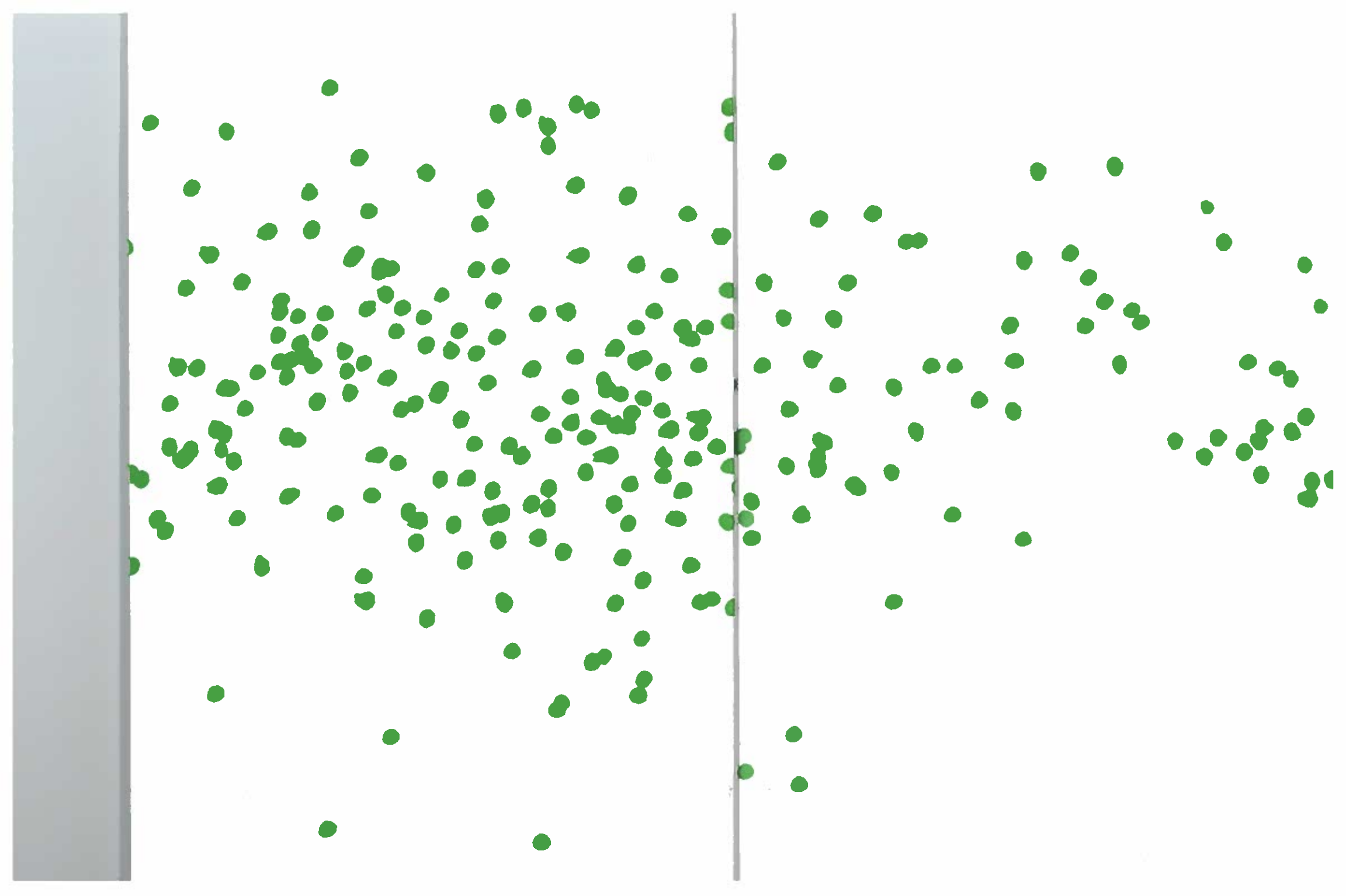


Bruno Munari
drawing a tree

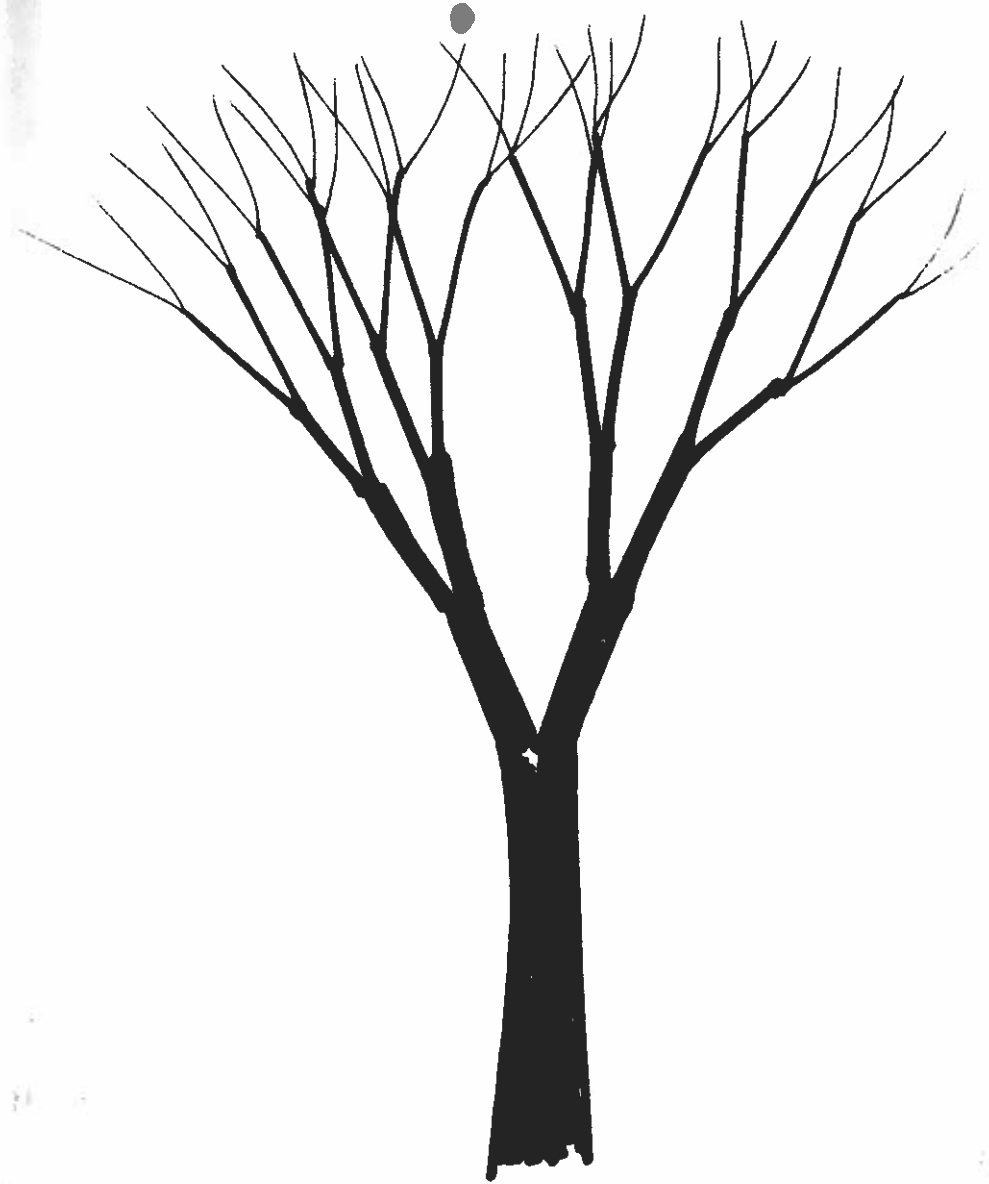


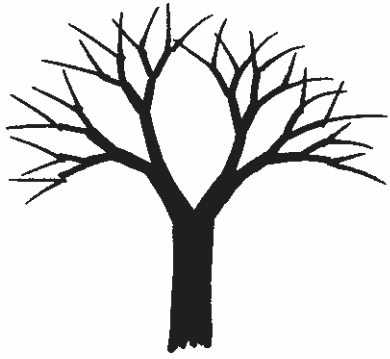


The tree spreads its branches and, as the years go by, its trunk gets bigger and bigger and the branches more and more numerous. Every leaf at the top of the branches has a tube that goes through the trunk which keeps it in contact with the ground. It uses the tube to suck up its nourishment. The trunk is where all these tubes are grouped together, which is why it is larger than the other branches. As the branches grow higher they get slenderer and slenderer.

The last one is very, very slender and carries only a few leaves. We can establish a rule of growth: the branch that follows is always more slender than the one that precedes it.

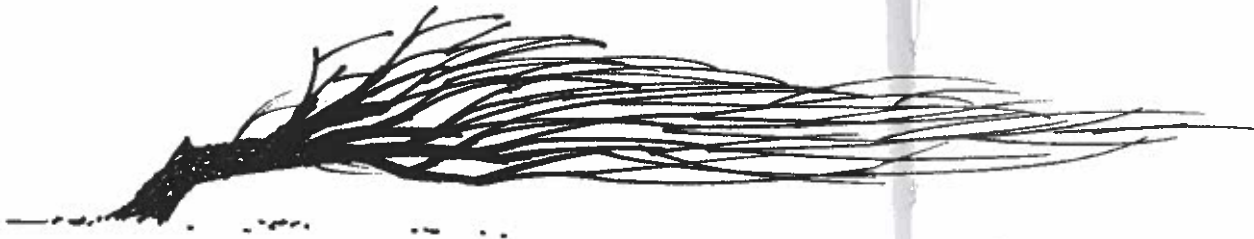
The tree can separate in various different ways, into two, three or more branches. Let's see if we can make a growth chart of a tree with two branches. It will always be a double growth: the trunk divides into two limbs, each limb will continue to divide into two, getting smaller and smaller.



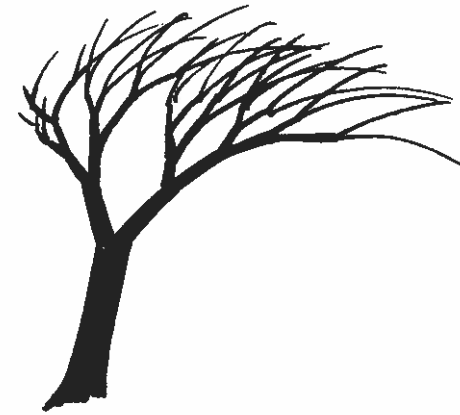


This growth pattern is so simple that anyone can draw it. Let's draw it then, even though we know it's a pattern and that it will be difficult to find such a perfectly drawn tree in nature. To grow so precisely, a tree would have to live in a place where there was no wind and with the sun always high in the sky, with the rain always the same and with constant nourishment from the ground all the time. There would have to be no lightning flashes, nor even any sharp changes in temperature, no snow or frost, never too hot or dry...

