. "Belki de bu adamlar korucunun arkadaşlarıdır."

Otto ona uçaktan ve kırmızı şeyden bahsetti.

"Yanılabilirim," dedi. "Fakat dinle, bir fikrim var. Biz buraya saklanıp gözleyebiliriz. Eğer Hans ile Karl'ın başı dertteyse dönmeyeceklerdir ve belki de the men will come here."

Elsa and Otto hid behind some bushes. They waited. Soon a man came down the path. He ran to the boat and looked at it. Then he turned and went back to the house.

"I was right," Otto said. "They are in trouble. We must get help."

"We can take the boat and go down the river," Elsa said.

"No, we can't do that," Otto said. "The men in the house will miss it. But we can take the warden's boat. That is lighter and it will go quickly. Our boat is heavy."

"Listen," Elsa said. "You go for help. You've hurt your foot but you can take the boat down the river. I'll stay here. I'll stay in the forest and watch the house."

"All right," Otto said. "But take care. Don't go near the house."

Elsa pushed the warden's boat into the river. She put a bag of food and a blanket in the boat. Then she helped Otto to get in. Otto waved goodbye and set off down the river.

adamlar buraya gelecektir."

Elsa ile Otto birkaç çalının arkasına saklandı. Beklediler. Çok geçmeden bir adam patikadan iniyordu. Kayığa koştu ve ona baktı. Sonra döndü ve tekrar eve gitti.

"Haklıymışım," dedi Otto. "Başları dertte. Yardım almalıyız."

"Sandalı alıp ırmaktan aşağıya inebiliriz," dedi Elsa.

"Hayır, bunu yapamayız," dedi Otto. "Evdeki adamlar yokluğunu farkeder. Fakat korucunun kayığını alabiliriz. O daha hafiftir ve çabuk gidecektir. Bizim kayığımız ağır."

"Dinle," dedi Elsa, "Sen yardım için git. Ayağını incittin ama, sandalı ırmaktan aşağıya indirebilirsin. Ben burada kalacağım. Ormanda kalıp evi gözetleyeceğim."

"Peki," dedi Otto. "Fakat dikkat et. Eve yaklaşma."

Elsa korucunun kayığını ırmağa itti. Bir yiyecek torbasıyla bir battaniye koydu sandala. Sonra Otto'nun binmesine yardım etti. Otto elini sallayarak veda etti ve ırmaktan aşağıya doğru yollandı.

Elsa went back to the boat again and took out her bag. She wanted to take her blankets, but she thought. "If I take the blankets, the men will notice it." So she left the blankets in the boat. She put her bag in some bushes. Then she hid herself and waited.

In the afternoon, two men came. They took the bags and blankets from the boat. They pulled the boat out of the water and carried it to the house. Then they came back and took the bags and the blankets.

Elsa stayed for a long time in the bushes. It was almost night.

"I'll go to the field now," she said to herself. "I can watch the house from there."

A light was burning in the house. Elsa sat and watched. Then the light went out and the house was dark.

Elsa tekrar kayığa gitti ve torbasını aldı. Battaniyesini de almak istedi ama, şöyle düşündü: "Battaniyeleri alırsam adamlar farkına varır." Böylece battaniyeleri sandalda bıraktı. Torbasını çalılıkların içine koydu. Sonra saklanıp bekledi.

Öğleden sonra iki adam geldi. Çantaları ve battaniyeleri sandaldan aldılar. Kayığı çekip sudan çıkararak eve taşıdılar. Sonra geri dönüp çantalarla battaniyeleri aldılar.

Elsa uzun bir süre çalılıklarda kaldı. Neredeyse geceydi.

"Çayıra gideyim şimdi," dedi kendi kendine. "Evi oradan gözetleyebilirim."

Evde bir ışık yanıyordu. Elsa oturup seyretti. Sonra ışık söndü ve ev karanlık oldu.

CHAPTER: 9

There was not much light in the cellar, so Hans and Karl could not see well. They sat down for a time.

"The man has locked the door," Hans said. "He's locked it and we can't escape."

"But there is a window," Karl said.

The window was small and it was high in the wall.

"I'm not very heavy," Karl continued. "Let me stand on your shoulders. Perhaps I can reach the window."

Karl climbed on Hans' shoulders. "I can reach it," he said, "but there are iron bars across it. We can't get through iron bars."

Karl climbed down from Hans' shoulders. The boys

BÖLÜM: 9

Mahzende fazla ışık yoktu, bu yüzden Hans ile Karl iyi göremiyordu. Bir süre oturdular.

"Adam kapıyı kilitlemiş," dedi Hans. "Onu kilitlemiş ve biz de kaçamayız."

"Fakat bir pencere var," dedi Karl.

Pencere ufak ve duvarda yüksekteydi.

"Ben pek ağır değilim," diye Karl devam etti. "Omuzlarının üzerinde durayım. Pencereye belki yetişebilirim."

Karl, Hans'ın omuzlarına çıktı. "Yetişebiliyorum ona," dedi. "Fakat üzerinde demir çubuklar var. Demir çubuklar arasından geçemeyiz."

Karl Hans'ın omuzlarından indi. Çocuklar ye-

sat on the ground and talked.

"We're prisoners," Hans said, "and there's no way out of here. But they haven't caught Otto and Elsa, so we have a chance."

"Where's the nearest village?" Karl asked. "Do you remember?"

"There's a village down the river," Hans answered, "but it's about twenty-five miles from here. If Otto and Elsa have the boat, they can bring help. But it will take a day or two. And perhaps the men have taken our boat."

In the evening, a man brought them some food. A second man stood near the cellar door, so the boys could not escape. The man put the food down and went out. He locked the cellar door again and went off.

Night came. It was quiet in the house. Hans and Karl were tired, but they could not sleep because it was cold in the cellar. Then they heard a noise outside the window.

"What's that?" Hans asked. "Did you hear a noise?"

"Yes," Karl answered. "It may be an animal.

re oturup konuştular.

"Biz tutukluyuz," dedi Hans. "Ve buradan hiçbir çıkış yolu yok. Fakat Otto ile Elsa'yı yakalamamışlar, bu yüzden bir şansa sahibiz."

"En yakın köy nerede?" diye Karl sordu. "Hatırlıvor musun?"

"Irmağın aşağısında bir köy var," diye ceyapladı Hans. "Fakat buradan yirmi beş mil (40 kilometre) kadar ötededir. Eğer Otto ile Elsa kayığa sahipse yardım getirebilirler. Fakat bu bir iki gün sürebilir. Ve belki de adamlar kayığımızı almışlardır."

Akşamleyin bir adam onlara biraz yiyecek getirdi. Bir ikinci adam mahzen kapısında durdu, böylece çocuklar kaçamayacaktı. Adam yiyeceği bıraktı ve dışarı çıktı. Yine mahzen kapısını kilitledi ve uzaklaştı.

Gece oldu. Ev sessizdi. Hans ile Karl yorgundu. Fakat mahzen soğuk olduğundan uyuyamıyorlardı. Sonra pencere dışında bir ses duydular.

"O nedir?" diye sordu Hans. "Bir gürültü işîttin mi?"

"Evet," diye cevapladı Karl, "Bir hayvan ola-

Or perhaps one of the men is outside the window."

Then they heard the noise again.

"Who's there?" Hans called.

"It's me, Elsa" a voice answered. The boys could see a dark shape at the window. It was Elsa's face.

"Where are you?" Elsa asked. "I can't see you."

"We're down here," Hans answered. "They've locked us in the cellar. Speak quietly, or the men may hear you. What are you doing here? Why haven't you gone for help?"

"Otto has gone," Elsa explained. "He hurt his foot, but he has taken the warden's boat. How can I help you?"

"It isn't possible," Hans told her. "They've locked the door and the window has iron bars across it. So we can't escape."

"Where's the warden?" Elsa asked. "Is he in the house?"

"Yes, he's in one of the rooms," Hans told her But he's a prisoner, like us. You must not stay

bilir. Ya da belki adamlardan biri pencere dışında-

Sonra gürültüyü tekrar duydular.

- "Kim var orada?" diye Hans seslendi.
- "Benim, Elsa," diye bir ses cevap verdi. Çocuklar pencerede karanlık bir şekil görebildiler. Bu, Elsa'nın yüzüydü.
- "Neredesiniz?" diye Elsa sordu. "Sizi göremiyorum."
- "Biz burada aşağıdayız," diye cevapladı Hans. "Bizi mahzene kilitlediler. Yavaş konuş, yoksa adamlar seni işitebilir. Burada ne yapıyorsun? Yardım için niye gitmedin?"
- "Otto gitti," diye açıkladı Elsa. "Ayağını incitti ama, korucunun kayığını aldı. Size nasıl yardım edebilirim?"
- "Mümkün değil," dedi Hans ona. "Kapıyı kilitlediler ve pencere üzerinde de demir parmaklıklar var. Bu yüzden kaçamayız."
- "Korucu nerede?" diye Elsa sordu. "Evin içinde mi?"
- "Evet, odaların birinde," dedi Hans ona. "Fakat o da bizim gibi tutuklu. Burada kalmamalısın. Git

here. Go and hide, or they will catch you too."

"The iron bars aren't very thick," Elsa said. "Shall I go and look for a rope? You can tie the rope to the bars and perhaps you can move them."

"All right. Look for a rope," Hans said. "But take care. And don't make any noise."

Elsa returned after a few minutes. "I've found a rope," she said. She tied one end to a bar. Then she threw the rope to the boys. They pulled hard but they could not move the iron bar.

"We can't do it," Hans said: "Now listen to me, Elsa. Take the rope and go back to the forest. Stay there and wait for Otto. Don't come near the house again."

Elsa took the rope but she did not go back to the forest. She stayed near the house, but the boys could not hear her.

"She's gone," Hans said. "I hope that they don't find her."

saklan yoksa seni de yakalayacaklar."

"Demir çubuklar pek kalın değil," dedi Elsa. "Gidip bir ip arayayım mı? İpi çubuklara bağlayabilirsiniz ve onları kıpırdatabilirsiniz belki."

"Peki. Bir ip ara," dedi Hans. "Fakat dikkat et. Ve hiç gürültü yapma."

Elsa birkaç dakika sonra döndü. "Bir ip buldum," dedi. Bir ucunu çubuğa bağladı. Sonra ipi çocuklara attı. Sıkı çektiler, fakat demir çubuğu oynatamadılar.

"Yapamıyoruz," dedi Hans. "Şimdi dinle beni, Elsa. İpi al ve ormana dön. Orada kalıp Otto'yu bekle. Tekrar eve yaklaşma."

Elsa ipi aldı ama ormana dönmedi. Evin yakınında kaldı, fakat çocuklar ónu duyamadılar.

"Gitmiş," dedi Hans. "Onu bulamayacaklarını umarım."

CHAPTER: 10

Elsa wanted to free Hans and Karl. "I must find the warden," she said to herself. "He'll be able to help us. So I must go inside the house."

Elsa walked round the house. She found a small window at the back. She pushed it and it opened. Elsa climbed through the window. Now she was inside the house.

Elsa crept through the dark house. She was afraid but she wanted to find the warden. She saw three doors in front of her. The warden was behind one of the doors.

"I mustn't open the wrong door," she thought.
"The men will wake up and they'll catch me."

Then she saw a key in one of the doors. "They've locked this door," she said to herself, "so the warden is in this room." She turned the key quietly.

BÖLÜM: 10

Elsa, Hans ile Karl'ı serbest bırakmak istiyordu. "Korucuyu bulmalıyım," dedi kendi kendine. "O yardım edebilir bize. Bu yüzden evin içerisine girmeliyim."

Elsa evin çevresinde yürüdü. Geride ufak bir pencere buldu. Onu itti: açıldı. Elsa pencereden içeriye tırmandı. Simdi evin içerisindeydi.

Elsa karanlık evin içine süzüldü. Korkuyordu ama, korucuyu bulmak istiyordu. Önünde üç kapı gördü. Korucu bu kapılardan birinin arkasındaydı.

"Yanlış kapıyı açmamalıyım," diye düşündü. "Adamlar uyanıp beni yakalar."

Sonra kapıların birinde anahtar gördü. "Bu kapıyı kilitlemişler," dedi kendi kendine. "Demek ki orman bekçisi bu odanın içinde." Anahtarı usulca çevirdi.

Then she opened the door and crept into the room.

It was the right room. The warden was there. Elsa closed the door behind her. The warden was on his bed. There were ropes round his hands and feet. There was a cloth across his mouth, so he could not speak.

Elsa untied the cloth round the warden's mouth. But she could not untie the ropes.

"It doesn't matter," the warden said. "But who are you? What are you doing here?"

Elsa told the warden her story. "They've locked the boys in the cellar," she explained. "I want to free them. I want to free you, too."

"You must leave me here," the warden told her. "You can't untie these ropes and you can't cut them. They're very thick. And if I escape, the men will look for me."

[&]quot;Have you a key of the cellar?" Elsa asked.

[&]quot;The men have taken my keys," the warden replied. "But listen. There's a small hut behind the house. There are some old keys in the hut. One of them is the cellar key. Take it and you can free your friends."

Sonra kapıyı açıp odanın içine süzüldü.

Doğru odaydı. Korucu oradaydı. Elsa kapıyı arkasından kapadı. Korucu yatağındaydı. El ve ayaklarında ipler vardı. Ağzında bir bez vardı, bu yüzden konuşamıyordu.

Elsa korucunun ağzına bağlı bezi çözdü. Fakat ipleri çözemedi.

"Zararı yok," dedi korucu. "Fakat siz kimsiniz? Burada ne yapıyorsunuz?"

Elsa korucuya hikâyesini (olanları) anlattı. "Çocukları mahzene kilitlediler," diye açıkladı. "Onları kurtarmak istiyorum. Sizi de kurtarmak istiyorum."

"Beni burada bırakmalısınız," dedi korucu ona. "Bu ipleri çözemez, onları kesemezsiniz. Pek kalındırlar. Hem kaçarsam adamlar beni arayacaktır."

"Mahzen için bir anahtarınız var mı?" diye Elsa sordu.

