# Lesson6: Roots & Shoots

◆単語

(1) ~で	有名だ be(f	)(	) ~ (	2) 時間を2	かける(		) time	
(3) do 13	時間を費やす(s	) + 時間 +	doing	g				
(4) いつ	の日か (s	)						
(5) 準備	する 〈 p	>	>					
(6) do す	つるために ( )(o	)	to do	1				
(7) 観察	する (o	)	(8) 彳	う動・ふる	まい (b			)
(9) メモ	( n	)(10) 決,	ひして	いる be(	d		)	
(11) 人間	[ h	)	)( b		)			
$(12) \sim 7$	を共有している have ~	(i )	)( c		)			
(13) 異7	なる (d	)	(14)	1%分だけ	· · (		) one pe	ercent
(15) 脳	(ъ	)	(16)	~に似て	いる (1		) ~	
(17) 子信	共時代 (c	)	(18)	親密な	( c			)
(19) おる	互いに (o )(a	)	(20)	悲しい	( s			)
(21) 恐ね	ıている (а	)	(22)	怒っている	5 (a			)
(23) 性相	各 (c	)	(24)	残酷な	( c			)
(25) 人門	間 (h	)	(26)	オス	( m			)
(27) 領土	土・縄張り(t	)	(28)	攻撃する	( a			)
(29) 社会	会・共同体(c	)	(30)	かつて・-	一度(o			)
(31) 残さ	される be(l	)( a		)				
(32) 我人	々が驚いたことに・・(	)(		)( s			)	
$(33) \sim 8$	を世話する(t	)	)( c		)(		) ~	
(34) 背雪	† (b	)	(35)	共有する	( s			)
(36) 巣	( n	)	(37)	~を求める	5 (a	)(	) ~	~
(38) 実に	i (i	)	(39)	環境	( e			)
(40) 会計	活 (c	)	(41)	自然	( n			)
(42) 意見	見・解説(c	)	(43)	権利	( r			)
(44) 我/	々自身の利益のために・	• (	our	·( <sub>0</sub>	)( g		)	
(45) さ	うに加えて(b	)	(46)	生き物(1		)( t		$)_{\mathbf{S}}$
(47) 破場	裏する (d	)	(48)	薬	( d			)
(49) 病勢	₹i (d	)	(50)	植物	( p			)
(51) 昆虫	t (i	)	(52)	地域	( a			)
(53) 治療	療法 ( c	)	(54)	つなげる	( c			)
$(55) \sim 7$	を構成する(m	)	)(		) ~			
<b>(56)</b> う	まくいかない・おかしく	なる (	)	)( w		)		
(57) 5 3	さぎ (r	)	(58)	穀物	( g			)
(59) 病気	₹ (d	)	(60)	キツネ	( f			)
(61)数7	が増加する (i	)	)(		)( n		)	

(62) ~する危機に瀕している be(	)( d	)	~
(63) ∼とともに・・ (a	)( ) ·	~	
(64) ~について心配する be(w	)( ) ~		
(65) ~にある・存在する (1 )(	) ~		
(66) いったん SV すれば・・(O)	S+V		
(67) そんなわけで SV だ。That's (	) S + V		
(68) ~に始まる (b )(	) ~		
(69) 少しずつ進む (w ) one's (w	y ) through $^{\sim}$	<u> </u>	
(70) 達する ( r	)(71) ちっぽけな (	t	)
(72) ひきおこす (c	)(73)計画 (p	)	)
(74) しっぽを振る (w )its(t	)		
(75) Roots and Shoots とはそういったもの	だ。		
That's ( ) R and S is (	)(	).	
(76) 相違 (d	)(77) 役割を果たす	( ) ;	a ( )
(78) 違いを作り出す (m )a (d	)		
(79) 影響を与える (a	)(80)~全体 (w	v )	~
(81) 選択 (c	) (82) ついには・・	( f	)
(83) 10 億 (	)		
(84) 人と物を共有する(s	)物( ),	人	
1: K: Dr. Goodall, (1)thank you so much ( (2)spent many years (study<変化>) (3)ch Africa? J: It was after I had read the Doctor Do	nimpanzees in Africa.	(4)When did you books. When I w	first decide to go to
somehow I would go to Africa to live with			
K: I'm sure there are lots of young people	e who want to work w	orth animals some	e day. How can they
prepare themselves?	<b>-</b> )( )( .	)/	
J: There are a lot of things you can do (			
very important that you watch them and			
write notes and ask questions. If you (6-0)	( ) reany ( a		wiii fina a way.
2:	-teru \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		. (-)(
K: You did a lot of fieldwork, (6-1)( observ	re<変化>) chimpanze	es in the wild. Ar	e they (7 <u>)(                                   </u>
any way like human beings?	. (	\ 777 1	. 1
J: Chimpanzees and humans (8) have a lo			
of humans and chimps (9) <u>differs</u> (10)(			
much like (11)ours and much of their (6)			
learn (12)( 彼らの子供時代に<3> ). The me	embers of a chimp fai	mily are very (13)	J <u>ciose</u> , often helping