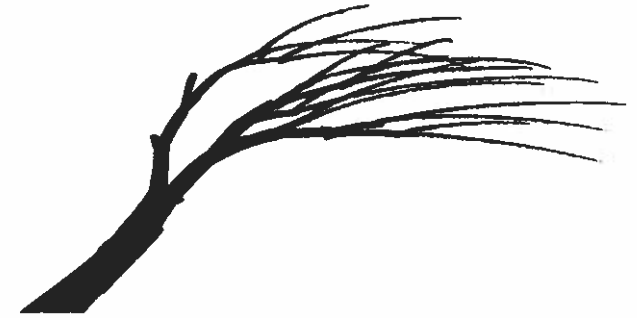
But in reality we know that these weather conditions do not exist, so our pattern changes, it adapts and looks different. But if you look carefully you can still see it.



If there's always a lot of wind, like at the seaside,

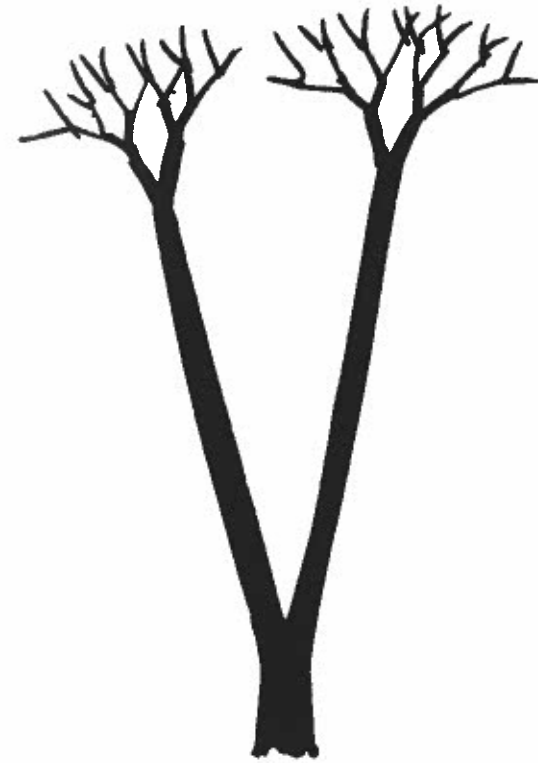
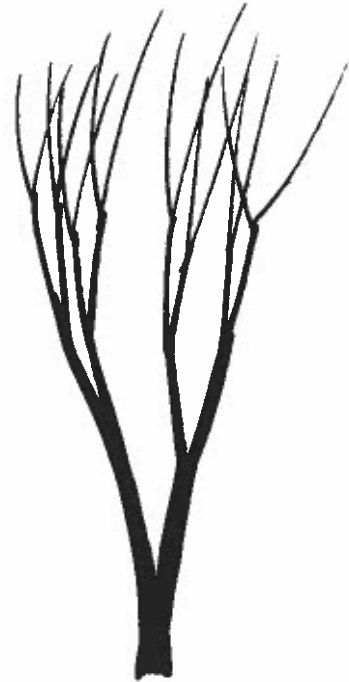
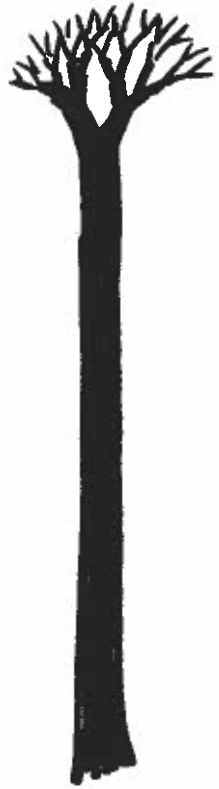


If it's windy the tree grows like this.