"Adamlar anahtarlarımı almışlar," diye cevap verdi korucu. "Fakat dinleyin. Evin arkasında küçük bir kulübe var. Kulübede bazı eski anahtarlar bulunuyor. Onlardan biri mahzen anahtarıdır. Onu alın arkadaşlarınızı serbest bırakabilirsiniz." Elsa thanked the warden.

"You must go now," the warden told her...

"Quickly, or the men may wake up. They mustn't catch you here."

Elsa tied the cloth across the warden's face. Then she said goodbye and went out of the room. She locked the door again. She was sorry to leave the warden there.

Elsa climbed out of the small window and went into the garden. She found the hut behind the house. It was dark inside and she could not see well. But at last she found the keys. She ran to the cellar window.

"Hans," she called. "Are you awake?"

The boys were almost asleep. "What do you want?" Hans asked. "Go back to the forest and hide."

"I've got some keys," Elsa said. "One of them may open the cellar door."

"Where did you get them?" Hans asked.

"Don't ask questions now," Elsa answered. "I'm going to throw the keys through the window. Catch them."

Elsa korucuya teşekkür etti.

"Şimdi gitmelisiniz," dedi korucu ona.

"Çabuk, yoksa adamlar uyanabilir. Sizi burada yakalamamalılar."

Elsa bezi korucunun yüzüne bağladı. Sonra hoşçakal dedi ve odadan çıktı. Kapıyı tekrar kilitledi. Korucuyu orada bıraktığı için üzgündü.

Elsa tırmanıp küçük pencereden çıktı ve bahçeye girdi. Evin arkasındaki kulübeyi buldu. İçerisi karanlıktı ve iyi göremiyordu. Fakat sonunda anahtarları buldu. Mahzen penceresine koştu.

"Hans," diye seslendi. "Uyanık mısın?"

Çocuklar neredeyse uykuya dalıyordu. "Ne istiyorsun?" diye Hans sordu. "Ormana dön ve saklan."

"Birkaç anahtar var bende," dedi Elsa. "Onlardan biri mahzen kapısını açabilir."

"Onları nereden aldın?" diye Hans sordu.

"Şimdi soru sorma," diye cevapladı Elsa. "Anahtarları pencereden içeri fırlatacağım. Yakala (tut) onları."

Elsa threw the keys between the bars and they fell on the floor. Hans picked up the keys and crossed to the cellar door. At last, he found the right key and opened the door.

"There's a small window at the back," Elsa told them. "The men are asleep but go quietly."

Hans and Karl went out of the cellar. Hans locked the door behind him. "They'll come in the morning and the cellar will be empty," he said. "They won't be able to understand it."

The boys crept through the house. They found the small window. Elsa was standing outside. Karl climbed through the window. He was thin, so it was easy for him. But it was not easy for Hans, because he was bigger.

"I don't think that I can climb through the window," he said. "I must find a different way."

"We'll pull you," Karl said.

So Hans put his head and arms through the window and Elsa and Karl pulled him. At last, Hans was through the window.

Then they saw a light in the house. One of the men was awake and he was walking through the Elsa anahtarları demirlerin arasından attı ve onlar yere düştü. Hans anahtarları yerden aldı ve mahzen kapısına geçti. Sonunda doğru anahtarı bulup kapıyı açtı.

"Arkada küçük bir pencere var," dedi Elsa onlara. "Adamlar uykuda ama sessizce gidin."

Hans ile Karl mahzenden çıktı. Hans arkasından kapıyı kilitledi. "Sabahleyin gelecekler ve mahzen boş olacak," dedi. "Bunu anlayamayacaklar."

Çocuklar evin içine süzüldüler. Küçük pencereyi buldular. Elsa dışarda duruyordu. Karl tırmanıp pencereden geçti. Zayıftı, bu yüzden onun için kolay oldu. Fakat Hans için kolay olmadı, o daha büyüktü cünkü.

"Tırmanıp pencereden geçebileceğimi sanmıyorum," dedi. "Değişik bir yol bulmalıyım."

"Seni çekeriz," dedi Karl.

Böylece Hans başını ve kollarını pencereden geçirdi, Elsa ile Karl da onu çekti. Sonunda Hans pencereden geçmişti.

Sonra evde bir ışık gördüler. Adamlardan biri uyan-

house. He had a light in his hand.

"Lie down," Hans said quietly, "and don't move. But if the man opens the door, run."

They lay on the ground and waited. At last the light went out and the house was dark again.

"Perhaps he went to the warden's room," Hans said. "But he's gone to bed now."

They got up and crept out of the garden. Then they ran into the forest. They ran a long way from the house.

CHAPTER: 11

It was afternoon when Otto left Elsa. He set off in the warden's boat. He liked the boat because it was light and moved quickly.

"Perhaps I can reach the village before evening," he said to himself. But he had no map and he was not certain.

mış evin içinde yürüyordu. Elinde bir ışık vardı.

"Yere yat," dedi Hans usulca, "ve kıpırdama. Fakat adam kapıyı açarsa eğer, koş."

Yere yatıp beklediler. Sonunda ışık söndü ve ev yine karanlıktı.

"Belki de korucunun odasına gitti," dedi Hans. "Fakat şimdi yattı."

Kalkıp bahçeden dışarıya süzüldüler. Sonra ormanın içine koştular. Evden hayli uzağa koştular.

BÖLÜM: 11

Otto Elsa'dan ayrıldığında öğle sonrasıydı. Korucunun kayığıyla yola çıktı. Hafif olduğu ve çabuk hareket ettiği için kayığı beğendi.

"Belki de akşamdan önce köye varabilirim," dedi kendi kendine. Fakat haritası yoktu ve emin değildi. His foot hurt him and he felt a lot of pain. He put his leg in the cold water. The pain stopped for a time but it came back again.

The sun was already going down. "I'm not going to stop yet," Otto said. He paddled quickly. Then he noticed some rocks in the river. There were a lot of these and the boat almost hit one.

"I'll have to stop soon," Otto thought. "The boat may hit a rock in the dark."

So he found a place and tied the boat up. He had some food but he did not light a fire because he was tired. He put his blanket round him and lay on the ground. He was soon asleep. But he had bad dreams in the night.

In his dream the plane was following him. He was in his boat and the plane was flying over him. He could not escape.

When he woke up, his leg hurt him. The pain was very bad. It was not easy to get up. But he pulled himself into the boat and set off down the river. He had to take care because there were still rocks in the river. It was hard work, but the boat did not hit any rocks.

Ayağı acıyor ve hayli acı duyuyordu. Bacağını soğuk suyun içine koydu. Acı bir süre kesildi, fakat yine başladı.

Güneş alçalmaya başlamıştı bile. "Henüz durmayacağım," dedi Otto. Hızla kürek çekti. Sonra nehirde birkaç kaya gözüne çarptı. Bunlardan bir sürü vardı ve kayık neredeyse birine çarpıyordu.

"Çok geçmeden durmak zorunda kalacağım," diye düşündü Otto. "Kayık karanlıkta bir kayaya çarpabilir."

Böylece bir yer buldu ve sandalı bağladı. Biraz birşeyler yedi, fakat yorgun olduğu için ateş yakmadı. Battaniyesine sarıldı ve yere uzandı. Çok geçmeden uykuya dalmıştı. Fakat geceleyin kötü rüyalar gördü.

Rüyasında uçak onu izliyordu. O kayığındaydı ve uçak üzerinde uçuyordu. Kaçamıyordu.

Uyandığı zaman bacağı acıdı. Sızı pek fenaydı. Kalkmak kolay değildi, fakat kendisini kayığa çekti ve ırmağın aşağısına doğru yola çıktı. Irmakta hâlâ kayalar bulunduğundan dikkat etmesi gerekiyordu. Zor işti, fakat kayık hiçbir kayaya çarpmadı.

After a few miles the river was clear again. But there was no sign of the village. The sun was very hot and Otto felt sick. His head was going round and round, so he lay down in the boat and rested. His boat floated on down the river.

When he opened his eyes, the village was near. He could see all the houses but he could not see any people. He wanted to land now. He put out his hand for the paddle but it was not in the boat.

"I lost it while I was resting," Otto thought. "What shall I do now? I can't see any people and the boat is floating past the village. I can't stop it."

Otto sat up in the boat and shouted. At last a man came out of his house. Otto waved to him and shouted, "Help me. I've lost my paddle and I can't stop the boat."

"Don't be afraid," the man said. "I'll get my boat and follow you."

Otto lay in the boat and waited. He was already past the village. Then the man came in his boat. He tied a rope to Otto's boat and in this way he pulled it to the bank. The man helped Otto to get

Birkaç mil (kilometre) sonra ırmak yine açıktı (temizdi). Fakat köyden eser yoktu. Güneş çok sıcaktı ve Otto hastalandı. Başı dönüyor, dönüyordu. Bu yüzden kayığın içine uzanıp dinlendi. Kayığı ırmaktan aşağıya doğru yüzmeye devam etti.

Gözlerini açtığı zaman köy yakınındaydı. Bütün evleri görüyordu ama, kimseyi göremiyordu. Şimdi yanaşmak istiyordu. Küreğe elini uzattı, fakat kayıkta değildi o.

"Dinlenirken onu kaybettim," diye düşündü Otto. "Şimdi ne yapacağım? Hiç kimseyi göremiyorum ve kayık yüzerek köyü geçiyor. Ben onu durduramıyorum."

Otto kayığın içinde dikilip oturdu ve bağırdı. Sonunda bir adam evinden çıktı. Otto ona el salladı ve bağırdı: "Bana yardım edin. Küreğimi kaybettim ve kayığı durduramıyorum."

"Korkma," dedi adam. "Kayığımı alır seni izlerim."

Otto kayığın içinde yatıp bekledi. Şimdiden köyü geçmişti. Sonra adam (kayığıyla) kayık içinde geldi. Otto'nun sandalına bir ip bağladı ve bu şekilde onu kıyıya çekti. Adam Otto'nun kayıktan inmesine

out of his boat and took him to his house.

"Lie down on the bed," he said. "I'll go and get the doctor."

When the doctor came, he first looked at Otto's foot.

"Does it hurt you very much?" he asked Otto.

Otto wanted to answer the doctor but he could not speak. His head was going round and round. The doctor put his hand on Otto's face.

"This boy is very sick," he said. "He needs a good rest."

The doctor took some medicine from his bag and put it in a glass. Then he made Otto drink the medicine.

"The boy will sleep now," he said to the man. "Call me when he wakes up."

yardım etti ve onu evine götürdü.

"Yatağa uzan," dedi. "Gidip doktoru getireyim."

Doktor geldiği zaman önce Otto'nun ayağına bak-

"Pek çok acıyor mu?' diye Otto'ya sordu.

Otto doktora cevap vermek istedi ama konuşamadı. Başı dönüyor, dönüyordu. Doktor elini Otto'nun yüzüne koydu.

"Bu çocuk çok hasta," dedi. "İyi bir dinlenmeye ihtiyacı var."

Doktor çantasından bir miktar ilaç alıp onu bir bardağa koydu. Sonra Otto'ya ilacı içirdi.

"Çocuk şimdi uyuyacak," dedi adama. "Uyanınca beni çağırın."

CHAPTER: 12

Hans, Karl and Elsa spent the night in the forest. They could not sleep because it was cold. At last the sun came up.

"The men will soon know that we are not in the cellar," Hans said. "Perhaps they will look for us. We must take care."

"What happened to our boat?" Karl asked Elsa.

"Two men came and carried it to the house," Elsa replied. "They took our bags and blankets too. But first I took my bag and hid it in the bushes. It's near the boat."

"Then we must go and get it," Hans said.

They made their way through the forest. It was still early but they took a lot of care. But there was no sign of the men. At last they reached the river and

BÖLÜM: 12

Hans, Karl ve Elsa geceyi ormanda geçirdi. Soğuk olduğu için uyuyamadılar. Sonunda güneş yükseldi.

"Adamlar yakında mahzende bulunmadığımızı öğrenecekler," dedi Hans. "Bizi arayacaklar belki. Dikkat etmeliyiz."

"Kayığımıza ne oldu?" diye Karl, Elsa'ya sordu.

"İki adam gelip onu eve taşıdı," diye cevapladı Elsa. "Çantalarımızı ve battaniyelerimizi de aldılar. Fakat ben önce torbamı alıp çalıların içine sakladım. Sandalın yakınındadır."

"Öyleyse gidip onu alalım," dedi Hans.

Ormandan geçtiler. Hâlâ erkendi ama çok dikkat ettiler. Fakat adamlardan iz yoktu. Sonunda ırmağa

they could see the motor boat.

"Where did you put the bag?" Hans asked Elsa. "Show me and I'll get it."

"In those bushes over there," Elsa answered. She pointed to some big bushes near the bank. "Let me go. I know the place."

"No, I'll go," Hans told her. "You stay here."

"Wait," Karl said. "I think that there's a man on the boat."

Karl was right. They could see a man on the boat. He was cleaning it.

"We'll have to wait," Hans said. "The man won't stay there all day. When he goes, I'll run and get the bag."

The man worked for an hour. After that, he sat on the bank and rested. He was not far from the children. Then, a second man came from the house. He was running down the path.

"Those boys have escaped from the cellar," he shouted. "We must go and look for them."

"They can't go far," the first man answered. He got up. "There isn't a way through the forest and

ulaştılar ve motoru görebiliyorlardı.

"Torbayı nereye koydun?" diye Hans, Elsa'ya sordu. "Göster bana, alayım."

"Oradaki çalıların içinde," diye cevapladı Elsa. Kıyı yakınındaki bazı büyük çalıları işaret etti. "Ben gideyim. Yerini biliyorum."

"Hayır, ben gideceğim," dedi Hans ona. "Sen burada kal."

"Bekle," dedi Karl. "Teknede bir adam var, sanırım."

Karl haklıydı. Teknede bir adam görebiliyorlardı. Onu temizliyordu.

"Beklemek zorunda kalacağız," dedi Hans, "adam tüm gün kalmayacak orada. Gittiği zaman koşar çantayı alırım."

