★ **How stories shape our minds**

https://www.youtube.com/watch?v=vyZMSZG2Dmk

How stories shape our minds | The science of storytelling | BBC Ideas

There's a Native American **proverb** that says, "The one who tells the story rules the world." Stories have the **potential** to be **incredibly** powerful. They're able to change how we **relate to** each other, to change **prejudice**, so the potential for stories to **persuade** is **staggering.**

I read this really, really good research paper about these two books which basically suggested, that if you get people to read a couple of chapters of Harry Potter, they'll **rate** themselves higher than other people in their ability to **potentially** move something, just using the power of their mind. The people who read about the vampires, they'll actually believe that their teeth are **slightly** longer than other people in the **population**, just as a result of having read a chapter or two of this book.

Psychologists call this 'assimilation' – where the reader takes on the qualities of a **fictional** group. In **term**s of **psychology**, there's a few things that stories actually do to us:

1. **Transportation**: when the reader loses themselves in the story world.

We get this sense that we're fully **immerse**d in the world that we're reading about.

2. **Identification**: where a reader takes on the **perspective** and identity of a story character.

We start to almost feel **as if** the things that are happening to them, are happening to us.

Research suggests that transportation and identification may **be related to** the ability to **empathize** with others.

Reading is not a **relaxation**, you are building worlds, you are **populating** those worlds with cities and those cities you are populating with people. So although television, film, theater all have their place in the storytelling world, to me that moment of contact with a book, when you read a story and **unlock** its secrets... nothing quite comes close.

But what is actually happening in our brains?
Neuroscientists at the University of Cambridge are looking at specific parts of the brain when we read.
Our research has been on the meaning of **individual** words, if you read the word "jump" for example, you **activate** those areas that you also activate when you do actually perform the action of jumping. The interesting question in this case of course is, if you read about somebody else jumping, why should you activate brain areas related to jumping?

One **theory is to do with mirror neuron**s. These are neurons that are **trigger**ed inside our brains when we watch the actions of others. Some scientists think mirror neurons help create **empathy** and that might also be what's happening when we read. The **proponents** of the theory would say that **immersing** yourself into a story is based on the mirror neuron system. We might feel sadness when we read about someone who is sad, or smile when we read about people who are happy. I am **convinced** that mirror neurons are part of this process, but it can't be the whole story.

It's been found that, when we **connect** with people who aren't real but are fictional characters, it forms a sort of social **surrogate** for us - it's almost like they're a real person when they're not. And psychologists sometimes call it forming a **parasocial relationship.** And what's interesting about that is it kind of makes us feel less lonely and it can also **buffer self-esteem** and improve our mood. We know that having a lot of friendships with other people is a really positive thing. But what's really interesting is they don't have to be real people.

A. 굵은 글씨로 된 단어 중에서 아래 뜻에 해당되는 것을 찾아 쓰시오.

① 심리학	② 형성하다	③ 심리학자	④ 속담	⑤ 인구	⑥잠재력/잠재적인
⑦ 놀랍게	⑧ 조금, 다소	⑨ ~와 연관을 짓다	⑩ 등급을 매기다	⑪ 편견, 선입관	⑫ 동화, 닮아가기
⑬ 용어	⑭ 설득하다	⑮허구의, 가상의	⑯ 엄청난 = amazing	⑰ 잠재적으로	⑱ 이동, 운송
⑲ 몰입시키다, 푹 빠트리다	⑳ 동일화, 동일시함	㉑ ~와 연관되다	㉒ 관점	㉓ 마치 ~인듯이	㉔ 공감하다
㉕ 휴식, 이완	㉖ 채워넣다, (일정 지역에) 사람을 살게 하다 = fill	㉗신경과학자	㉘각각의, 개인의	㉙ 이론	㉚ 거울 뉴런
㉛지지자 = supporters	㉜ 대리인/대용품 = replacement	㉝ 완충시키다	㉞ 자아존중감	㉟ 준사회적 관계	㊱ 확신한