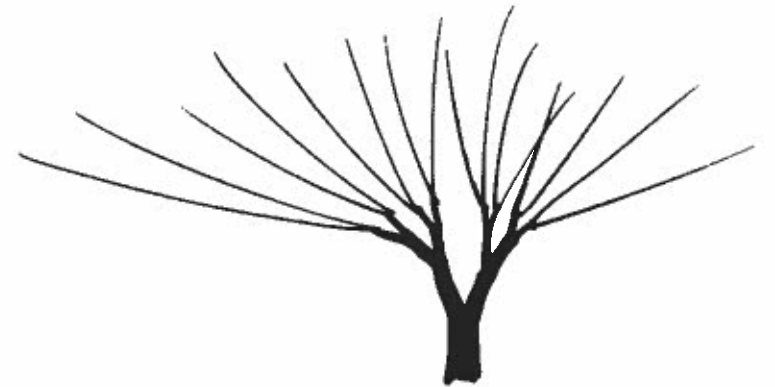


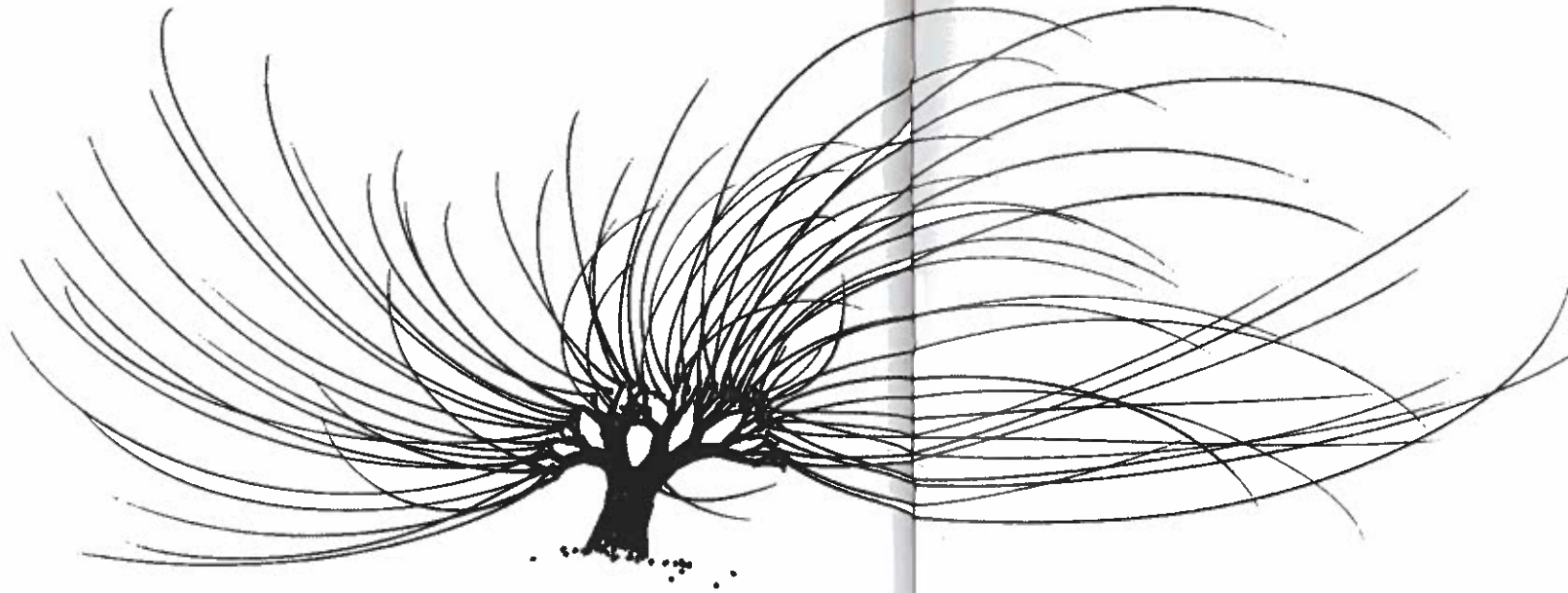
If there's a strong wind, it often grows like this.

the tree becomes like this. But the structure is always the same.



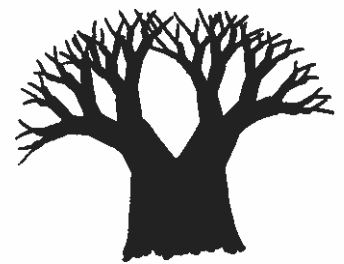
The same pattern can have a very long trunk and short branches. It can have a short trunk and long branches. It can have a short trunk with long second branches and short tertiary branches. It can be normal and only have long end branches.

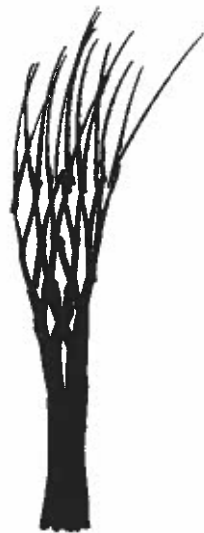
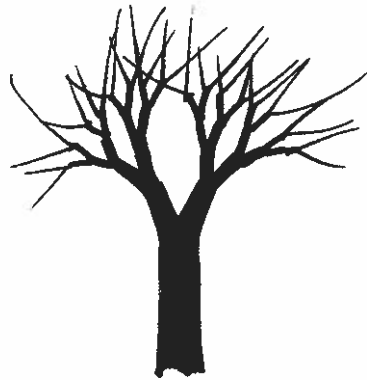




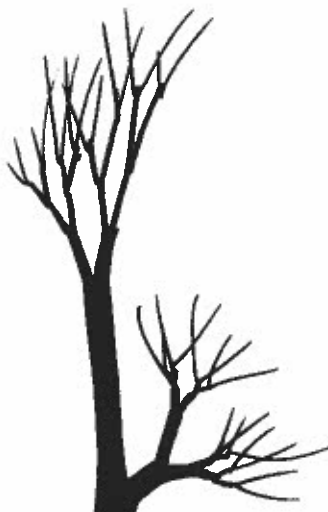
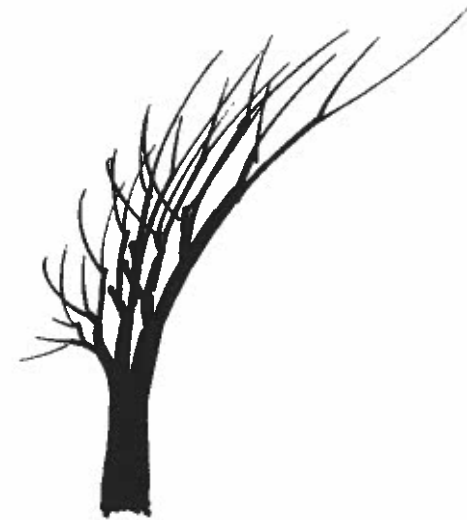
It can have only very long and curved end branches.