Adam bir saat çalıştı. Ondan sonra kıyıda oturup dinlendi. Çocuklardan uzakta değildi. Sonra bir ikinci adam evden geldi. Patikadan aşağıya koşuyordu.

"O çocuklar mahzenden kaçmışlar," diye bağırdı. "Gidip aramalıyız onları."

"Uzağa gidemezler," diye birinci adam cevap verdi. Ayağa kalktı. "Orman içinden geçen bir yol yok, they haven't any shoes."

"Where does this path go?" the second man asked, pointing down the river.

"Oh, only a few miles along the river bank," the first man replied. "Perhaps they have followed it. We can go and see. But don't be afraid. They can't escape. The nearest village is twenty-five miles from here."

Then he ran to the bushes and got the bag of food. Then they went back into the forest. They found a place among some bushes and ate their food. At noon the plane came again. It flew over the trees, but they could not see it. After that the plane flew off and the forest was quiet again.

CHAPTER: 13

Otto drank the medicine and he slept all day. When he woke up it was evening. He could hear the noise of a storm outside. It was raining hard and there hem ayakkabıları da yok."

"Bu patika nereye gider?" diye ikinci adam ırmağın aşağısını işaret ederek sordu.

"O, ırmak kıyısı boyunca yalnızca birkaç kilometre," diye birinci adam cevapladı. "Onu izlemişlerdir belki. Gidip görebiliriz. Fakat korkma. Kaçamazlar. En yakın köy buradan yirmi beş mil (kırk kilometre)dir."

Iki adam patikadan aşağıya yola koyuldular. Hans bekledi. Sonra çalılara koştu ve yiyecek torbasını aldı. Sonra ormana döndüler. Bazı çalılıkların arasında bir yer bulup yiyeceklerini yediler. Öğleyin uçak yine geldi. Ağaçların üzerinde uçtu, fakat onu göremediler. Bundan sonra uçak uçup gitti; orman yine sessizdi.

BÖLÜM: 13

Otto ilacı içti ve tüm gün uyudu. Uyandığında akşamdı. Dışarıda bir firtinanın gürültüsünü işitebili-

was a strong wind.

"Where am I?" Otto asked himself. He had a little pain in his foot but he did not feel sick. "What am I doing in this room?" Then he remembered. His friends were prisoners in the forest and they needed help.

Otto shouted and the man came into the room. He put on the light.

"Ah, you're awake now," he said. "How do you feel? You were very sick this morning, so the doctor gave you some medicine."

But Otto was not listening.

"Is there a policeman in the village?" he asked. "I must speak to him. My friends are prisoners in the forest."

"I'll bring the policeman," the man said. "And the doctor. He's an important man in the village and he'll be able to help."

"Please be quick," Otto begged him.

The man came back soon. The policeman and the doctor were with him. They took off their wet coats and sat near Otto's bed.

"Tell us your story then," the doctor said.

yordu. Şiddetli yağmur yağıyordu ve kuvvetli bir rüzgâr vardı.

"Neredeyim?" diye kendi kendine sordu Otto. Ayağında biraz acı vardı ama, hasta değildi. "Bu odada ne yapıyorum?" Sonra hatırladı. Arkadaşları ormanda tutukluydu ve yardıma ihtiyaçları vardı.

Otto bağırdı ve adam odaya girdi. Işığı yaktı.

"A, demek uyanıksın şimdi," dedi. "Nasıl hissediyorsun kendini? Bu sabah çok hastaydın, bu yüzden doktor sana biraz ilaç verdi."

Fakat Otto dinlemiyordu.

"Köyde polis var mı?" diye sordu. "Onunla konuşmalıyım. Arkadaşlarım ormanda tutukludur."

"Polisi getireyim," dedi adam. "Ve doktoru da. Köyde önemli bir kişidir ve yardımı dokunabilir."

"Lütfen, çabuk olun," diye Otto ona rica etti.

Adam çok geçmeden geri döndü. Polis ile doktor beraberindeydi. Islak paltolarını çıkarıp Otto'nun yatağı yanına oturdular.

"Öyleyse, anlat hikâyeni bize," dedi doktor.

Otto spoke for a long time. He told them about the journey down the river. He told them about the plane and the men in the warden's house.

"My friends are prisoners," Otto said. "Perhaps Elsa is a prisoner too. How can we save them?"

The doctor asked Otto some questions. Then he turned to the policeman. "We must telephone the town and get help," he said.

"We can't telephone," the policeman answered. "The storm has broken the telephone line. They won't mend the line before tomorrow."

"We can't wait," the doctor said. "We must go ourselves when the storm stops. I have a motor boat and there are good men in the village."

Otto was listening. "I want to come too," he said. "Don't leave me here. I can show you the place."

"Does your foot still hurt you?" the doctor asked. He looked at Otto's foot. "Yes, you can come with us. But you must stay in the boat. Your foot is still bad and you won't be able to walk."

Otto uzun bir süre konuştu. Irmağın aşağısına doğru yapılan yolculuğu anlattı onlara. Onlara uçağı ve korucunun evindeki adamları anlattı.

"Arkadaşlarım tutukludur," dedi Otto. "Belki Elsa da tutukludur. Onları nasıl kurtarabiliriz?"

Doktor Otto'ya bazı sorular sordu. Sonra polise döndü. "Kasabaya telefon edip yardım almalıyız," dedi.

"Telefon edemeyiz," diye cevapladı polis. "Fırtına telefon hattını kopardı. Yarından önce hattı onarmazlar."

"Bekleyemeyiz," dedi doktor. "Fırtına durduğu zaman biz kendimiz gitmeliyiz. Bir motorum var ve köyde de iyi adamlar var."

Otto dinliyordu. "Ben de gelmek istiyorum," dedi. "Beni burada bırakmayın. Yeri size gösterebilirim."

"Ayağın hâlâ acıyor mu?" diye doktor sordu. Otto'nun ayağına baktı. "Evet, bizimle birlikte gelebilirsin. Fakat teknede kalmalısın. Ayağın hâlâ kötü ve yürüyemezsin."

After that the doctor gave Otto some medicine. Then the men left him. The policeman went into the village. He was looking for help. He went to many houses and at last he found four men. They were ready to come with him.

The doctor went to his boat. He worked there and soon the boat was ready. The policeman and his men also came to the boat. But the storm continued and they had to wait.

At last, the storm stopped.

"We can leave now," the doctor said. "We'll reach the place in the morning. Will two of you go and bring Otto here?"

The policeman and one of his men brought Otto from the house. Then they all got on the boat.

The boat moved up the river. It was still dark, but there was a big light on the boat. It shone on the water. When the light shone, they could see the river.

"There are some big rocks in the river," Otto said to the doctor.

"I know the river well," the doctor said. "But we'll take care."

Bundan sonra doktor Otto'ya biraz ilaç verdi. Sonra adamlar yanından ayrıldılar. Polis köye gitti. Yardım arıyordu. Birçok eve gitti ve sonunda dört adam buldu. Onunla birlikte gelmeye hazırdılar.

Doktor teknesine gitti. Orada çalıştı ve çok geçmeden tekne hazırdı. Polis ve adamları da tekneye geldiler. Fakat fırtına devam ediyordu ve beklemek zorunda kaldılar.

Sonunda firtina durdu.

"Şimdi hareket edebiliriz," dedi doktor. "O yere sabahleyin ulaşacağız. İkiniz gidip Otto'yu buraya getirir misiniz?"

Polisle adamlarından biri Otto'yu evden getirdi. Sonra onların hepsi tekneye bindi.

Tekne ırmağın yukarısına doğru gitti. Hâlâ karanlıktı ama teknede koca bir ışık vardı. Su üzerinde parlıyordu. Işık parlayınca ırmağı görebiliyorlardı.

Otto, doktora, "Irmakta birkaç kocaman kaya var," dedi.

"Irmağı iyi bilirim," dedi doktor. "Fakat dikkat edeceğiz."

Otto was happy now. He was bringing help to his friends.

CHAPTER: 14

The two boys and Elsa were still in the forest. They did not go near the house and they did not see the men again. It was a warm day and they were tired, so they slept.

It was dark when Hans woke up. "Has Otto reached the village yet?" he asked himself. "If he's already there, he will soon bring help. They may come in the morning."

Then the storm began. Karl and Elsa woke up too. They were all hungry, so they ate some food. For a time they were dry under the bushes, but then the rain came through the leaves. At last the storm stopped. "We can't sleep here," Hans said. "The ground is wet now."

Otto şimdi mutluydu. Arkadaşlarına yardım getiriyordu.

BÖLÜM: 14

İki çocukla Elsa hâlâ ormandaydı. Eve yaklaşmadılar ve adamları tekrar görmediler. Ilık bir gündü ve yorgundular; böylece uyudular.

Hans uyandığı zaman karanlıktı. "Otto köye vardı mı şimdi?" diye kendi kendine sordu. "Eğer şimdiden oradaysa, yakında yardım getirir. Sabahleyin gelebilirler."

Sonra fırtına başladı. Karl ile Elsa da uyandı. Hepsi acıkmıştı, bu yüzden birşeyler yediler. Bir süre çalıların altında kuruydular, fakat sonra yağmur yaprakların arasından girdi. Sonunda fırtına durdu. "Burada uyuyamayız," dedi Hans. "Yer ıslak şimdi."

"Can't we go down the river bank?" Elsa asked. "We can follow that path. If a boat comes, we'll see it."

"That's a good idea," Hans said. "But we must watch the river or we may miss the boat."

They went past the field. They wanted to have a look at the house. A light was still burning there. Then they went to the river. They found the path and followed it. It went along the bank of the river. But it was not a good path. There were thick bushes across it. They watched the river, but there was no sign of a boat.

At last they reached the end of the path and they had to stop. But there was a big tree near the river bank and it was dry there.

"We've come about four miles," Hans said. "It's late now and the men in the house are asleep. Look under the trees and find some dry wood. Then we can light a fire."

At last they found enough wood and they lit a fire.

"I'll watch while you rest," Hans said. "Then I'll wake Karl and he can watch."

So Elsa and Karl lay down near the fire and slept.

"Irmak kıyısından aşağıya inemez miyiz?" diye Elsa sordu. "Patikayı izleyebiliriz. Eğer bir kayık gelirse onu görürüz."

"Bu iyi bir fikir," dedi Hans. "Fakat ırmağı gözetlemeliyiz, yoksa kayığı kaçırabiliriz."

Tarlayı geçip gittiler. Eve bir göz atmak istediler. Orada hâlâ bir ışık yanıyordu. Ondan sonra ırmağa gittiler. Patikayı bulup onu izlediler. Irmak kıyısı boyunca gidiyordu. Fakat iyi bir patika değildi. Üzerinde sık çalılıklar vardı. Irmağı gözetlediler, fakat kayıktan eser yoktu.

Sonunda patikanın ucuna ulaştılar ve durmak zorunda kaldılar. Fakat ırmak kıyısı yakınında koca bir ağaç vardı ve orası kuruydu.

"Dört mil (altı kilometre) kadar geldik," dedi Hans. "Şimdi geç oldu ve evdeki adamlar uykudalar. Ağaçların altına bakın ve kuru odun bulun biraz. O zaman bir ateş yakabiliriz."

Sonunda yeterince odun buldular ve bir ateş yaktılar.

"Siz dinlenirken, ben gözetleyeceğim," dedi Hans. "Sonra Karl'ı uyandırırım ve o gözetleyebilir."

Böylece Elsa ile Karl ateşin yanına uzanıp uyudu.

Hans watched the river. He got some wood and put it on the fire. Then he woke Karl.

"Is there any sign of the boat?" Karl asked.

"Not yet," Hans told him. "But it's almost morning. Perhaps the boat will come then."

Karl watched but still the boat did not come. He was tired but he did not wake Elsa. At last he heard a noise. It was the noise of an engine. A boat was coming up the river.

Karl ran and woke Hans: Elsa woke up too. They stood on the river bank and waited. The boat was very near now. Then they saw the light from the boat. It was shining on the water.

"They've come," Hans said. "He shouted to the men in the boat. The doctor stopped the boat and turned the light on the bank.

Otto could see his friends on the bank. "They're my friends," he said to the doctor. He called to them.

The doctor brought the boat near the bank and he and the policeman landed.

"We escaped from the cellar," Hans explained.

Hans ırmağı gözetledi. Biraz odun alıp ateşe koydu. Sonra Karl'ı uyandırdı.

"Kayıktan eser var mı?" diye Karl sordu.

"Henüz değil," dedi Hans ona. "Fakat neredeyse sabah oluyor. Belki kayık o zaman gelecek."

Karl gözetledi, fakat kayık hâlâ gelmedi. Yorgundu ama, Elsa'yı uyandırmadı. Sonunda bir gürültü işitti. Motor gürültüsüydü. Irmaktan yukarı bir tekne çıkıyordu.

Karl koştu ve Hans'ı uyandırdı. Elsa da uyandı. Nehir kıyısında durdular ve beklediler. Tekne şimdi çok yakındaydı. Sonra tekneden büyük ışığı gördüler. Suyun üzerinde parlıyordu.

"Geldiler," dedi Hans. Teknedeki adamlara bağırdı. Doktor tekneyi durdurdu ve ışığı kıyıya çevirdi.

Otto kıyıdaki arkadaşlarını görebiliyordu. "Onlar arkadaşlarımdır," dedi doktora. Onlara seslendi.

Doktor tekneyi kıyıya yaklaştırdı ve onunla polis karaya çıktı.

"Mahzenden kaçtık," diye Hans açıkladı. "Fa-

"But the men are still in the house and the warden is their prisoner."

"I'm glad that you are here," the doctor said. "It will be easy now because you are not in the house."

"Don't forget the warden," Hans said "These men are bad and they may hurt him."

"That's true," the doctor said. "But I have a good plan. Come on the boat and I'll tell you about it."

They followed the doctor into the boat. Then the doctor told them his plan.

CHAPTER: 15

The doctor explained his plan. "The men are in the house now and they're asleep," he said. "We can go to the house but we can't get in because they've locked the doors. And the warden is their prisoner."

kat adamlar hâlâ evde ve korucu da onların tutuklusu."