(14)(o:お互いに<2>). They can feel sad, happy, afraid, and angry.
$K: (15) \underline{What} (                                   $
J: They are usually friendly with (16)( $e:$ お互い<2> ), but they can be cruel, just like humans.
K: Really?
J:The males patrol their territories, sometimes (17)( attack<変化>) chimps from (18)( other<変化>)
community. But they can be very kind and loving, too. Once, when he was about three years old, a
chimp (18)(call<変化>) Mel lost his mother and (19)was (1 )(a ). We all thought
he'd die. But, (20)( 我々が驚いたことに・・<3> ), a 12-year-old male chimp called Spindle (21)took
()() him.
K: (22)( ) what way?
J: He (23)let Mel (ride / rides / riding / to ride / rode<選択>) (24)on his (b ) and share his
nest at night. I often (25)saw him (shared /sharing / to share<選択>) his food if Mel (26)asked
() it. Chimpanzees can indeed be loving and caring.
<u>◆設問</u>
(3)(9) アクセント
(4) 言い換えよ。ヒントはこの章の中にある。
= When ( ) you first ( d ) to go to Africa ?
(5)「~するために・・」とせよ。
(6) 名詞に書き換えよ。( )
(6-0)「もし決意が固ければ・・」とせよ。
(7)「何らかの点で・・」とせよ。
(8)「共通のものが沢山ある・・」とせよ。
(10)「1%ぶんだけ・・」とせよ。
(11) 書き換えよ。
= our ( )
(13) 発音 [
(15)「~はどうでしょう?」とせよ。
(19)「一人取り残された・・」とせよ。
(22)「どんな風に・・?」とせよ。
3:
$K: Now\ let's\ turn\ to\ the\ topic\ of\ the\ environment.$ You travel all over the world, giving talks about
the conversation of nature. Do you have any comment?
J:Yes, we humans must understand that wild animals have the (1)( $$ 権利 $$ ) to live. They need wild
places. (2)(B: $3)(3)(3)(3)(3)(3)(3)(3)(3)(3)(3)(3)(3)(3$
we must not destroy. Many drugs for human diseases come from plants and insects. When we
destroy a wild area, maybe we are destroying the cure for cancer and other diseases without
knowing (4) <u>it</u> .
K: I see.