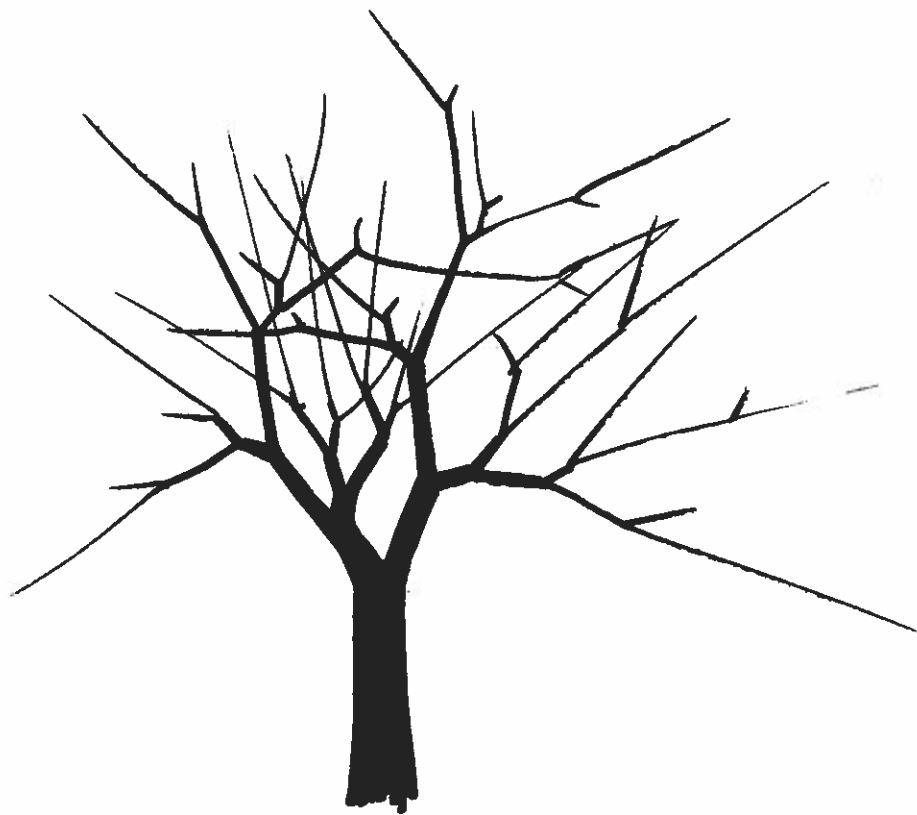
It can be very slender or very wide, but the growth pattern is always the same, with two branches.



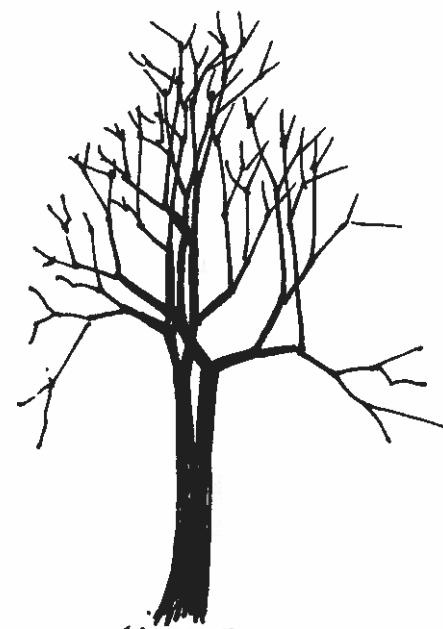
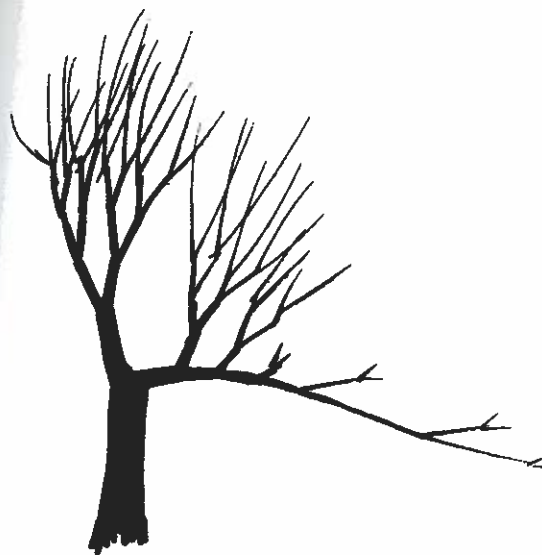


We can also say that the branches do not always grow in a fan shape. Sometimes they all point straight up, other times they are very open. Sometimes some of the branches go straight up and others go where they want. But the pattern is always the same.