"Burada bulunuşunuza sevindim," dedi doktor. "Evde olmadığınız için iş kolaylaşacak şimdi."

"Korucuyu unutmayın," dedi Hans. "Bu adamlar kötüdürler ve onun canını vakabilirler."

"Bu doğru," dedi doktor. "Fakat iyi bir planım var. Tekneye gelin size anlatayım onu."

Doktoru kayığa kadar izlediler. O zaman doktor onlara planını anlattı.

BÖLÜM: 15

Doktor planını açıkladı. "Adamlar şimdi evdedir ve uyuyordurlar," dedi. "Eve gidebiliriz ama, kapıları kilitledikleri için içeri giremeyiz. Ve korucu da onların tutuklusudur."

- "Are there a lot of men in the house?" the policeman asked.
- "There are four or five," Hans told him. "I'm not certain."
- "There are seven of us," the doctor said. "You and Karl can help us too. That is part of my plan. We can't get into the house, so the men must come out."
- "But they won't come out," Hans said. "When they see you, they'll stay in the house."
- "They won't see us" the doctor explained. "They'll see you and Karl. They want to catch you again, so they will come out of the house."
- "I understand now," Hans said. "Karl and I must go near the house."
- "That's the idea," the doctor said. "You must go near the house and make a noise. Shout. Say that you're hungry. The men will see you and they'll come out of the house."
- "What shall we do then?" Hans asked.
- "Wait there," the doctor said. "They'll come to you. Then run. Run to the forest and they will follow you. Two of us will wait in the forest; the men will

- "Evde çok adam var mı?" diye polis sordu.
- "Dört veya beş var," dedi Hans ona. "Emin değilim."
- "Biz yedi kişiyiz," dedi doktor. "Sen ve Karl da bize yardım edebilirsiniz. Bu planımın bir bölümüdür. Eve giremeyiz, bu yüzden adamlar dışarı çıkmalıdır."
- "Fakat dışarı çıkmayacaklardır," dedi Hans. "Sizi görünce evin içinde kalacaklardır."
- "Bizi görmeyecekler," diye doktor açıkladı. "Seninle Karl'ı görecekler. Sizi tekrar yakalamak isteyecekler, böylece evden dışarı çıkacaklar."
- "Şimdi anlıyorum," dedi Hans. "Karl ile ben evin yakınına gitmeliyiz."
- "Fikir bu," dedi doktor. "Evin yakınına gitmeli ve gürültü yapmalısınız. Bağırın. Aç olduğunuzu söyleyin. Adamlar sizi görecek ve evden dışarı çıkacaklardır."
- "O zaman ne yapacağız biz?" diye Hans sordu.
- "Orada bekleyin," dedi doktor. "Onlar size gelecektir. Sonra koşun. Ormana koşun ve sizi izleyeceklerdir. Bizim ikimiz ormanda bekleyecek. Adamlar yo-

be tired and we'll catch them."

"Then we must take the leader," the doctor continued. "One or two men will still be with him. But that part will be easy. I'll wait behind the house. The men will follow you acros the field. They won't close the door behind them. Then we'll go into the house."

"It's a good plan," Hans said.

"But we mustn't make any mistakes," the doctor told them.

After that the doctor took the boat up the river. Then he found a good place and stopped the boat.

"We'll leave the boat here," he said. "Two men will stay on the boat. Otto, you must stay here too. Your foot is still bad and you can't move quickly. Elsa, you must stay with Otto."

"But what shall we do here?" Elsa asked.

"Watch the river," the doctor said. "You have work to do. One of the men may escape. You must stop him."

After that the doctor and his men left the boat.

rulacak ve biz de onları yakalayacağız."

"Sonra elebaşını ele geçirmeliyiz," diye doktor devam etti. "Bir veya iki adam hâlâ beraberinde olacaktır. Ama bu kısım kolay olacak. Ben evin arkasında bekleyeceğim. Adamlar sizi izleyip çayırı geçecektir. Kapıyı arkalarından kapamayacaklar. Ondan sonra biz içeri gireceğiz."

"İyi bir plan," dedi Hans.

"Ama hiç hata yapmamalıyız," dedi doktor onlara.

Bundan sonra doktor tekneyi ırmağın yukarısına götürdü. Sonra iyi bir yer buldu ve tekneyi durdurdu.

"Tekneyi burada bırakacağız," dedi. "İki kişi teknede kalacak. Otto, sen de burada kalmalısın. Ayağın hâlâ kötü ve çabuk hareket edemiyorsun. Elsa, sen de Otto ile kalmalısın."

"Fakat biz burada ne yapacağız?" diye Elsa sordu.

"Irmağı gözetleyin," dedi doktor. "Yapılacak işiniz var. Adamlardan biri kaçabilir. Onu durdurmalısınız."

Bundan sonra doktorla adamları tekneden ayrıldı.

Hans led them through the forest. At last, they reached the field. It was light now and they could see the house.

Hans showed them the path. "This goes to the river," he said. "I'll lead them along this path. There are trees and bushes on both sides and you can wait behind them."

"I'll do that," the policeman said. "I'll need one big man. It will be easy to stop the men. They'll be tired because they are running."

"Good," the doctor said. "I'll take my two men behind the house. I can see a little hut in the garden. We'll wait there. Now our plan is complete. Those men will soon be our prisoners."

CHAPTER: 16

The policeman went with one man and hid behind some trees. They were near the path.

Hans onlara ormanın içinde öncülük etti. Sonunda çayıra ulaştılar. Şimdi aydınlıktı ve evi görebiliyorlardı.

Hans onlara patikayı gösterdi. "Bu ırmağa çıkar," dedi. "Onları bu patika boyunca götüreceğim. Her iki yanda da ağaçlar ve çalılar var, onların gerisinde bekleyebilirsiniz."

"Ben onu yaparım," dedi polis. "İriyarı bir tane adama ihtiyacım olacak. Adamları durdurmak kolay olacak. Koştukları için yorgun olacaklar."

"İyi," dedi doktor. "İki adamımı evin gerisine götüreceğim. Bahçede küçük bir kulübe görebiliyorum. Orada bekleyeceğiz. Şimdi planımız tamamdır. Bu adamlar yakında tutuklumuz olacaklar."

BÖLÜM: 16

Polis bir tane adamla gidip birkaç ağacın arkasına saklandı. Patikanın yakınındaydılar.

"I'll go now," the doctor said to Hans and Karl. "Wait here for fifteen minutes. Then go into the field and make a noise."

The doctor went with his men. They crept round the field and hid near the hut. Smoke was now coming from the house. The men inside were awake.

"It's time now," Hans said. He and Karl got up and walked to the middle of the field. They were quite near the house.

"Are you ready?" Hans asked.

"Yes, I'm ready," Karl said.

Then the both boys shouted. Soon a man came out of the house. He looked across the field and saw the boys.

"Give us food," Hans shouted. "We're hungry. Give us food.

A second man came out of the house. Then the fat man appeared too. "It's those boys," the first man told him. "They're asking for food."

The fat man laughed. "Go and catch them," he ordered. "Bring them here. Quickly."

The fat man went into the house again. The two

"Şimdi gidiyorum," dedi doktor Hans ve Karl'a. "Burada on beş dakika bekleyin. Ondan sonra çayıra girip gürültü yapın."

Doktor adamlarıyla gitti. Çayırın çevresinden süzülüp kulübe yakınında saklandılar. Şimdi evden duman geliyordu. İçerdeki adamlar uyanıktı.

"Şimdi vakittir," dedi Hans. O ve Karl ayağa kalktılar ve çayırın ortasına yürüdüler. Evin iyice yakınındaydılar.

"Hazır mısın?" diye Hans sordu.

"Evet, hazırım," dedi Karl.

Sonra her iki çocuk da bağırdı. Çok geçmeden bir adam evden çıktı. Çayıra baktı ve çocukları gördü.

"Bize yiyecek verin," diye Hans bağırdı. "Açız. Bize yiyecek verin."

Bir ikinci adam evden çıktı. Sonra şişman adam da göründü. "İşte o çocuklar," dedi birinci adam ona. "Yiyecek istiyorlar."

Şişman adam güldü. "Gidip onları yakalayın," diye emretti. "Onları buraya getirin. Çabuk."

Şişman adam tekrar eve girdi. İki adam çayıra koş-

men ran into the field. Hans and Karl did not move. The two men were very near. Then the boys turned and ran. They ran back to the forest and the men followed them.

"Stop," one of the men shouted. "We won't hurt you."

The boys ran slowly but they did not stop. They were in the forest now and were running along the path. The men were behind them. They were already tired but they still followed the boys.

The policeman and his man were waiting. They jumped on the two men and pushed them to the ground. The men were very surprised. They did not fight.

"We've done our part," the policeman said. "What's happened in the house? Go and see."

Hans ran to the field and looked. The doctor was standing outside the house. He waved to Hans. "Come to the house," he shouted. Hans told the policeman and they took their prisoners to the house.

"It was easy," the doctor said. "But the fat man has escaped. We couldn't follow him because we were fighting with these men. We must follow him tu. Hans ile Karl kımıldamadı. İki adam pek yakındaydı. O zaman çocuklar dönüp koştular. Koşarak ormana döndüler. Adamlar onları izlediler.

Adamlardan biri, "Durun," diye bağırdı. "Canınızı yakmayacağız."

Çocuklar yavaş koştular fakat durmadılar. Şimdi ormandaydılar ve patika boyunca koşuyorlardı. Adamlar arkalarındaydı. Şimdiden yorulmuşlardı ama hâlâ çocukları izliyorlardı.

Polisle adamı bekliyordu. İki adamın üzerine atılıp yere yıktılar onları. Adamlar çok şaşırmıştı. Dövüşmediler.

"Bize düşeni yaptık," dedi polis. "Evde ne oldu? Git, bak."

Hans çayıra koştu ve baktı. Doktor evin dışında duruyordu. Hans'a el salladı. "Eve gelin," diye bağırdı. Hans polise söyledi ve onlar tutuklularını eve götürdüler.

"Kolay oldu," dedi doktor. "Fakat şişman adam kaçmış. Bu adamlarla dövüştüğümüz için onu izle-

now. He may take the boat."

"Let him go," Hans said. "He can't escape."

"But he may go up the river," the doctor said.

Hans and Karl laughed. "He'll have a surpise if he does that," Hans said. "There's a tree across the river. He can't go past that. He must stop and come back. Then our men will catch him."

Hans was right. The fat man took the boat and went up the river. But the tree stopped him and he had to come back. The doctor's boat was waiting down the river. The men in it stopped the fat man's boat. They caught him and brought him to the house. Elsa and Otto came too.

The fat man had a bag with him. There were some small boxes in the bag. In every box there were some diamonds.

"So these men were smugglers," the doctor said. "They were bringing diamonds into the country. They cost a lot of money here. The smugglers can sell them and make money. But there are only a few diamonds. I don't understand it."

yemedik. Şimdi onu izlemeliyiz. Tekneyi alabilir."

"Bırakın gitsin," dedi Hans. "Kaçamaz."

"Fakat ırmağın yukarısına doğru gidebilir," dedi doktor.

Hans ile Karl güldü. "O işi yaparsa bir sürpriz bekliyor onu," dedi Hans. "Irmağın üzerinde bir ağaç var. Onu geçip gidemez. Durup geri dönmelidir. O zaman adamlarımız onu yakalayacaktır."

Hans haklıydı. Şişman adam tekneyi alıp ırmaktan yukarı gitti. Fakat ağaç onu durdurdu ve geri dönmek zorunda kaldı. Doktorun teknesi ırmağın aşağısında bekliyordu. İçindeki adamlar şişman adamın teknesini durdurdular. Onu yakalayıp eve getirdiler. Elsa ile Otto da geldi.

Şişman adamın beraberinde bir çanta vardı. Çantanın içinde ufak kutular vardı. Her kutuda birkaç elmas vardı.

"Bu adamlar kaçakçı," dedi doktor. "Ülkeye elmas sokuyorlardı. Onlar burada çok para eder. Kaçakçılar onları satıp para kazanabilirler. Fakat birkaç elmas var yalnızca. Anlamıyorum."

The policeman searched the fat man. He searched the house too but he could not find any diamonds. Then he put his prisoners in the cellar. He locked the door and left two men outside.

CHAPTER: 17

The boys wanted to see the warden.

"He's resting," the doctor explained. "When we found him, he was not strong. We cut his ropes but he could not get up. We have given him a hot drink and some food. We can talk to him when he wakes up."

The boys and Elsa had some food too. Then they sat by the fire and waited. After two hours the doctor called them.

"The warden is awake now," he said. "He's going to tell us his story."

Polis şişman adamı aradı. Evi de aradı, fakat hiç elmas bulamadı. Ondan sonra tutuklularını mahzene koydu. Kapıyı kilitledi ve dışarda iki adam bıraktı.

BÖLÜM: 17

Çocuklar korucuyu görmek istediler.

"Dinleniyor," diye doktor açıkladı. "Onu bulduğumuzda kuvvetli değildi. İplerini kestik ama, ayağa kalkamadı. Ona sıcak içecek ve biraz yiyecek verdik. Uyandığı zaman onunla konuşabiliriz."

Çocuklarla Elsa da bir şeyler yedi. Ondan sonra ateşin yanına oturup beklediler. İki saat sonra doktor onlara seslendi.

"Korucu şimdi uyanık," dedi. "Bize hikâyesini anlatacak."

They all went into the warden's room and the warden began his story.

"I can't tell you much," he said, "but perhaps it will help. A month ago two men came. They came in a motor boat. 'We have a friend' one of them said. 'He's an important man and he's rich. He wants to have a holiday in the forest. He needs your house. He'll pay you well for it.' I didn't like the men, so I said: 'I'm sorry. Your friend may be important but he can't have my house. I don't want his money.' After that the two men went off and I did not see them again. I forgot about the matter."

"But a week ago," the warden continued, "the motor boat came back. There were five men in it. One of them was the fat man. He was their leader. They came to my house. 'I must have your house,' he told me. He spoke quietly but I did not like him. 'I need it for a week,' he said. 'You can go into the forest and work. But don't come near the house. I'll pay you well.' The fat man took some money from his pocket and threw it on the table. 'I've already told your men.' I replied. 'You can't have my house.' The fat man was very angry. He picked

Hepsi birden korucunun odasına girdi ve korucu hikâyesine başladı.