B. Fill in the blanks with the words in A and choose the meaning of each word from the box.

1. Women still face _____ in the workplace. _____

2. Leo wouldn't agree, despite our efforts to _____ him. _____

3. The financial impact on the town was _____ _____

4. She was far too _____d in her studies. _____

5. My mother died last year so I can really _____ with what he's going through _____

6. one of the most densely _____d areas in the world _____

7. I was _____d that we were doing the right thing. _____

ⓐ feeling certain that something is true

ⓑ extremely great or surprising

ⓒ if an area is populated by a particular group of people, they live there

ⓓ to put someone or something deep into a liquid so that they are completely covered

ⓔ to be able to understand someone else's feelings, problems etc, especially because you have had similar experiences

ⓕ to make someone decide to do something, especially by giving them reasons why they should do it, or asking them many times to do it

ⓖ an unreasonable dislike and distrust of people who are different from you in some way, especially because of their race, sex, religion etc – used to show disapproval

C. Summary

Topic	How stories shape our minds
1st paragraph	The _____ for stories to persuade is staggering.
2nd paragraph	A research paper suggested that reading Harry Potter, and a book about vampires make _____ believe that they have the _____ of the characters in the stories.
3rd paragraph	Assimilation occurs to story readers through _____ and _____. 1) _____ refers to the moment when readers are fully _____ in a story world. 2) _____ occurs when readers feel like they become the story _____
4th paragraph	Reading books is more powerful than any other thing in the storytelling world.
5th paragraph	Neuroscientists at the University of Cambridge have studied how _____ work when we 'read' a word and actually 'do the action' that the word means. They found that both actions _____ the same parts of the _____.
6th paragraph	One theory explains it based on the _____ neuron system. Watching an action triggers _____ neurons, which help create _____.
7th paragraph	Feeling connected with fictional characters forms a _____ relationship, which improves self-esteem and our _____

D. Answer the following questions.

1. Which group of people have the proverb "The one who tells the story rules the world"?

2. People who read Harry Potter rate themselves higher in which ability?

    A. Ability to have a stronger mind

    B. Ability to move something with their bodies

    C. Ability to move something with the power of their mind

3. People who read about Vampires believe they...

    A. Enjoy drinking blood

    B. Have longer teeth than other people

    C. Have whiter skin than other people

4. Books do two things to us:

    1. _____ – when the reader loses themselves in the story world.

    2. _____ – where the reader takes on the perspective and identity of a story character.

5. What emotion do mirror neurons help create?

6. Which option shows how mirror neurons work?

    A. reading about a man dying -> makes you smile

    B. reading about love -> makes you happy

    C. reading a happy ending -> makes you feel disappointed

7. Parasocial relationships

    When we connect with characters in a book, it can help us feel less_____and improve our _____.

E. True or False

• A reader who reads about mermaids is less likely to think they are a good swimmer.	[T / F]
• It is difficult for readers to imagine a character's point of view.	[T / F]
• Reading makes us more empathetic.	[T / F]
• If we read the word 'kiss', the areas in our brain used for kissing are activated.	[T / F]
• People with no friends could socialize through reading.	[T / F]