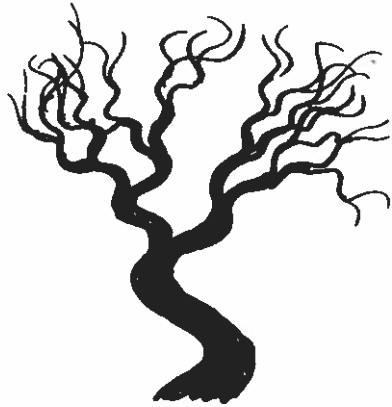




Sometimes a branch grows long and another grows short. Although the pattern stays the same the branches can point in different directions. They seem like different trees, but if you look carefully...

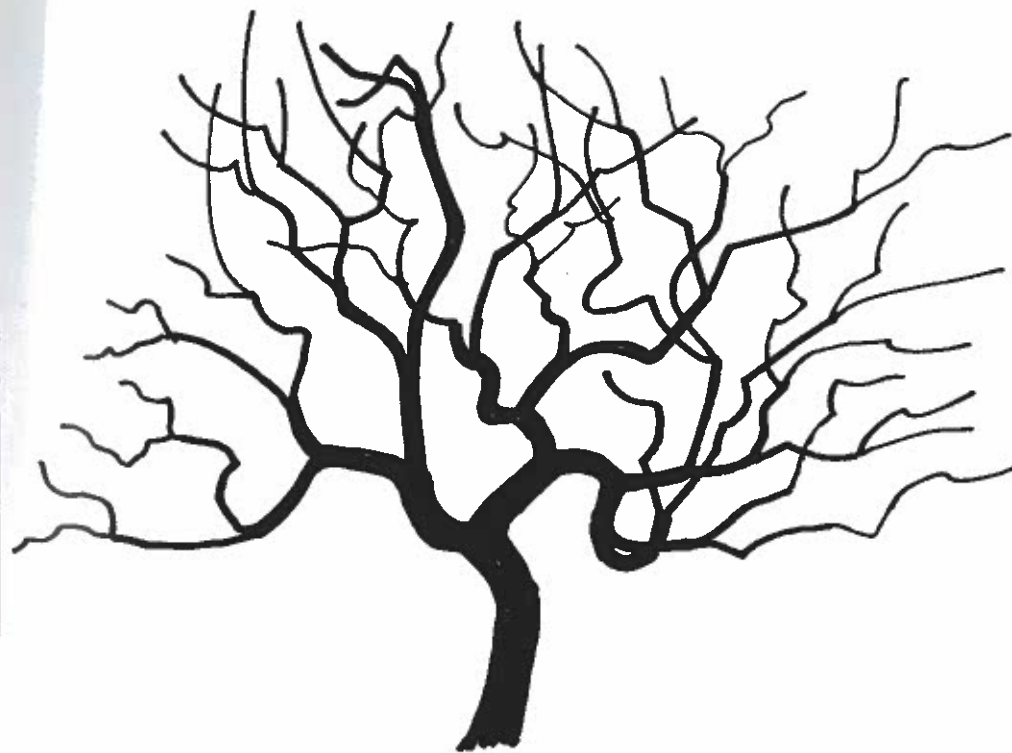


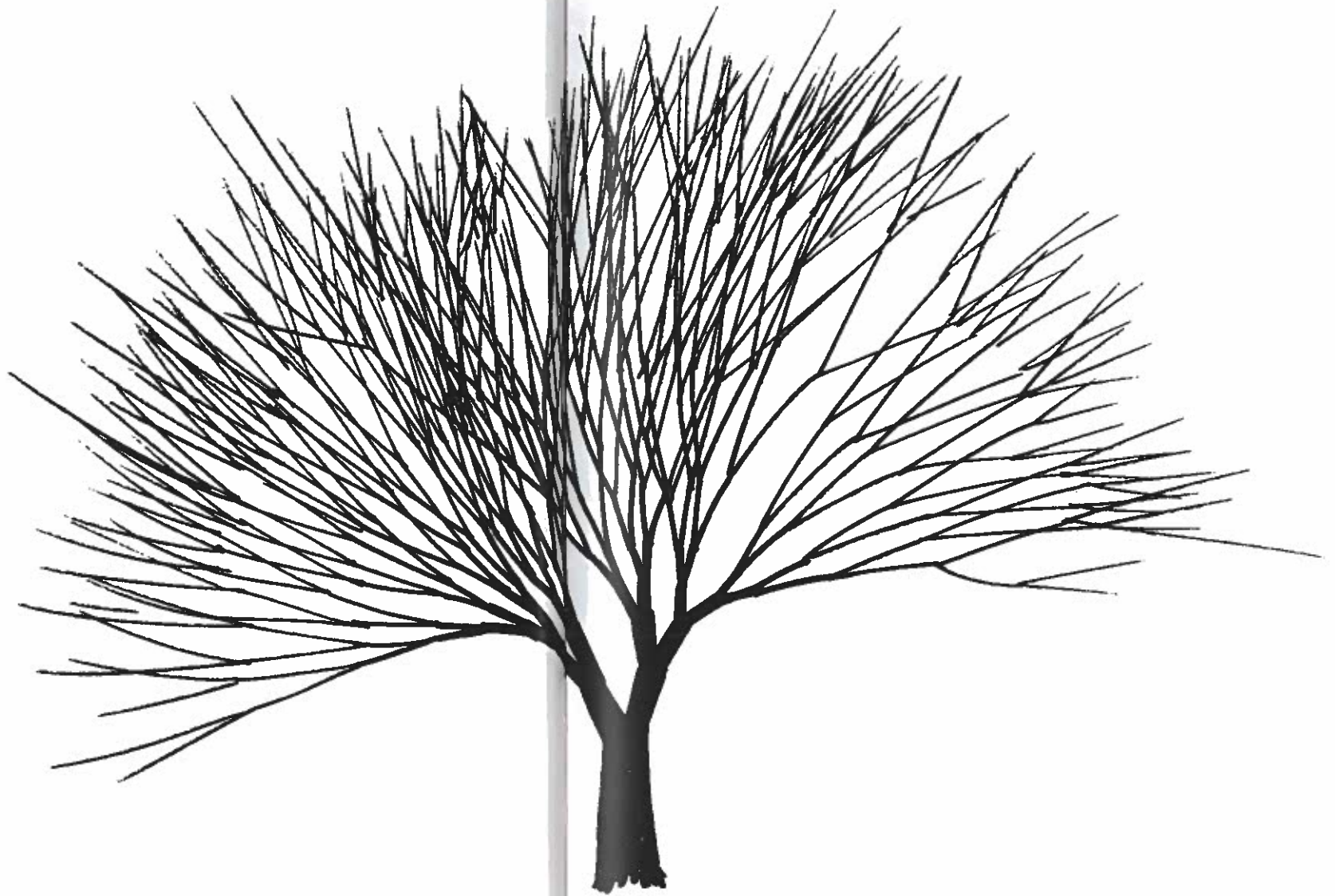
The same pattern can be drawn with curved, wavy or sharp-moving lines. So far we've used straight lines, but now the same pattern gives us fresh pictures of different trees. One snakes upwards, another closes in on itself, one expands into space until it touches the ground with its smallest branches.