J: Everything in nature is connected. Plants and animals (5) <u>make ( )</u> a whole (6) <u>pattern</u> of life. If we destroy that pattern, all kinds of things can (7) <u>go ( w ).</u>
K: Could you say more about that?
J: Sure. One time in England, rabbits were destroying farmers' grain. The farmers killed the rabbits
by giving them a disease. Then foxes didn't have enough to eat and they started killing the farmers'
chickens. The farmers then killed the foxes, and rats quickly (9)increased ( ) number and
destroyed just as much grain as the rabbits had eaten. We humans are (9)( ) danger ( )
destroying our environment and ourselves (10)( a )( ) (11)it.
$\overline{4}$ :
K : So (12) <u>are you worried ( )</u> our future ?
J: Yes, I am. But my hope (13)( l: $\sim$ にある<2> ) young people. (13-1)Once they know about
environmental problems, they want to solve them. (14)That's ( ) I decided to start Roots &
Shoots.
K: What is that?
J : Well, it began with a group of high school students in Tanzania in 1991. It is called Roots $&$
Shoots, because roots can (15)work their ( ) through rocks to reach water. And shoots,
though they are tiny, can break through a wall to reach the sunlight. The rocks and wall are the
problems humans have caused to our earth.
K : So it's a kind of club for young people?
J: That's right. We now have groups all over the world and each group chooses three projects: one to
help people, one to help animals, one to help the environment. The world is a better place when you
(16)cause a sad person (smile / to smile / smiled / smiling<選択> ), when you (17)make a dog (to
wag / wagging / wagged / wag <選択>) its tail, or when you give water to a thirsty plant. (18) That's
what Roots & Shoots is (a )(a ).
K : Some final words ?
J: The most important difference between humans and chimpanzees is that we can speak and share
ideas. Every one of you has (19) <u>a role to ( )</u> and you can (20)( m ) a
(d ). You are just one person, but (21)( do / world / what / the / you / affects / whole ).
And you have a choice: What to buy? What to eat? What to wear? The changes you make may be
small, but if a thousand, then a million, finally a billion people all make those changes, this is going
to make a big change.
K: Dr. Goodall, thank you very much for your time and for sharing your ideas with us.
◆設問
(2) 補充・書き換えよ。=( )(a )
(3)「我々自身の利益のためにも・・」とせよ。
(4) 内容を日本語で書け。

(5)「作りあげている・・」とせよ。
(6)(22)アクセント
(7)「おかしくなってしまう・・」とせよ。
(8)「数が増えた」とせよ。
(9)「~の危機に瀕している」とせよ。
(10)「~とともに・・」とせよ。
(11) 指すものを英語で書け。( )
(13) ブラインドに注意し和訳せよ。
(14)「そんなわけで、決心したんだ・・」とせよ。
(15)「苦労して進む・・」とせよ。
(18)「それこそが S&R だ・・」とせよ。
(20)「変化をもたらす」とせよ。
(21) 「あなたのすることが全世界に影響を及ぼす」と並べ替えよ。
◆補充せよ。 (1) (また) (ない) (の理事ですなど)
(1) 彼はチンパンジーの研究で有名だ。
He is ( ) ( ) his studies on chimpanzees.
(2) あなたは何年もその研究に費やした。 Va. (
You ( ) many years ( ) it. (3) 動物を理解するためにできる多くのことがある。
There are a lot of things ( )( o )( ) understand animals.  (4) チンパンジーと人間は、多くの共通点を持っている。
Humans and chimpanzees ( ) a lot ( )( ).
Trumans and eminpanzees ( ) a lot ( ). (5) Mel だけが一人、残された。
Mel ( )(1 )(a ).
(6) 我々が驚いたことに、Spindle が彼の世話をしたのだ。
( )( )(s ), Spindle ( )( )( ) him.
(7) ネズミが急速に数を増やした。
Rats quickly ( )( )( n ).
(8) 我々は我々の環境を破壊する危機に瀕している。それとともに我々自身も・・。
We are ( )( d )( destroying ourselves
and ourselves (a )( ) it.
(9) 私の希望は彼らの中に存在する。
My hope ( )( ) them.
(10) いったん問題について知ると、彼らはそれを解決しようとした。
( ) they knew about the problem, they tries to solve it.

(11) それこそが R &	Sだ。						
That's (	) R & S is (	)( ).					
(12) そんなわけで、	私はR&Sをスタ	ートさせたのだ。					
That's (	) I started R &	S.					
(13) Thank you (	)(	) ing your ideas (	) us.				
あなたのアイデアを我々と共有してくれてありがとう。							
(14) 根は岩を通って	じわじわ進み、水	に達する。					
Roots (w	)( )(	) through r	ocks to reach water.				
(15) みんな演じるべき役割があり、違いを生じさせることができる。							
Everyone has a (r	) to (	) and can (	m ) a ( d	).			