"Size fazla anlatamayacağım," dedi. "Fakat belki yardımı dokunur. Bir ay önce iki adam geldi. Bir motorla geldiler. "Bir arkadaşımız var," dedi onlardan biri. "Önemli bir kişidir ve zengindir. Ormanda tatil yapmak istiyor. Evinize ihtiyacı var. Bunun için size iyi para verecek." Adamları beğenmemiştim, bu yüzden: "Özür dilerim. Sizin arkadaşınız önemli biri olabilir ama evimi alamaz. Parasını istemiyorum," dedim. Ondan sonra iki adam uzaklaşıp gitti ve onları tekrar görmedim. Konuyu unuttum."

"Fakat bir hafta önce," diye korucu devam etti, "motor geri döndü. İçinde beş adam vardı. Onlardan biri şişman adamdı. Onların elebaşısıydı. Evime geldiler. 'Evini almam gerekiyor,' dedi bana. Sakin konuştu, fakat ondan hoşlanmadım. 'Bana bir hafta gerekli,' dedi. 'Ormana gidip çalışabilirsin. Fakat evin yanına sokulma. Sana iyi para vereceğim.' Şişman adam cebinden bir miktar para alıp masa üstüne fırlattı. 'Adamlarınıza zaten söylemiştim,' diye cevap verdim. 'Evimi alamazsınız.' Şişman adam

up the money and put it in his pocket."

The warden continued with his story. "The fat man did not go. He turned to his men. Lock him in one of the rooms, he ordered. Two of his men took me to my room. They tied my hands and legs and they left me on the bed. Then they locked the door. Every day they gave me some food but not much. Every day a plane came. I heard the noise of the engine. It came at noon. It flew over the house but did not land."

"Yes, we know about that," the doctor said. "These boys saw the plane. Then the men caught them and brought them to the house."

"I remember that day," the warden said. "That morning I untied my ropes. But the men did not notice it. I wanted to escape but I could not open the door. Then I heard voices. They were not the voices of these men. So I ran to the door and shouted. I hit the door hard and made a noise. But the men came and tied me up again."

"But we knew that you were a prisoner" Hans said. "We couldn't help you. They locked us in the cellar.

çok kızdı. Parayı aldı cebine koydu."

Orman bekçisi hikâyesine devam etti. "Şişman adam gitmedi. Adamlarına döndü. 'Onu odalardan birine kilitleyin,' emrini verdi. Adamlarından ikisi beni odama götürdü. Ellerimi, kollarımı bağladılar ve beni yatağın üstünde bıraktılar. Sonra kapıyı kilitlediler. Her gün gelip biraz, fakat fazla değil, yiyecek verdiler. Her gün bir uçak geldi. Motorun gürültüsünü işittim. Öğleyin geldi. Evin üstünde uçtu ama konmadı.''

"Evet, bunu biliyoruz," dedi doktor. "Bu çocuklar uçağı görmüş. Sonra adamlar onları yakalayıp eve getirmiş."

"O günü hatırlıyorum," dedi korucu. "O sabah iplerimi çözdüm. Fakat adamlar farkına varmadı. Kaçmak istedim ama, kapıyı açamadım. Ondan sonra sesler duydum. Adamların sesleri değildi. Bu yüzden kapıya koşup bağırdım. Kapıya sertçe vurdum ve gürültü yaptım. Fakat adamlar gelip beni tekrar bağladılar."

"Fakat sizin tutuklu olduğunuzu anladık biz," dedi Hans. "Size yardım edemedik. Bizi mahzene kilitBut you saved us because you told Elsa about the key."

"So the story is complete," the doctor said. "We've caught the smugglers and we have the diamonds."

"But is the story complete?" Hans asked. He turned to the warden. "When did these men come here?"

"They came on Friday," the warden answered.

"Today is Friday," Hans said. "The men came here a week ago. This is the seventh day."

"I don't understand," the doctor said.

"The fat man wanted the house for a week." Hans explained. "Today is the last day. So the plane will come again. This may be the important day. Perhaps the pilot will bring a lot of diamonds."

"I think that you are right, Hans," the doctor said. "Their plan is clear to me now. Every day the pilot leaves the airfield. He keeps his plane there. When he leaves, he has a few diamonds. Perhaps the men at the airfield search him. But they don't find the diamonds because he has only a few. They search

lediler. Fakat Elsa'ya anahtardan söz ettiğiniz için bizi kurtardınız."

"Böylece hikâye tamam," dedi doktor. "Kaçakçıları yakaladık ve elmaslara sahip olduk."

"Fakat hikâye tamam mı?" diye Hans sordu. Orman bekçisine döndü. "Bu adamlar buraya ne zaman geldiler?"

"Cuma günü geldiler," diye korucu cevap verdi.

"Bugün cuma," dedi Hans. "Adamlar buraya bir hafta önce geldiler. Bu yedinci gündür."

"Anlamıyorum," dedi doktor.

"Şişman adam evi bir haftalığına istemiş" diye Hans açıkladı. "Bugün sonuncu gündür. Demek ki uçak tekrar gelecek. Bu, önemli bir gün olabilir. Belki de pilot bir sürü elmas getirecektir."

"Haklısın sanırım, Hans," dedi doktor. "Şimdi planları açık seçik bence. Her gün pilot hava alanından ayrılıyor. Uçağını orada tutuyor. Ayrılırken üç beş elmas alıyor. Belki de hava alanındaki adamlar onu arıyorlar. Fakat sadece birkaç tane aldığından elmasları bulamıyorlar. Onu iki üç gün arıyorlar. Ondan

him for two or three days. After that they stop. They think that he is an honest man. But then the pilot brings a lot of diamonds. He brings them here and drops them in the forest. Then the fat man can sell them and make a lot of money."

"But the pilot hasn't brought all the diamonds yet," Hans added. "He may bring them today. If he brings them, we'll get the diamonds."

"It's nearly twelve o'clock," the doctor said. "We'll soon know the answer."

CHAPTER: 18

"The plane will come soon," the doctor said. "What must we do when it comes? What did the men do?"

Hans told him. "First the men lit a fire and black smoke came from the house. This smoke showed the pilot the place in the forest. When the plane sonra bırakıyorlar. Dürüst bir insan olduğunu düşünüyorlar. Fakat sonra pilot birçok elmas getiriyor. Onları buraya getirip orman içine atıyor. O zaman şişman adam onları satıp çok para kazanabilir."

"Fakat pilot henüz bütün elmasları getirmedi," diye Hans ekledi. "Onları bugün getirebilir. Eğer onları getirirse, elmasları elde ederiz."

"Neredeyse saat on iki," dedi doktor. "Yakında cevabı öğreniriz."

BÖLÜM: 18

"Yakında uçak gelecektir," dedi doktor. "Geldiği zaman ne yapmalıyız? Adamlar ne yaptılar?"

Hans ona anlattı. "Adamlar önce bir ateş yaktılar ve kara duman evden (çıktı) geldi. Bu duman pilota ormandaki yeri gösterdi. Uçak geldiği zaman çayıcame, it flew over the field. It flew in a circle. Then two men came out of the house. One of them had a flag. He waved this three times. Then the pilot waved him and threw the red thing out of the plane. After that the plane flew off."

"We must find the flag," the doctor said. Then it will be easy. The pilot can't see our faces from the plane."

"I have the flag," the policeman said. He was holding the flag in his hand. The doctor took it.

Hans threw some old cloth on the fire and soon black smoke was coming from the house.

"Now we're ready," the doctor said. "I'll go outside when the plane comes. One man can stand beside me."

"The boys must stay inside," the policeman said. "The pilot mustn't see them."

It was twelve o'clock now. They listened. They could hear the noise of the plane. It was coming nearer. But they still waited inside the house. Then they saw the plane. It was flying over the field. The doctor took the flag and went out of the house. One

rın üzerinde uçtu. Bir daire (çizerek) içinde uçtu. O zaman iki adam evden çıktı. Onların birinde bir bayrak vardı. Bunu üç kere salladı. Sonra pilot ona el salladı ve kırmızı şeyi uçaktan dışarıya fırlattı. Ondan sonra uçak uçup uzaklaştı."

"Bayrağı bulmalıyız," dedi doktor. "O zaman kolay olacaktır. Pilot uçaktan yüzlerimizi göremez."

"Bayrak bende," dedi polis. Bayrağı elinde tutuyordu. Doktor onu aldı.

Hans birkaç eski bezi ateşe attı ve çok geçmeden siyah duman evden çıkıyordu.

"Şimdi hazırız," dedi doktor. "Uçak gelince dışarı çıkacağım. Bir tane adam yanımda durabilir."

"Çocuklar içerde kalmalıdır," dedi polis. "Pilot onları görmemeli."

Şimdi saat on ikiydi. Dinlediler. Uçağın gürültüsünü işitebiliyorlardı. Yaklaşıyordu. Fakat hâlâ evin içinde bekliyorlardı. Sonra uçağı gördüler. Çayır üzerinde uçuyordu. Doktor bayrağı aldı ve evden çıktı. Bir tane adam onu izledi. Doktor evin önünde

man followed him. The doctor stood in front of the house and waved the flag three times. Then he waited.

The pilot flew over the field again. The plane was very low and the pilot was looking at the two men. But he did not wave and he did not throw the red thing from the plane. The plane flew over the field again. Then it flew off.

At last the doctor came back into the house. He put the flag on the table.

"We did the right things," he said, "but the pilot could see our faces. He was flying very low. He knew that we weren't his friends."

Hans and Karl were looking sad.

"It doesn't matter," the doctor told them. "We've caught the leader and four of his men. And we have some diamonds. The pilot will go back to the airfield and we'll find him."

Then suddenly Karl said, "Listen. I can hear the plane again. It's coming back." Hans ran to the window and looked out.

"Listen to the engine," the doctor said. "The pilot is in trouble. I think that he wants to land."

durdu ve bayrağı üç kere salladı. Ondan sonra bekledi.

Pilot tekrar çayırın üzerinde uçtu. Uçak çok alçaktı ve pilot iki adama bakıyordu. Fakat el sallamadı ve kırmızı şeyi uçaktan atmadı. Uçak yine çayır üzerinde uçtu. Sonra uçup uzaklaştı.

Sonunda doktor dönüp eve girdi. Bayrağı masaya koydu.

"Doğru şeyleri yaptık," dedi. "Fakat pilot yüzlerimizi görebildi. Çok alçaktan uçuyordu. Arkadaşları olmadığımızı anladı."

Hans ile Karl üzgün görünüyordu.

"Zararı yok," dedi doktor onlara. "Elebaşıyı ve adamlarından dördünü yakaladık. Ve birkaç elmasa sahibiz. Pilot hava alanına dönecek ve bulacağız onu."

Sonra Karl birdenbire şöyle dedi:

"Dinleyin. Yine uçağı duyabiliyorum. Geri geliyor." Hans pencereye koşup dışarı baktı.

"Motoru dinleyin," dedi doktor. "Pilotun başı dertte. İnmek istediğini sanıyorum." They all ran out of the house and watched. The plane was very low.

"Yes, he's going to land," the doctor said. "Look, the plane is turning."

"But can he land in this field?" the policeman asked. "It isn't very long. Will he be able to stop the plane?"

"He can land if he is a good pilot," the doctor replied. "But it won't be easy."

The plane was already coming down. Its wheels touched the ground and it ran across the field. It was going slowly but it did not stop.

"It's going to hit the trees" Hans said.

The plane hit a tree and there was a loud noise. Then it turned on one side. A part of the plane broke off.

"Quickly," the doctor said. "We must get the pilot out of the plane. It may catch fire."

They ran to the plane. They could see the pilot. He was lying in the plane. He did not move. The doctor and the policeman climbed on the plane. They pulled out the pilot and put him on the

Onların hepsi evden çıkıp seyretti. Uçak pek alçaktaydı.

"Evet, inecek," dedi doktor. "Bakın, uçak dönüyor."

"Fakat bu çayıra inebilir mi?" diye sordu polis. "Pek uzun değil, Uçağı durdurabilecek mi?"

"İyi bir pilotsa konabilir," diye cevapladı doktor. "Fakat kolay olmayacak."

Uçak inmeye başlamıştı bile. Tekerlekleri yere dokundu ve çayır üzerinde gitti. Yavaş gidiyordu ama durmamıştı.

"Ağaçlara çarpacak," dedi Hans.

Uçak bir ağaca çarptı ve büyük bir gürültü oldu. Sonra bir yanına döndü (yattı). Uçağın bir parçası kırılıp kopmuştu.

"Çabuk," dedi doktor. "Pilotu uçaktan çıkarmalıyız. Ateş alabilir."

Uçağa koştular. Pilotu görebiliyorlardı. Uçakta yatıyordu. Kımıldamadı. Doktorla polis uçağa tırmandılar. Pilotu dışarı çekip yere koydular. Ondan sonra eve taşıdılar onu.

ground. Then they carried him to the house.

Hans and Karl walked to the house too. But then Hans stopped. "The diamonds," he said to Karl. "We've forgotten the diamonds. They're still in the plane."

The doctor and the policeman carried the pilot into the house. Then the two boys turned and ran back to the plane. Hans climbed into the plane. "I must find the diamonds," he said. He looked for them, but he could not see any. Then he looked behind the pilot's seat. There was a small bag on the floor. Hans took the bag and threw it to Karl. Then he climbed out of the plane again.

The boys took the bag to the house and put it on the table. Elsa and Otto were there.

"Look after this," Hans said. "It may have diamonds in it. Where's the doctor?"

"He's with the pilot," Elsa told them. "They took the pilot to a bedroom."

The two boys went into the bedroom. The pilot was lying on the bed and his face was very white.

"Is he dead?" Hans asked.

Hans ile Karl da eve yürüdüler. Fakat sonra Hans durdu. "Elmaslar," dedi Karl'a. "Elmasları unuttuk. Onlar hâlâ uçaktadır."