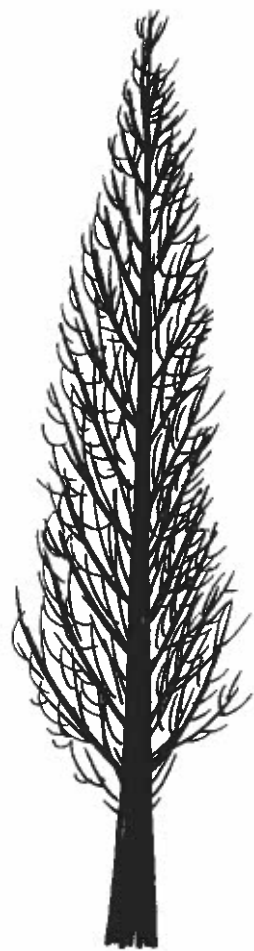


The same pattern can also have branches pointing downwards, like the weeping willow. Or you can draw a tree with a dual growth, where the branches go wherever they want. Some go straight up, some bend this way and that, some turn backwards, some escape.



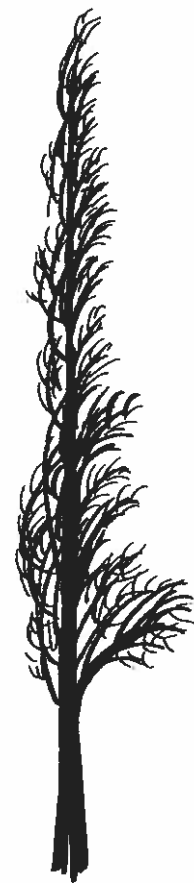


A tree drawn with almost straight lines, with nine branches one behind the other in dual branching.

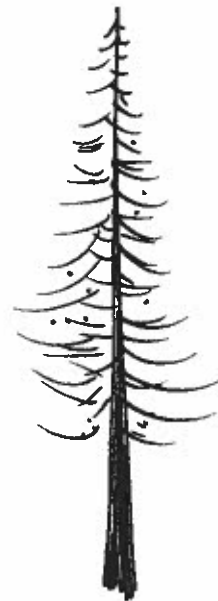


Poplar

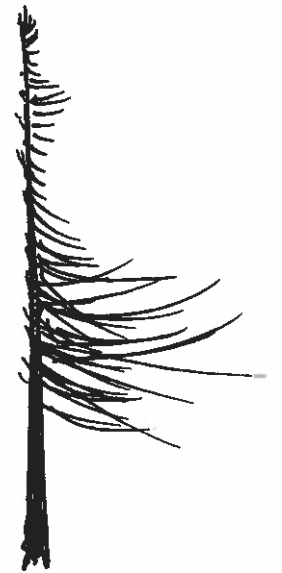
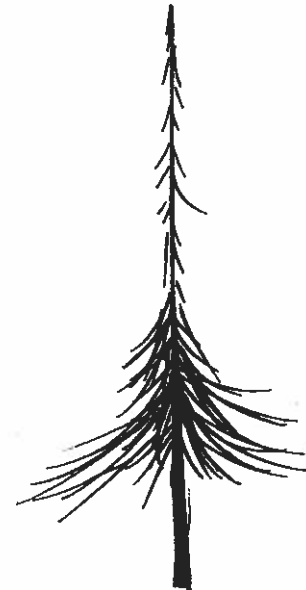
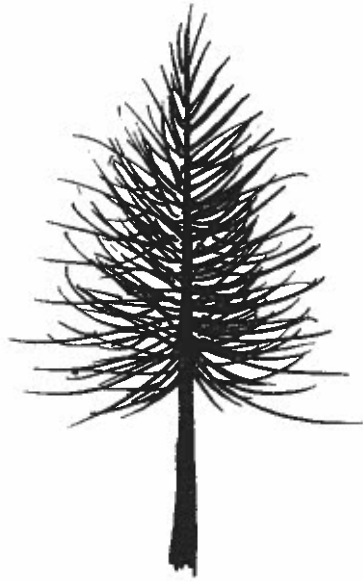
This is another tree pattern.