## Lesson6: Roots & Shoots (解答)

◆単語

(1)	~で有名だ b	e (famous )( for )	$\sim$ (2)	時間をかけ	ける(take	) time	
(3) d	o に時間を費	·やす (spend ) + 時間	+ doi	ng			
(4) t	ハつの日か(	someday )					
(5) <u>1</u>	準備する 〈	prepare	$\rangle$				
(6) d	o するために	( in )( order	) to do	)			
(7) 着	観察する	(observe	) (8) 1	行動・ふる	まい(behavio	r	)
(9)	メモ(note	)(10) 決心している be(	deteri	mined <受	動態で使う>	)	
(11)	人間	(human		)(being	)		
(12)	~を共有して	ている have ~(in		)( comm	ion	)	
(13)	異なる	( differ	) (14)	1%分だけ	+ • • ( by	) one per	rcent
(15)	脳	(brain	) (16)	~に似てい	いる(like	) ~	
(17)	子供時代	(childhood	) (18)	親密な	(close		)
(19)	お互いに	(one )(another	) (20)	悲しい	(sad		)
(21)	恐れている	( afraid	) (22)	怒っている	angry		)
(23)	性格	(character	) (24)	残酷な	(cruel		)
(25)	人間	(human	) (26)	オス	(male		)
(27)	領土・縄張り	(territory	) (28)	攻撃する(	(attack		)
(29)	社会・共同体	本(community	) (30)	かつて・一	一度(once		)
(31)	残される be	e ( left )( alone		)			
(32)	我々が驚いた	たことに・・( to )(	our	)( surp	orise	)	
(33)	~を世話する	5 (take	)( care	9	)( of )	$\sim$	
(34)	背中	(back	) (35)	共有する (	(share		)
(36)	巣	( nest	) (37)	~を求める	(ask	)( for	) ~
(38)	実は	(indeed	) (39)	環境	(environmen	ıt	)
(40)	会話	(conversation	) (41)	自然	(nature		)
(42)	意見・解説	( comment	) (43)	権利	(right		)
(44)	我々自身の利	刊益のために・・( for	) 0	ur (own	)( good	)	
(45)	さらに加えて	⟨ besides ⟨ continues ⟨ c	) (46)	生き物 (li	ving	)(thing	$)_{\mathrm{s}}$
(47)	破壊する	( destroy	) (48)	薬	(drug		)
(49)	病気	( disease	) (50)	植物	(plant		)
(51)	昆虫	(insect	) (52)	地域	(area		)
(53)	治療法	(cure	) (54)	つなげる(	(connect		)
(55)	~を構成する	5 (make )( up	) ~	$\smile$			
(56)	うまくいかか	ない・おかしくなる( go		)( wrong	)		
(57)	うさぎ	( rabbit	) (58)	穀物	(grain		)
(59)	病気	( disease	) (60)	キツネ	(fox		)
(61)	数が増加する	5 (increase		)( in	)( number	)	

(62) ~する危機に瀕している be(	in )( danger )( of ) $\sim$	
(63) ~とともに・・ (along	)( with ) $\sim$	
(64) ~について心配する be (wor	ried )( about ) $\sim$	
(65) ~にある・存在する (lie	)( in ) $\sim$	
(66) いったん SV すれば・・( Onc	e ) S+V	
(67) そんなわけで SV だ。That's (	why $S+V$	
(68) ~に始まる (begin	)( with ) $\sim$	
(69) 少しずつ進む (work	) one's ( way $$	
(70) 達する (reach	)(71) ちっぽけな (tiny	)
(72) ひきおこす (cause	) (73) 計画 (project	)
(74) しっぽを振る (wag	) its (tail )	
(75) Roots and Shoots とはそうい	ったものだ。	
That's ( what ) R & S	is (all) (about).	
(76) 相違 (difference	)(77)役割を果たす ( play )a(role	
(78) 違いを作り出す (make	) a (difference )	
(79) 影響を与える (affect	)(80)~全体 (whole )~	
(81) 選択 (choice	)(82) ついには・・ (finally	)
(83) 10 億 (billion	)	
(84) 人と物を共有する (share	)物(with)人	

#### ◆本文

## 1:

K: Dr. Goodall, (1) thank you so much ( for ) taking time for this interview. I know that you (2) spent many years ( study<変化>: studying) (3) chimpanzees in Africa. (4) When did you first decide to go to Africa?

)

- J: It was after I had read the Doctor Dolittle and the Tarzan books. When I was 11, I knew that somehow I would go to Africa to live with animals, study them and write books about them.
- K: I'm sure there are lots of young people who want to work with animals some day. How can they prepare themselves?
- J: There are a lot of things you can do  $(5)(\underline{in})(\underline{order})(\underline{to})$  understand animals. It is very important that you watch them and observe their  $(6)(\underline{behave})$ . It is also important that you write notes and ask questions. If you  $(6-0)(\underline{are})$  really  $(\underline{determined})$ , you will find a way.