1	**How stories shape our minds I The science of storytelling** There's a Native American **proverb** that says, "The one who tells the story rules the world." Stories have the **potential** to be **incredibly** powerful. --- 어떻게 이야기가 형성하는가 우리의 마음을 I 스토리텔링의 과학 미국인디언들의 속담이 있다, " 이야기를 말하는 자가 지배한다 세상을." /이야기는 가지고 있다/ 잠재력을 / 아주 놀라울만큼 강력한
2	They're able to change how we **relate to** each other, to change **prejudice**, so the potential for stories to persuade is staggering. --- 이야기들은 바꿀 수 있다 /어떻게 우리가 서로에 대해 관계를 맺는지, /(이야기는) 편견을 바꿀 수 있다, 그래서 이야기의 잠재력/ 남을 설득하는/ 엄청나다.
3	I read this really, really good research paper about these two books which basically suggested, that if you get people to read a couple of chapters of Harry Potter, they'll **rate** themselves higher than other people in their ability to **potentially** move something, just using the power of their mind. --- 나는 읽었다 이 아주 아주 멋진 연구논문을/ 이 두 책에 관한/ (이 연구는) 기본적으로 암시했다,/ 만약 당신이 사람들로 하여금 읽게 한다면/ 몇 개 챕터를 /해리포터의/ 그들은 등급을 메긴다 스스로를/ 더 높게 다른 사람보다 / 능력치에서 / 잠재적으로 물건을 옮길 수 있는 / 단지 정신력을 사용해서.
4	The people who read about the vampires, they'll actually believe that their teeth are **slightly** longer than other people in the **population**, just as a result of having read a chapter or two of this book. --- 사람들/ 뱀파이어에 관한 책을 읽은,/ 그들은 사실 믿을 것이다/ 그들의 이빨이 약간 더 길다고/ 다른 사람들보다/ (자신이 속한) 인구에서, / 단지 결과로/ 이 책의 한 두 챕터를 읽은
5	**Psychologists** call this 'assimilation' – where the reader takes on the qualities of a **fictional** group. In **term**s of **psychology**, there's a few things that stories actually do to us: --- 심리학자들은 이것을 '동화'라 부른다 – 독자가 취득한다 그 자질을 소설속 인물의. 심리학용어로, 몇 가지가 있다/ 이야기들이 실제로 하는 우리에게 하는 :
6	1. **Transportation**: when the reader loses themselves in the story world. 　We get this sense that we're fully **immerse**d in the world that we're reading about. --- 1. 이동 : 독자가 자신을 잃어버릴 때/ 이야기 세계에서. 우리는 이런 느낌을 얻는다/ 우리가 완전히 몰입되었다고/ 그 세계에/ 우리가 읽고 있는
7	2. **Identification**: where a reader takes on the **perspective** and identity of a story character. 　We start to almost feel **as if** the things that are happening to them, are happening to us. Research suggests that transportation and identification may **be related to** the ability to **empathize** with others. --- 2. 동일시: 독자가 얻을 때/ 관점과 자아정체감을/ 이야기속 등장인물의. 　우리는 느끼기 시작한다/ 마치 그 등장인물에게 일어나는 일들이/ 우리들에게 일어나고 있는 듯이
8	Reading is not a **relaxation**, you are building worlds, you are **populating** those worlds with cities and those cities you are populating with people. --- 독사는 휴식(이완되는 활동)이 아니다, 당신은 건설하는 중이다 세상들을, 당신은 채우고 있다 그 세상을 도시들로, 그리고 그 도시들을 사람들로.
9	So although television, film, theater all have their place in the storytelling world, to me that moment of contact with a book, when you read a story and **unlock** its secrets... nothing quite comes close. --- 그래서 비록 텔레비전, 영화, 극장(연극) 모든 것이 그들의 자리메김을 하더라도/ 스토리텔링 세상에, 나에게 책하고 연결되는 순간, 이야기를 읽어서 비밀을 알아내는 순간.... 어떤 것도 그에 비할 바가 되지 않는다.
10	But what is actually happening in our brains? **Neuroscientists** at the University of Cambridge are looking at specific parts of the brain when we read. --- 그런데 무엇이 실제로 일어나고 있는 걸까 우리의 뇌에서? 신경과학자들은/ 캠브리지대학교의/ 보고 있다/ 특정한 부분을 우리뇌의 / 우리가 독서를 할 때.