Doktorla polis, pilotu evin içine taşıdı. Sonra iki çocuk dönüp uçağa koştu. Hans tırmanıp uçağa girdi. "Elmasları bulmalıyım," dedi. Onları aradı ama göremedi hiç. O zaman pilot sandalyesinin arkasına baktı. Yerde ufak bir torba vardı. Hans torbayı alıp Karl'a fırlattı. Sonra tırmanarak uçaktan çıktı yine.

Çocuklar torbayı eve götürdüler ve masanın üzerine koydular onu. Elsa ile Otto oradaydı.

"Buna göz kulak olun," dedi Hans. "Elmaslar içinde olabilir. Doktor nerede?"

"Pilotun yanında," dedi Elsa onlara. "Pilotu bir yatak odasına götürdüler."

İki çocuk yatak odasına gitti. Pilot yatakta yatıyordu ve yüzü pek beyazdı.

"Ölü mü?" diye sordu Hans.

"No, he's not dead," the doctor replied. "He has hurt himself but he'll live. You must leave me now I have work to do."

The boys left the doctor with the pilot.

CHAPTER: 19

The doctor stayed with the pilot. He was with him for two hours. At last he came out of the bedroom. His face was very tired. The boys were sitting near the table. The bag lay there but it was not open.

The doctor saw the bag. "What's that?" he asked.

"We found it in the plane," Hans explained.

"Did you climb into the plane?" the doctor asked. "That was wrong."

"I know," Hans said. "I'm sorry. But I wanted to find the diamonds."

"Hayır, ölü değil," diye cevapladı doktor. "Yaralanmış ama yaşayacak. Beni (yalnız) bırakın şimdi. Yapılacak işim var."

Çocuklar doktoru pilotla bıraktılar.

BÖLÜM: 19

Doktor pilotla kaldı. İki saat onunla birlikteydi. Sonunda yatak odasından çıktı. Yüzü çok yorgundu. Çocuklar masanın yanında oturuyordu. Torba orada yatıyordu ama açık değildi.

Doktor torbayı gördü. "Bu nedir?" diye sordu.

"Onu uçakta bulduk," diye Hans açıkladı.

"Uçağın içine mi tırmandınız?" diye doktor sordu. "Yanlıstı (hata idi) bu."

"Biliyorum," dedi Hans. "Özür dilerim. Fakat elmasları bulmak istedim." "You're a brave boy," the doctor said, "but it was wrong." Then he laughed. "Shall we open the bag?" he asked. "Are you certain that the diamonds are in it?"

"It's very heavy," Hans said.

The doctor opened the bag. It was full of diamonds. He put them on the table. There were about two hundred diamonds.

"Now we've finished," the doctor said. "We have the smugglers and we have all the diamonds. We have the pilot, too. We must thank you for that."

The doctor did not leave that day. They all spent the night in the warden's house. Elsa cooked a big dinner and they ate well.

In the morning, the policeman went to the cellar. He took out his prisoners and led them to the boat. Two men carried the pilot. He was still sick and he could not walk.

"We're going to use the fat man's boat too," the doctor said. "We'll need it. We have a lot of prisoners."

Then the doctor said goodbye. "What will you do now?" he asked Elsa and the boys.

"Sen cesur bir çocuksun," dedi doktor. "Fakat yanlıştı." Sonra güldü. "Torbayı açalım mı?" diye sordu. "Elmasların içinde olduğuna emin misin?"

"Pek ağır o," dedi Hans.

Doktor torbayı açtı. Elmaslarla doluydu. Onları masanın üzerine koydu. İki yüz kadar elmas vardı.

"Şimdi bitirdik," dedi doktor. "Kaçakçılara ve tüm elmaslara sahibiz. Pilot da bizde. Bunun için size teşekkür etmeliyiz."

Doktor o gün ayrılmadı. Onların hepsi geceyi korucunun evinde geçirdi. Elsa koca bir yemek pişirdi ve iyi yediler.

Sabahleyin polis mahzene gitti. Tutuklularını çıkardı ve onları tekneye götürdü. İki adam pilotu taşıdı. Hâlâ hastaydı ve yürüyemiyordu.

"Şişman adamın teknesini de kullanacağız," dedi doktor. "Ona ihtiyacımız olacak. Bir sürü tutuklumuz var."

Sonra doktor veda etti. "Şimdi ne yapacaksınız?" diye Elsa ile çocuklara sordu.

- "Oh we'll stay here," Hans answered. "The warden is not very strong and we'll look after him."
- "Don't get into trouble," the doctor said when he was leaving. The boys laughed.
- "We're going to have a quiet holiday," Hans replied. "We've had enough adventure."

"O! Burada kalacağız," diye cevapladı Hans. "Korucu pek kuvvetli değil, ona bakacağız."

Aýrılırken doktor, "başınızı derde sokmayın," dedi. Çocuklar güldüler.

"Yeterince serüvenimiz oldu."

SORULAR

Okuduğunuz "Adventure on the river" adlı hikâyeye ilişkin aşağıdaki soruları cevaplandırınız:

- 1. What were the names of the boys?
- 2. What were they doing?
- 3. Can they stay there all day?
- 4. Who is their leader?
- 5. How old is Hans?
- 6. Whose idea was it?
- 7. Had they got a boat?
- 8. Who gave them the boat?
- 9.. What did they do to the boat?
- 10. Who sat in the boat first?
- 11. Why will the uncle be pleased?
- 12. What day is it?
- 13. When will they leave?
- 14. When did the boys come back?
- 15. Who helped with the painting?
- 16. Who is Elsa?
- 17. What did the boys talk about?
- 18. What is necessary on a journey?
- 19. What do they need pots for?
- 20. Who brought the blankets?
- 21. What did Elsa do?

- 22. What did they promise to do?
- 23. What did she bring?
- 24. What did she give to the boys?
- 25. How did the water flow?
- 26. Was it hard work?
- 27. How was it in the forest?
- 28. When did Otto say that he was hungry?
- 29. What must they find now?
- 30. Who went to look for wood?
- 31. What flowed between the trees?
- 32. Where did he tie the boat?
- 33. Where did they land?
- 34. Who has matches?
- 35. What did they hear?
- 36. What did they see in the sky?
- 37. What was there across the river?
- 38. How could they stop the boat?
- 39. Could they move the tree?
- 40. Who cut off the branches?
- 41. Where did he put the blankets?
- 42. Who stood in the water?
- 43. Who is taller, Otto or Karl?
- 44. What was resting on the tree?
- 45. Where did Karl put his wet clothes?
- 46. How were they before falling asleep?
- 47. Who woke up first?
- 48. Is the house of the warden far from there?

- 49. When did they see a boat?
- 50. Who will stay near the boat?
- 51. What will Otto do?
- 52. What was coming near?
- 53. What did the man wave?
- 54. How many times did he wave?
- 55. What did the pilot throw from the plane?
- 56. What did it look like?
- 57. Was it falling slowly or quickly?
- 58. Where did they take it?
- 59. Whom was the black smoke for?
- 60. Who is in trouble?
- 61. How many men were standing behind them?
- 62. Where did they take the boys?
- 63. Who had a large ring?
- 64. Where was the flag?
- 65. Were the boys watching the house?
- 66. What were they watching?
- 67. Whose plane was it?
- 68. Did he say he was on holiday?
- 69. Where was the warden?
- 70. Who was shut up in the next room?
- 71. What happened to him?
- 72. Where did they put the boys?
- 73. What did they do before going into the cellar?
- 74. Could Otto watch the birds?
- 75. What did he hear?

- 76. Who is in trouble?
- 77. Who fell?
- 78. Whom did he tell about his friends?
 - 79. What must they get?
 - 80. Who will take care?
 - 81. When did the two men come?
 - 82. What did they take from the boat?
 - 83. What did they pull? Where from?
 - 84. Where will Elsa watch the house from?
 - 85. What was burning in the house?
 - 86. Could the boys see well?
 - 87. What did the man do to the door?
 - 88. What are there across the window?
 - 89. Where did the boys sit?
 - 90. What did they do afterwards?
 - 91. How far is the nearest village?
 - 92. When did a man bring some food?
 - 93. Where did a second man stand?
 - 94. Why couldn't they sleep?
 - 95. Who stands outside the window?
 - 96. Can she see the boys?
 - 97. Is it possible for Elsa to help the boys?
 - 98. What will she look for?
 - 99. What will they do with it?
 - 100. When did Elsa return?
 - 101. Could they move the bars or not?
 - 102. What did they tell her to do?

- 103. Where did Elsa walk?
- 104. Who was in one of the rooms?
- 105. What did Elsa want?
- 106. Where could she find the key of the cellar?
- 107. Whom did she give the keys?
- 108. How could the boys go out?
- 109. Where was the small window?
- 110. Could they climb through the window?
- 111. Who had some difficulties and why?
- 112. Why did they lie down?
- 113. Who was awake?
- 114. What did Otto feel?
- 115. Where did he put his leg?
- 116. What did he notice in the river?
- 117. What may happen?
- 118. When did he have bad dreams?
- 119. What was following him in his dream?
- 120. When does he hope to reach the village?
- 121. What floated on the river now?
- 122. What was near when he opened his eyes?
- 123. Could he find the paddle?
- 124. What can he see?
- 125. How did the man help him?
- 126. Whom did he get?
- 127. What did the doctor give him?
- 128. What is it for?
- 129. Where did the boys spend the night?

- 130. What did they see?
- 131. What was he doing?
- 132. How many miles is the nearest village from there?
- 133. Where did they eat their food?
- 134. When did the plane come again?
- 135. How long did Otto sleep?
- 136. When did he wake up?
- 137. Who needed help?
- 138. How was it raining?
- 139. Whom did Otto want to talk to?
- 140. What did he tell?
- 141. Who is a prisoner?
- 142. How did they leave?
- 143. Who knew the river well?
- 144. Could they leave before or after the storm?
- 145. Was Otto happy or sad now?
- 146. Why was he happy?
- 147. How was it when Hans woke up?
- 148. When may they come?
- 149. Who was hungry?
- 150. How was the ground after the rain?
- 151. What is a good idea?
- 152. If a boat comes near, will they see it?
- 153. Who will watch while they rest?
- 154. Who heard the noise first?
- 155. Whom did he wake up?

- 156. What was coming?
- 157. Who is bad?
- 158. Who has a plan?
- 159. Who must go out?
- 160. Are there a lot of men in the house?
- 161. How many men are there?
- 162. Where are Hans and Karl going?
- 163. Why are they doing this?
- 164. Who will go into the house then?
- 165. Who will watch the river?
- 166. Who hid behind the trees?
 - a) What were these men?
- 167. When did the two men come to the warden?
- 168. What did they tell about the fat man?
- 169. Was he rich or poor?
- 170. For how many weeks must he have the house?
- 171. Who untied his ropes?a) What is he going to tell?
- 172. Is today the last or the first day?
- 173. What will the pilot bring?
- 174. Where will he drop them?
- 175. At what time did he come?
- 176. What colour was the thing which the pilot threw?
- 177. What did Hans throw on the fire?
- 178. Why did he do it?

- 179. Where must the boys stay?
- 180. How many men followed the doctor?
- 181. Was the pilot flying low or high?
- 182. Where will he go back?
- 183. Can he land if he is a good pilot?
- 184. What may catch fire?
- 185. Who carried the pilot into the house?
- 186. Who climbed into the plane?
- 187. Where is the doctor?
- 188. What colour was his face?
- 189. How many hours did he stay with the pilot?
- 190. Who was brave?
 - 191. Is the bag heavy or light?
 - 192. How many diamonds were there in the bag?
 - 193. Who opened the bag?
 - 194. Who wanted to find them?
 - 195. What have they now?
 - 196. Did the doctor leave that day?
 - 197. Whom must they thank?
 - 198. What kind of dinner did Elsa cook?
 - 199. How many men carried the pilot?
 - 200. What will the boys do?
 - 201. Why will they stay there?
 - 202. How is he?
 - 203. Who laughed?
 - 204. What kind of holiday will they have?

- 205. What have they had enough?
- 206. Who won't get into trouble again?
- 207. Who replied then?



ADVENTURE ON THE RIVER CEVAPLARI:

- 1. Their names were Hans, Otto and Karl.
- 2. They were throwing stones across the river.
- 3. No, they cannot.
- 4. Hans is their leader.
- 5. He is fourteen years old.
- 6. It was the idea of Hans.
- 7. No, they hadn't.
- 8. Otto's uncle gave them the boat.
- 9. They cleaned and painted it.
- 10. Hans sat in the boat first.
- 11. Because it is like a new boat now.
- 12. It is Friday.
- 13. They will leave on Monday.
- 14. They came back the next morning.
- 15. Elsa did.
- 16. She is Otto's cousin.
- 17. They talked about the journey.
- 18. A lot of food is.
- 19. They need them for cooking.
- 20. Hans brought the blankets.
- 21. She hid the paddles.
- 22. They promised to take Elsa.

- 23. She brought her food and some blankets.
- 24. She gave the paddles to the boys.
- 25. It flowed quickly.
- 26. No. it wasn't.
- 27. It was cold in the forest.
- 28. After an hour he did.
- 29. They must find a place to land now.
- 30. Karl and Otto did.
- 31. The river did.
- 32. He tied it to a small tree.
- 33. They landed on the right bank.
- 34. Elsa has matches.
- 35. They heard a noise.
- 36. They saw a plane in the sky.
- 37. There was a tree across the river.
- 38. They could stop the boat with the paddles.
- 39. No, they couldn't.
- 40. Hans cut off the branches.
- 41. He put them over the tree.
- 42. Karl did.
- 43. Karl is taller than Otto.
- 44. The boat was resting on the tree.
- 45. He put them near the fire.
- 46. They were tired before falling asleep.
- 47. Hans woke up first.