## 2:

- K: You did a lot of fieldwork, (6-1)(observe<変化>: *observing*) chimpanzees in the wild. Are they (7)(<u>in</u>) any way like human beings?
- J: Chimpanzees and humans (8) <u>have a lot (in )(common)</u>. We know today that the DNA of humans and chimps (9) <u>differs</u> (10)(<u>by</u>) just a little over one percent. Their brains are very much like (11) <u>ours</u> and much of their (6)(behave) is like ours. Like us, they also have much to learn (12)(彼らの子供時代に<3>: in their childhood). The members of a chimp family are very

(13)<u>close</u>, often helping (14)(o: お互いに<2>: *one another*). They can feel sad, happy, afraid, and angry.

K: (15) What ( about ) their character – I mean, are they friendly? Are they cruel?

J: They are usually friendly with (16)(e:  $3 \pm 1 \le 2 \le each other$ ), but they can be cruel, just like humans.

K: Really?

J: The males patrol their territories, sometimes (17)( attack<変化>: attacking ) chimps from (18)( other<変化>: another ) community. But they can be very kind and loving, too. Once, when he was about three years old, a chimp (18)( call<変化>: called ) Mel lost his mother and (19)was (left )(alone ). We all thought he'd die. But, (20)(我々が驚いたことに・・<3>: to our surprise), a 12-year-old male chimp called Spindle (21)took (care )(of ) him.

K: (22)(In) what way ?

J: He (23)let Mel (*ride* / rides / riding / to ride / rode<選択>) (24)on his (*back*) and share his nest at night. I often (25)saw him (shared *sharing* / to share<選択>) his food if Mel (26)asked (*for*) it. Chimpanzees can indeed be loving and caring.

#### ◆設問

(3)(9) アクセント

(4) 言い換えよ。ヒントはこの章の中にある。

= When ( were ) you first ( determined ) to go to Africa?

- (5)「~するために・・」とせよ。
- (6) 名詞に書き換えよ。( behavior )
- (6-0)「もし決意が固ければ・・」とせよ。
- (7)「何らかの点で・・」とせよ。
- (8)「共通のものが沢山ある・・」とせよ。
- (10)「1%ぶんだけ・・」とせよ。
- (11) 書き換えよ。

= our ( brains )

- (13) 発音 [ **クロウス** ](カタカナ可) 「ズ(閉じる)」ではない
- (15)「~はどうでしょう?」とせよ。
- (19)「一人取り残された・・」とせよ。
- (22)「どんな風に・・?」とせよ。

## 3:

K: Now let's turn to the topic of the environment. You travel all over the world, giving talks about the conversation of nature. Do you have any comment?

J: Yes, we humans must understand that wild animals have the (1)( 権利: right ) to live. They need wild places. (2)(B:さらに: Besides), (3)( for ) our own ( good ), there are some kinds of living things that we must not destroy. Many drugs for human diseases come from plants and insects. When we destroy a wild area, maybe we are destroying the cure for cancer and other

diseases without knowing (4)it.

K: I see.

J: Everything in nature is connected. Plants and animals (5) make ( <u>up</u> ) a whole (6) pattern of life. If we destroy that pattern, all kinds of things can (7)go (<u>wrong</u>).

K: Could you say more about that?

J: Sure. One time in England, rabbits were destroying farmers' grain. The farmers killed the rabbits by giving them a disease. Then foxes didn't have enough to eat and they started killing the farmers' chickens. The farmers then killed the foxes, and rats quickly (8) increased ( in ) number and destroyed just as much grain as the rabbits had eaten. We humans are (9)( in ) danger (of ) destroying our environment and ourselves (10)( along )( with ) (11) it.

## 4:

K: So (12) are you worried ( about ) our future?

J: Yes, I am. But my hope (13)(1: ~にある<2>: *lies in*) young people. (13-1)Once they know about environmental problems, they want to solve them. (14)That's ( why ) I decided to start Roots & Shoots.

K: What is that?