11	Our research has been on the meaning of **individual** words, if you read the word "jump" for example, you **activate** those areas that you also activate when you do actually perform the action of jumping.
	우리의 연구는 개별 단어들의 뜻에 초점을 두고 있습니다, 만약 여러분이 "점프"라는 단어를 예를 들어 읽고 있다면, 여러분은 그 부분/ 여러분이 역시나 활성화 시킬/ 여러분이 실제로 점핑이라는 액션을 수행할 때/ (예를 들어, 여러분이 "점프"라는 단어를 읽을 때와 실제로 점핑이라는 액션을 수행할 때 활성화 시킬 뇌의 특정부위가 같다.)
12	The interesting question in this case of course is, if you read about somebody else jumping, why should you activate brain areas related to jumping?
	흥미로운 질문은/ 이 경우 물론/ 이다./ 만약 여러분이 읽는다면/ 점핑하는 누군가에 대해, 왜 여러분은 활성화시켜야 하는 걸까요/ 실제 점핑하는 행동과 연관된 뇌의 부분들을/ (이 경우 물론 흥미로운 질문은 '우리가 점핑하는 누군가에 대해 읽을 때 왜 우리가 실제 점핑하는 행동을 할 때 활성화하는 부분을 왜 꼭 활성화시켜야 하는 걸까요' 이다)
13	One **theory is to do with mirror neuron**s. These are neurons that are **trigger**ed inside our brains when we watch the actions of others.
	한 이론은 거울 뉴런과 관련을 짓고 있다. 이것들은 신경세포이다/ 자극되는/ 우리 뇌안에서/ 우리가 볼 때 / 다른 사람들의 행동을
14	Some scientists think mirror neurons help create **empathy** and that might also be what's happening when we read.
	어떤 과학자들은 생각한다/ 거울 뉴런이 돕는다고/ 만들어 내는 데/ 공감능력을 / 그리고 그 현상이 또한 일어날지도 모른다고/ 우리가 독서를 할 때도.
15	The **proponents** of the theory would say that **immersing** yourself into a story is based on the mirror neuron system.
	이 이론의 지지자들은/ 말한다/ 몰입시키는 것은/ 이야기속으로/ 근간을 두고 있다/ 거울 신경 세포 시스템에
16	We might feel sadness when we read about someone who is sad, or smile when we read about people who are happy.
	우리는 아마 슬픔을 느낄 것이다/ 우리가 읽을 때 슬픈 사람에 대해, 또는 미소지을 것이다/ 우리가 읽을 때 행복한 사람에 대해 읽을 때
17	I am **convinced** that mirror neurons are part of this process, but it can't be the whole story.
	나는 확신한다/ 거울 뉴런은 이 과정의 일부라는 것을, 하지만 그것이 전체 과정일 수는 없다.
18	It's been found that, when we **connect** with people who aren't real but are fictional characters, it forms a sort of social **surrogate** for us - it's almost like they're a real person when they're not. And psychologists sometimes call it forming a **parasocial relationship.**
	발견되어지고 있다, 우리가 연결될 때 사람들과 / 실존하지 않는/ 그러나 이야기속의 인물드과 같은/ 그것은 형성한다/ 일종의 사회적인 대용품을 우리를 위해- 그들이 진짜 사람인 것과 아주 비슷하다/ 비록 실제가 아니지만. 그리고 심리학자들은 때때로 부른다 그걸/ 준사회적 관계 형성이라고. (우리가 이야기속 인물과 같이 실존하지 않는 사람들과 연결될 때, 그것은 일종의 사회적 관계를 형성한다. 마치 실제 사람인 것 처럼. 심리학자들은 이걸 '준사회적 관계 형성'이라고 부른다.)
19	And what's interesting about that is it kind of makes us feel less lonely and it can also **buffer self-esteem** and improve our mood.
	그리고 재미있는 것은/ 이것과 관련해/ 이다/ 그것은 일종에 만든다/우리가 느끼도록 /덜 외롭게 /그리고 그것은 또한 강화시킨다/ 자아존중감을 그리고 향상시킨다/우리의 기분을.
20	We know that having a lot of friendships with other people is a really positive thing. But what's really interesting is they don't have to be real people.
	우리는 안다/ 가지는 것이/ 많은 우정을 다른 사람들과/진짜 긍정적인 것이라고. 그러나 진짜 흥미로운 것은 그들이 실제 인물일 필요는 없다는 것이다.