- 48. No, it isn't.
- 49. After a few minutes they saw it.
- 50. Elsa will stay near the boat.
- 51. He will explore the forest.
- 52. The plane was.
- 53. He waved a flag.
- 54. He waved three times.
- 55. He threw a red thing from the plane.
- 56. It looked like a ball.
- 57. It was falling slowly.
- 58. They took it to the house.
- 59. It was for the pilot.
- 60. The warden is in trouble.
- 61. Two men were standing behind them.
- 62. They took them to the house.
- 63. The fat man had a large ring.
- 64. It was on the table.
- 65. No, they weren't.
- 66. They were watching the plane.
- 67. It was the plane of the fat man.
- 68. Yes, he said he was on holiday.
- 69. He was in the forest.
- 70. The warden was shut up in the next room.
- 71. He became a prisoner of the fat man.
- 72. They put them in the cellar.
- 73. They took off their shoes before going into the cellar.

- 74. No, he couldn't.
- 75. He heard the noise of the plane.
- 76. Hans and Karl are in trouble.
- 77. Otto fell.
- 78. He told Elsa about them.
- 79. They must get help.
- 80. Elsa will.
- 81. They came in the afternoon.
- 82. They took the bags and the blankets from the boat.
- 83. They pulled the boat out of the water.
- 84. She will watch the house from the field.
- 85. A light was.
- 86. No, they couldn't.
- 87. He locked it.
- 88. There are iron bars across it.
- 89. They sat on the ground.
- 90. They talked afterwards.
- 91. It is about twenty-five miles from there.
- 92. In the evening a man brought some food.
- 93. He stood near the cellar door.
- 94. Because it was cold in the cellar.
- 95. Elsa does.
- 96. No, she cannot.
- 97. No, it isn't.
- 98. She will look for a rope.

- 99. They will tie it to the iron bars.
- 100. She returned after a few minutes.
- 101. They couldn't move the bars.
- 102. They told her to go back to the forest.
- 103. She walked round the house.
- 104. The warden was,
- 105. She wanted to free him and the boys.
- 106. She could find it in the small hut.
- 107. She gave them to the boys.
- 108. They could go out by the help of the small window.
- 109. It was at the back of the house.
- 110. Yes, they could.
- 111. Hans had because he was bigger.
- 112. Because they saw a light in the house.
- 113. One of the men was.
- 114. He felt a lot of pain.
- 115. He put it in the cold water.
- 116. He noticed some rocks in the river.
- 117. The boat may hit a rock in the dark.
- 118. He had them in the night.
- 119. A plane was.
- 120. He hopes to reach the village before evening.
- 121. His boat floated on the river now.
- 122. The village was.
- 123. No, he couldn't.
- 124. He can see the houses.

- 125. He helped him by pulling the boat to the bank.
- 126. He got the doctor.
- 127. He gave him some medicine.
- 128. It is for making him sleep.
- 129. They spent the night in the forest.
- 130. They saw the motor-boat with a man inside it.
- 131. He was cleaning the boat.
- 132. It is over twenty miles from there.
- 133. They ate their food among some bushes.
- 134. At noon it came again.
- 135. He slept all day.
- 136. He woke up in the evening.
- 137. His friends did.
- 138. It was raining hard.
- 139. He wanted to talk to the policeman.
- 140. He told his story.
- 141. His friends are.
- 142. They left in doctor's motor-boat.
- 143. The doctor knew the river well.
- 144. They could leave after the storm.
- 145. He was happy now.
- 146. Because he was bringing help to his friends.
- 147. It was dark when he woke up.
- 148. They may come in the morning.

- 149. All of them were.
- 150. It was wet.
- 151. To follow the path is a good idea.
- 152. Yes, they will.
- 153. Hans will.
- 154. Karl did.
- 155. He woke up Hans.
- 156. A motor-boat was coming.
- 157. The men in the house are bad.
- 158. The doctor has.
- 159. The men must go out.
- 160. No, there aren't.
- 161. There are four or five men.
- 162. They are going near the house.
- 163. Because they want to make the men come out of the house.
- 164. The doctor and the others will.
- 165. Elsa and Otto will.
- 166. The policeman and one man did.
 - a) They were smugglers.
- 167. They came to the warden a month ago.
- 168. They told that he was an important man.
- 169. He was rich.
- 170. He must have the house for one week.
- 171. The warden did.
 - a) He is going to tell his story.

- 172. It is the last day.
- 173. He will bring a lot of diamonds.
- 174. He will drop them in the forest.
- 175. He came at twelve o'clock.
- 176. It was red.
- 177. He threw some old cloth on the fire.
- 178. To get black smoke.
- 179. They must stay inside the house.
- 180. One man did.
- 181. He was flying low.
- 182. He will go back to the airfield.
- 183. Yes, he can.
- 184. The plane may.
- 185. The doctor and the policeman did.
- 186. Hans did.
- 187. He is with the pilot.
- 188. It was white.
- 189. He stayed with him for two hours.
- 190. Hans was brave.
- 191. It is heavy.
- 192. There were about two hundred diamonds in the bag.
- 193. The doctor did.
- 194. Hans wanted to find them.
- 195. They have the smugglers and the diamonds now.
- 196. No, he didn't.

- 197. They must thank Hans.
- 198. She cooked a big dinner.
- 199. Two men did.
- 200. They will stay there.
- 201. They will stay there to look after the warden.
- 202. He is not very strong.
- 203. The boys did.
- 204. They will have a quiet holiday.
- 205. They have had enough adventure.
- 206. The boys won't get into trouble again.
- 207. Hans did.

A Deep Learning-based Formula Detection Method for PDF Documents

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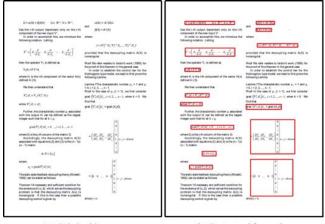
Abstract-In practice, PDF files may be generated by different tools and their character information quality could be different. As a result, the approaches to detecting formulae from PDF documents usually have much different performance on different PDF files. To address this problem, in this paper we combine and refine the Convolutional Neural Network (CNN) and Recurrent Neural Network (RNN) model to detect formulae according to both their character and vision features. Based on the characteristic of PDF documents, we propose a series of strategies to train and optimize deep networks, such as the implicit class down-sampling strategy which can reduce the unbalancedness between formulae and other page elements (e.g., text paragraphs, tables, figures, etc.). The region proposal method is also redesigned to generate moderate formula candidates through combining the bottom-up and top-down layout analysis. The experimental results show that the combination of CNN and RNN can increase the robustness of our proposed detection method. Furthermore, the proposed method outperforms the existing formula detection methods on both a ground-truth dataset and a larger self-built dataset, which would be released and available for research purposes.

Keywords—formula detection; deep learning; PDF documents

I. INTRODUCTION

Up to now, there are massive formulae containing in PDF documents. However, PDF files only contain page rendering information, which makes their formulae not convenient to be transformed, searched and reused. Thus, PDF formula recognition is proposed to convert the formulae in PDF documents to structured formats such as Latex, MathML, which usually contains two sequenced steps: formula detection and structure analysis. The former is to identify whether a page contains formulae and further determines their bounding boxes. The latter is to extract the spatial and grammar structure of formulae. In this paper we focus on the former task, formula detection. Fig. 1 shows an example of formula detection.

Several PDF formula detection methods have been proposed in the past, these methods are rule-based or learning-based. Rule-based methods firstly extract formula symbols from PDF, then extend formula areas according to the operator domains of these symbols. The idea of learning-based methods is to split document pages into candidate regions at first, then extract region features and classify each region. Despite those existing methods, the formula detection task still faces many



(a) Original image

(b) Detected formulae

Fig. 1. An example of formula detection. (a) Document page (b) Detected results, formulae in it is detected by our method and annotated with red boxes.

challenges. For example, existing formula detection methods mainly rely on character information directly extracted from PDF files. However, character encoding of different PDF version may be different, which could make PDF parsing tools such as PDFBox [1] output inconsistent and unreadable character encoding information from PDF files. Besides, some mathematical symbols might be stored as images in PDF files, not characters. Furthermore, complex symbols may consist of several parts. For instance, " $\sqrt{}$ " may consists of a character " $\sqrt{}$ " and a short line. Those complex symbols cannot be directly extracted from PDF files. Therefore, formula detection in PDF documents still needs further research to cope with the difference and complexity of PDF files.

On the other hand, as a new technology, deep learning has achieved outstanding performance in many applications, and many structures of deep networks such as Convolutional Neural Network (CNN) and Recurrent Neural Network (RNN) have been proposed to various tasks. The advantage of deep networks is that the networks can automatically extract appropriate features for given data and tasks, which is quite helpful for researchers, especially those who are lacking in domain specific knowledge. Deep learning has also shown a great ability on document related tasks such as document classification, handwriting recognition, etc.



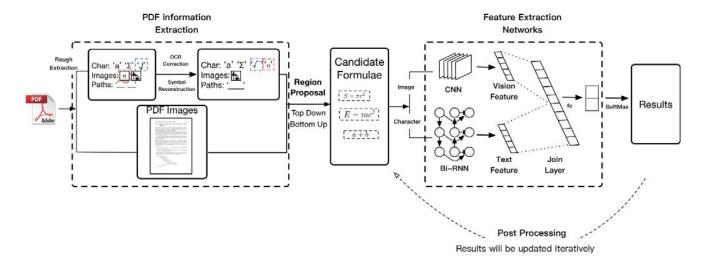


Fig. 2. Method framework

Taking advantages of deep networks, in this paper, we combine a CNN model and a RNN model to utilize both character and visual features on PDF formula detection. Specifically, for a given PDF page, candidate formula regions are firstly generated by both bottom-up and top-down strategies, then the feature extraction networks and post-processing rules are recursively used to rate and modify these candidates. The feature extraction networks combine both CNN and RNN to separately process image flow and text flow. In addition, we also create a large dataset to test the proposed PDF formula detection methods. The dataset contains more than 1,000 PDF pages with more than 22,000 manual labeled formulae. This dataset would be released for research purposes.

II. RELATED WORK

In this section, we introduce the current research on formula detection and deep neural networks.

A. Formula Detection

The research of formula structure extraction can date back to 1968 [2]. For the formula detection task, there are also many efforts having been made in the past. Traditional formula detection methods are rule based or learning based. Most of the rule-based methods firstly identify specific mathematical characters, such as "+", "\sum ", etc., and then attempt to extend formula area according to the operator domains of these symbols [3-7]. Kacem et al. [8] utilized a fuzzy logic model to extract mathematical symbols, then merged their operation region to form the complete formula areas. Inoue et al. [9] designed rules to separate isolated formulae form text lines, according to the observation that the text line usually contains more plain text words. The rule based methods usually contain a set of parameters, which can hardly be adaptive to various documents and formulae. Currently, the main idea of learning based methods is to split document pages into text lines at first, then classify each text line and combine the classification results by rules. Chowdhury et al. [10] firstly extracted lines in documents, then used a decision tree to filter formula lines according to handmade layout features. Liu et al. [11] utilized Support Vector Machine (SVM) to classify each text line to

identify formula lines. The main differences between those methods are the features and learning models adopted in them.

There are also many works on the basis of extracted formulae. [12] constructed a formula retrieval engine based on the formulae extracted from Wikipedia. [13] utilized the deep learning technical to convert formula images to structure format descriptions. Detecting formulae in document is one precondition of these researches.

B. Deep Networks

In the past few years, deep networks have been widely researched and achieved good performance on various tasks. In object detection field. Ren et al. proposed the Faster-RCNN [14], which achieved the mean Average Precisions (mAPs) of 69% on VOC 2007. On machine translation, Cho et al. [15] and Sutskever et al. [16] proposed a framework called RNN Encoder-Decoder. This framework encoded a sentence of one language to an intermediate representation and then decoded it to a target language. In document modeling, Tang et al. [17] proposed a novel model, which first learned sentence representations with Long Short Term Memory (LSTM) and then encoded them into document representations using gated RNN. Besides, deep learning has also been widely used on document recognition related tasks. Sharma et al. [18] used the deep networks to automatically spot and recognize document words. Afzal [19] employed CNN to classify documents.

III. FRAMEWORK

The framework of our method is shown in Fig. 2. In the framework, the input is a PDF file, and the formulae appearing in their pages will be detected and output by two sequential parts, namely candidate formula region generation and formula identification.

In the first part, the page rendering information in PDF files is firstly parsed and several steps are executed to check and correct the information. Then, both top-down and bottom-up layout analysis methods are utilized to generate candidate formula regions. The output of this step is the text, graph and image information stream of each candidate region, which is the input of the following process.

Then in the formula identification part. Feature extraction networks are trained to extract the features of candidates, and the actual class of each candidate is decided according to these features. Then a series of post-processing rules are designed to adjust and refine incomplete formula areas, which would be detailed in Section. 6. The classifying and post-processing will be executed alternately, till no formula region is modified.

IV. CANDIDATE FORMULA REGION GENERATION

This section introduces the candidate formula generation methods used in the above framework. At first, the page rendering information in PDF files is extracted. Then on the basis of PDF information, this paper utilizes two different methods to generate candidate formula regions.

A. PDF Information Extraction

Rendering information such as mathematical characters are useful for PDF formula detection. However, character information directly extracted from PDF files might be imprecise. Therefore, a correction process is necessary to fix the extraction results. In our method, PDF information is extracted and corrected by the following three steps.

1) Original Extraction

In the original extraction step, we use the extraction tool provided by Founder Corporation to extract PDF information. The tool is very similar to PDFBox [1] and is developed according to the PDF specification [20]. The extracted PDF information includes characters, images and paths, with their bounding boxes, encodings, fonts and other attributes. The extracted information is split into different information streams for the further processing: character stream, graph (path) stream and image stream.

2) OCR Based Character Correction

The primary information could be imprecise. For instance, some characters may be falsely encoded, or may be stored as character images in PDF. Thus an OCR system is used to correct the primary information. Especially, if a small image is recognized as a character, it will be added to the character list.

3) Symbol Reconstruction

Some complex symbols in PDF files could be stored in multiple parts, such as the " $\sqrt{}$ ", which might be the combination of a character " $\sqrt{}$ " and a sort line "—". Besides, some operators in formula might be words, such as "log", "max", "sin", etc. In the symbol reconstruction step, those particular mathematical operators are recognized by a series of rules, for example, the adjacent 'l', 'o', 'g' would be replaced by symbol 'log'. These recognized symbols will be added into character stream with corresponding character encodings.