J: Well, it began with a group of high school students in Tanzania in 1991. It is called Roots & Shoots, because roots can (15)work their ( way ) through rocks to reach water. And shoots, though they are tiny, can break through a wall to reach the sunlight. The rocks and wall are the problems humans have caused to our earth.

K : So it's a kind of club for young people?

J: That's right. We now have groups all over the world and each group chooses three projects: one to help people, one to help animals, one to help the environment. The world is a better place when you (16)cause a sad person (smile / to smile / smiled / smiling<選択>), when you (17)make a dog (to wag / wagging / wagged / wag <選択>) its tail, or when you give water to a thirsty plant. (18)That's what Roots & Shoots is (all )(about ).

K: Some final words?

J: The most important difference between humans and chimpanzees is that we can speak and share ideas. Every one of you has (19)<u>a role to ( play )</u> and you can (20)( *make*) a ( *difference*). You are just one person, but (21)( do / world / what / the / you / affects / whole ). And you have a choice : What to buy? What to eat? What to wear? The changes you make may be small, but if a thousand, then a million, finally a billion people all make those changes, this is going to make a big change. K: Dr. Goodall, thank you very much for your time and for sharing your ideas with us.

### ◆設問

- (2) 補充・書き換えよ。= ( *in* )( *addition* )
- (3)「我々自身の利益のためにも・・」とせよ。
- (4) 内容を日本語で書け。

自分たちが治療法を破壊していること(そうとは知らないうちに破壊しているのだ)

(5)「作りあげている・・」とせよ。
(6)アクセント
(7)「おかしくなってしまう・・」とせよ。
(8)「数が増えた」とせよ。
(9)「~の危機に瀕している」とせよ。
(10)「~とともに・・」とせよ。
(11) 指すものを英語で書け。( our environment )
(13) ブラインドに注意し和訳せよ。
いったん環境問題について知れば、それらを解決したくなるだろう。
(14)「そんなわけで、決心したんだ・・」とせよ。
(15)「苦労して進む・・」とせよ。
(18)「それこそが S&R だ・・」とせよ。
(20)「変化をもたらす」とせよ。
(21) 「あなたのすることが全世界に影響を及ぼす」と並べ替えよ。
What you do affects the whole world
◆補充せよ。
(1) 彼はチンパンジーの研究で有名だ。
He is ( <i>famous</i> )( <i>for</i> ) his studies on chimpanzees.
(2) あなたは何年もその研究に費やした。
You ( <i>spent</i> ) many years ( <i>studying</i> ) it.
(3) 動物を理解するためにできる多くのことがある。
There are a lot of things ( in )( order )( to ) understand animals.
(4) チンパンジーと人間は、多くの共通点を持っている。
Humans and chimpanzees ( have ) a lot ( in )( common ).
(5) Mel だけが一人、残された。
Mel ( was )( left )( alone ).
(6) 我々が驚いたことに、Spindle が彼の世話をしたのだ。
( To )( our )( surprise ), Spindle ( took )( care )( of ) him.
(7) ネズミが急速に数を増やした。
Rats quickly (increased )( in )( number ).
(8) 我々は我々の環境を破壊する危機に瀕している。それとともに我々自身も・・。
We are ( in )( danger )( of ) destroying ourselves
and ourselves ( <i>along</i> ) ( <i>with</i> ) it.
(9) 私の希望は彼らの中に存在する。
My hope ( lies )( in ) them.

( Once	) they knew abou	t the proble	n, they trie	es to solve i	t.	
(11) それこそが]	R & S だ。					
That's ( what	t ) R & S is	( all )	( about	).		
(12) そんなわけて	で、私はR&Sを	スタートさせ	たのだ。			
That's ( why	) I started	d R & S.				
(13) Thank you (	<i>for</i> )(	<i>sharing</i> ) yo	ur ideas (	with	) us.	
あなたのアイデア	"を我々と共有して	くれてあり	がとう。			
(14) 根は岩を通っ	ってじわじわ進み、	水に達する	0			
Roots (work	)( their	)( <b>wa</b> j	v ) thi	rough rocks	s to reach water.	
(15) みんな演じる	るべき役割があり、	違いを生じ	させること	ができる。		
Everyone has a	a (role) to (	play	) and ca	an ( <i>make</i>	) a ( <i>difference</i>	).