The correction of original PDF information increases the veracity of formula elements, and relieves the influence of wrong and missing characters on PDF formula detection task.

B. Candidate Formula Generation

To detect formulae in PDF documents, formula or formulalike candidate regions should be firstly proposed from document pages before the classification process. In traditional region proposal methods, *Sliding-Window* is usually used to generate candidate regions, but the large difference between formula scales make it hard to use sliding window to generate precise candidate formula regions. To obtain candidate regions with high recall, we use both top-down and bottom-up layout analysis methods to generate candidate formula regions from document pages.

1) Top-down candidate formula generation

The top-down layout analysis generally starts from the whole page, and separates pages into individual regions. Our top-down method is built upon the XY cut algorithm [21], which is usually used to segment document pages. The algorithm cuts a page into new parts on horizontal and vertical direction recursively according the white space of the page. And its time complexity is $O(W^*H)$, where W and H are the width and height of a page. For PDF documents, there is a faster way to implement XY cut for PDF document. After the step of PDF information extraction, the bounding boxes of characters, images and paths are obtained. We create and maintain two segment trees [22] respectively for X-axis and Yaxis, which memorize the projection height of each coordinate. Then for each object extracted from PDF files, we insert it into the two trees and update the tree values. Because the cost of insert and update operation is O(log(n)) for segment tree, so the time complexity of the faster XY cut is O(N*(log(W)+log(H))), where N is the number of extracted objects in the page, which is generally less than 1,000 in a document page.

2) Bottom-up candidate formula generation

The top-down methods are difficult to process the irregular layout such as the wrap or surrounding layout, while the bottom-up methods can process this situation well [23]. Thus in this paper, the bottom-up strategy is also used to generate more candidate regions to improve the recall.

Our bottom-up method is inspired by [23]. Firstly, the extracted objects in the step of PDF information extraction can be regarded as low level Connected Components (CCs). Then these CCs are incrementally regrouped in horizontal and vertical direction by different rules. In the horizontal direction, the CCs are merged according to their distances and scales, because the components in one line are usually in a similar height and width. In the vertical direction, since the task is formula detection, the merge rules are designed on the basis of formula symbols. For example, for a CCs group contains symbol " Σ ", " Π ", etc., or this group contains a line in the top or bottom which might be a fraction line, the adjacent CCs in vertical direction such as "i=1" should to be merged in this group.

V. FEATURE EXTRACTION NETWORKS

In the framework of our method, feature extraction networks are used to extract both visual features and character features of input formula candidates. This section introduces the detailed structures of the networks, as well as some optimizing strategies.

A. Feature Extraction Networks

The feature extraction networks consist of two sub networks. One is a RNN, which is used to extract the features of sequential character information. The other is a CNN, which is utilized to extract the visual features. A joint layer is used to connect these two networks. Then the joined features are sent to a classifier to determine the category of a candidate region.

TABLE I STRUCTURES OF OUR USED CNN

Part Index	Layer Type	Layer Params
1	Input Layer	None
	Convolution Layer	96 of 11x11 Conv kernels
	Max-Pooling Layer	Pooling size: 3x3
	Convolution Layer	256 of 5x5 Conv kernels
2	Max-Pooling Layer	Pooling size: 3x3
2	Convolution Layer	384 of 3x3 Conv kernels
	Convolution Layer	384 of 3x3 Conv kernels
	Convolution Layer	256 of 3x3 Conv kernels
	Spatial Pooling Layer	Pooling size: 7x7
3	Full Connection Layer	4096 of Neurons
	Full Connection Layer	4096 of Neurons
The no	etwork output 4096 dimens	sional vision features

1) Extraction of charecter feature

Character information is useful for detecting formulae. Traditional methods generally use the manually designed character features to decide whether a candidate is a formula, which is limited to the domain knowledge and the relevant threshold parameters are difficult to determine. Thus in our method, the character features are extracted by RNN, which is good at extracting sequence features. The detailed structures of our model are described as follows.

The adopted RNN model is two stacked layers of Bi-LSTM. At first, each character in the character stream is encoded to a one-hot vector. The length of the vector is the number of different character encodings. For the vector of each character, the index which represents its encoding is 1, others are 0. For each formula, its character vector sequences are input into the first Bi-LSTM layer, with each vector corresponding to a unit cell. The output of the first layer will be input to the second Bi-LSTM layer and the final 10 units from the second layer are combined as the character features of input formula. The unit is set to output a 512-dimension feature vector, so the length of character features is 5,120.

2) Extraction of visual feature

Besides the character features, formulae also contain particular visual characteristics. Traditional methods for PDF formula detection seldom consider the visual information. Since CNN has shown its great power on various vision tasks, we introduce the CNN to extract the visual features of formulae.

The CNN used in our method is modified from Alexnet [24], which is the champion network of the ILSVRC 2012, and is also widely used in many document-related tasks [18], [19]. The architecture of our CNN consists of three parts, as shown in Table I.

As Table I shows, the first part is the input layer. The image data is structured to an input batch, then the input batch is sent to the data layer for training. The input layer is followed by a series of convolution layers and pooling layers. A convolution layer contains hundreds of convolution kernels, which can extract different features from the input images and generate the feature maps; The pooling layer is the downsampling of the input images, which can reduce the

computation and increase the robustness of the networks. One characteristic of formulae is that their scales are various, with a large range of aspect ratios. Traditional CNN requires the input be in the same size, which may be not suitable for various formula scales. Thus we replace the last max pooling layer by the SPatial Pooling (SPP) layer [25]. The SPP layer can overcome the problem of fixed input by using a fixed-scale down-sampling, so the size of the input image can be changeable. Rectified Linear Units (ReLU) is utilized as the activation function to increase the nonlinearity of our CNNs. The second part will output 256 of 7*7 feature maps. The third part is the full connection layer, which is a double-layer of multi layered perceptron. This layer will receive the feature maps from the former part and output a 4096-dimension image feature vector.

3) Networks merging

Since the image features and character features are extracted by CNN and RNN, we add a joint layer to connect these features. Then an extra full connection layer is used to map the features to a 2-dimention vector, which is sent to the final Softmax classifier.

B. Training

1) Implicit class down-sampling of trainig data

For the detection task, one common problem is that the number of background is much more than that of foreground. Unbalanced data makes the classifier tend to classify data to the background side and reduces the accuracy. Thus some methods perform random down-sampling process on the negative data in order to reduce the unbalancedness. However, most of the areas in document pages are texts, thus a large number of the negative data are text areas. This would reduce the networks classification ability for minority page objects such as formulae, figures and tables. Therefore, in the training process, we propose the implicit class down-sampling method to balance training data.

Specifically, one positive data list and several implicit negative data lists are created at first. The training data is manually labeled with several kinds of regions, such as formula regions, paragraph regions, table regions, etc. The formula regions are added into positive data list while others are added into their corresponding negative data lists. Next, the region proposal method mentioned in the former section is used to generate candidate regions. For each region, if its Intersect Over Union (IOU) with one ground truth formula region is higher than a threshold (*IOU_THRSHOLD*), this region is added to the positive data list, otherwise the data will be added to a negative data list. Finally, in the training process, each training batch will load data from those lists averagely. The proportion of positive data is set to 40% in order to guarantee the number of positive data.

The implicit class down-sampling balances the quantity of positive data and negative data, as well as guaranteeing the diversity of negative data. This could help the classifier learn more robust features.

2) Training details

The parameters of CNN and RNN are initialized with Xavier. Stochastic Gradient Descent(SGD) is utilized to train the network. In each iteration, the probability of each class from the network is compared with the ground truth, and the

differentiation is used to adjust the network layer by layer. There are still two parameters need to be adjusted, namely batch-size and learning rate. The batch-size affects the result less, so is simply set to 64. The adjustment of learning rate is based on the training process. If the average loss decreases slowly, the learning rate may be too low. If the average loss fluctuates severely, the learning rate may need to be decreased. After adjustment, the learning rate in the experiments is 0.001.

VI. POST-PROCESSING

After classification, the category and probability of each candidate region is given. But these regions may overlap with each other, so further process is needed to obtain the final results

Non Maximum Suppression (NMS) is used in the postprocessing as the first step to filter overlapped regions according to their confidence. Then we implement a correction process for each formula to ensure its integrity. In detail, each mathematic symbol in formulae is checked, if the operands of this symbol are missing, its possible parts will be searched and added to this formula to form a new formula region. This new formula region will be sent to the deep classifier to redefine its category. If it is still classified as formula, then the new formula region will replace the old one. The correction process will be executed recursively, till no new formula regions are generated.

VII. EXPERIMENTS

A. Dataset

Two datasets are used for comparison on PDF formula detection. One is the public Marmot dataset, the other is a larger dataset collected by us.

1) Marmot dataset

The public Marmot dataset [26] consists of 400 document pages and contains 1574 isolated formulae. The bounding boxes of formulae have been labeled manually. This dataset is fully used as the test set.

2) Our dataset

The Marmot dataset is too small to be used for deeplearning based methods. Besides, the dataset is lack of document pages without formulae. Thus, we collected a larger dataset to train deep networks well.

The dataset consists of more than 1,000 scientific papers collected from *CiteSeer¹*. We selected more than 12,000 document pages from those papers. The dataset is also various in page layouts and formula styles.

The formulae in the dataset is annotated manually. This dataset contains more than 22,000 formulae. As mentioned in Sec 5.2, the implicit class down-sampling requires the label of other categories. We also labeled texts, figures and tables in the dataset. 80% of the data is used for training the networks, and 20% is used for testing.

B. Evaluation Metrics

Single Match: IOU measurement is used to estimate whether a detected formula is correct or not. Concretely, we

calculate the IOUs between a detected formula and all the formulae in ground truth, if one is larger than the *IOU_THRSHOLD*, the detected formula is considered correct and matches the corresponding ground truth, then the ground truth formula is removed to avoid matching again. Considering the importance of formulae integrality, the *IOU_THRSHOLD* is set to 0.8 in the experiments.

Holistic Evaluation: The F1 metric is also used for evaluating the performance of PDF formula detection methods. We first calculate the number of detected formulae ($N_{detecte}$), the number of formulae in ground truths (N_{gt}), and their matching number (N_{Match}). Then the F1 value is calculated as follows:

$$F1 = \frac{2 * N_{match}}{N_{detecte} + N_{gt}} \tag{1}$$

C. Network Combination Results

As mentioned in Section 5, the feature extraction networks combine a CNN and a RNN to simultaneously extract text and visual features. We compare the combined networks with single RNN and CNN model. Table II shows the results.

TABLE, II RECOGNITION ACCURACY OF DIFFERENT MODELS

Model	Accuracy of Different Dataset (%)		
Model	Marmot	Ours	
CNN	93.8	92.4	
RNN	92.9	87.5	
Combined	95.2	94.7	

As table II shows, the performance of the combined feature extraction networks is better than any of the single RNN or CNN. Fig. 3 shows two samples of the classification results. As shown in Fig. 3(a), the combined networks can recognize formulae which resemble text-line and with less structure information. Besides, in Fig. 3(b), even the character information of this formula is missing, the networks can still correctly recognize it.

D. Formula detection results

Lin et al [27] compared and summarized several existing formula detection methods on the Marmot dataset. We implement their method and compare it with ours. Besides, to compare with the general deep-learning based object detection methods, the method proposed in the literature [14] with Alexnet network is also conducted. Table III shows the results.

TABLE. III FORMULA DETECTION RESULTS

35.0	F1 of Different Dataset (%)		
Methods	Marmot	Ours	
Comprehensive[27]	68.1	55.3	
Faster RCNN[14]	14.3	11.2	
Ours+Only RNN	90.9	82.4	
Ours+Only CNN	91.5	85.6	
Ours+Combined	93.4	88.7	

¹ http://citeseer.ist.psu.edu/index

Image:

 $\exists !_{f'} [\mathsf{Representation}(f') = r' \land \mathsf{Service}(f) = \mathsf{Service}(f')]$

Text:" E!f[Representation (f')=r' \(\) Service(f)=Serv ice(f')]"

(a) A sample which is recognized as background by CNN, but correctly classified by the

I mage: $v_x = \frac{\sum_{\zeta \in x} \sigma_{\zeta} - \left\langle \sum_{\zeta \in x} \sigma_{\zeta} \right\rangle}{j^{\frac{1}{2}d} e} \quad x \in Z^d,$

Text: " (character information is missing)

(b) A sample which is recognized as background by RNN, but correctly classified by the

Fig. 3. Samples of network conbination results

Traditional methods including [27] mainly rely on the character information. Thus, their performance may be very different in different files. For the object detection method [14], a large number of formula candidates generated by its Region Proposal Networks (RPNs) are not precise enough. This results in that most of its detected formulae have low IOU value. As shown in Table 3, when the IOU_THRSHOLD is 0.8 in the experiments, the F1 of Faster-RCNN is below 15%. However, when the threshold is reduced to 0.6, the best F1 of Faster-RCNN can reach 56%. The combination of CNN and RNN achieve the better performance. The good classification ability also ensures the effect of post-processing. In the correction process, much wrong recombination can be identified by the classifier.

VIII. CONCLUSION

This paper proposes a deep learning-based method to detect formulae from PDF documents. Comparing with traditional PDF formula detection methods, our system could relieve the influence of imprecise PDF information on formula detection, with the help of the region proposal method, which combines top-down and bottom-up layout analysis, and uses the feature extraction networks on both character information and visual information of formulae in PDF files. The experimental results show that the proposed method outperforms the existing PDF formula detection methods on the public Marmot dataset, as well as a large dataset collected by us. In the future, we will recheck our dataset and release it, and explore formula structure recognition.

ACKNOWLEDGEMENT

This work is supported by the projects of National Natural Science Foundation of China (No. 61472014), the Beijing Nova Program (XX2015B010) and the China Postdoctoral Science Foundation (No. 2016M590019), which is also a research achievement of Key Laboratory of Science, Technology and Standard in Press Industry (Key Laboratory of Intelligent Press Media Technology). We also thank the anonymous reviewers for their valuable comments.

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