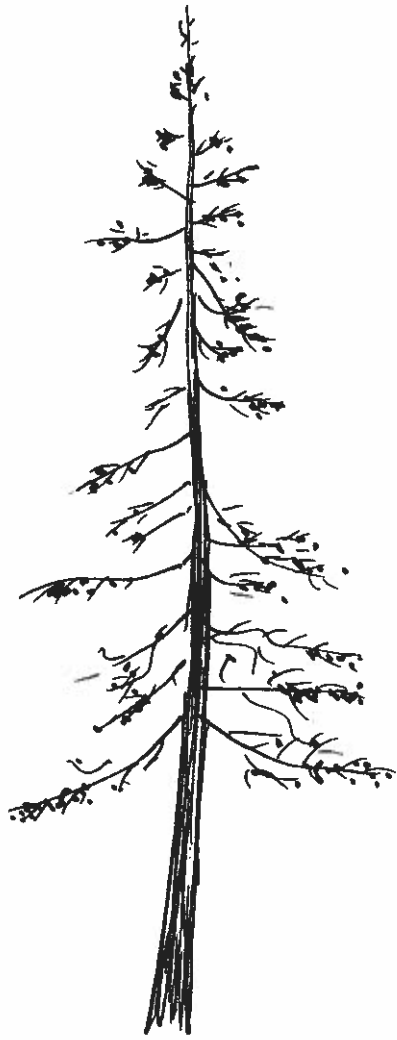
The same pattern with wind.



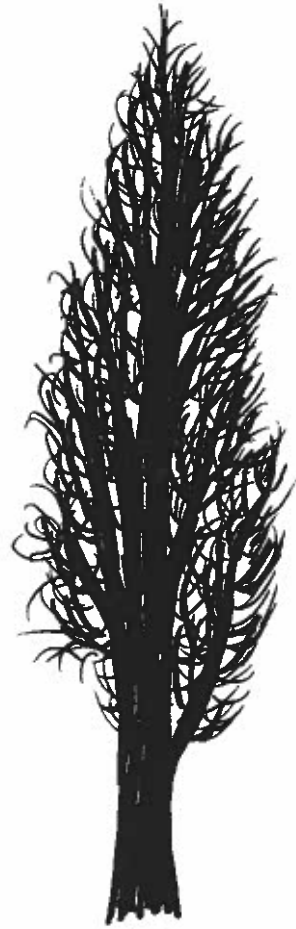
This type of tree has its variants too. It can have branches that face upwards like the poplar, or more open, or untidy, or all facing downwards, narrow or wide or very wide, nearly horizontal.



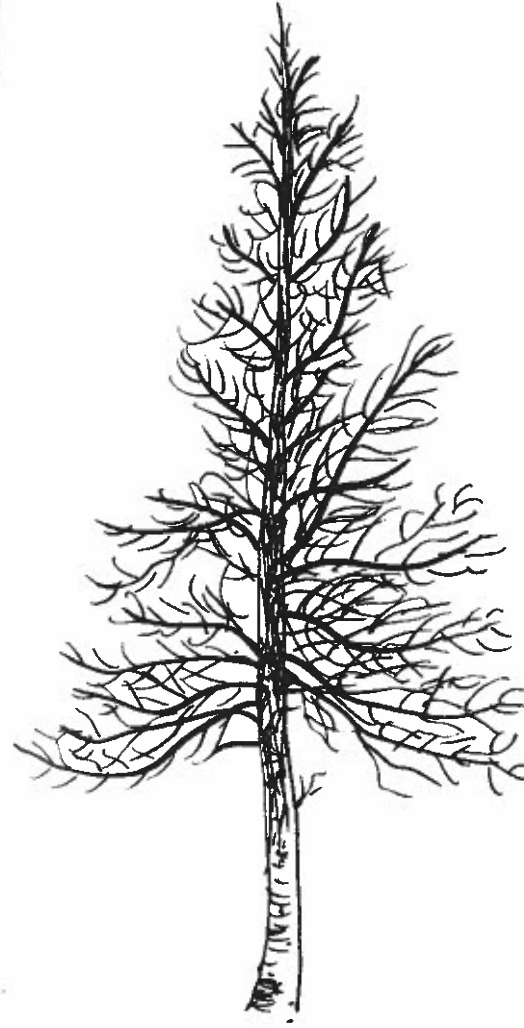
Of course, it can have a lot of branches, a huge number or very few. It can have a lot of branches at the bottom or not many at the top, or all of them at the top to be nearer the sun, or all on one side and almost none on the other.



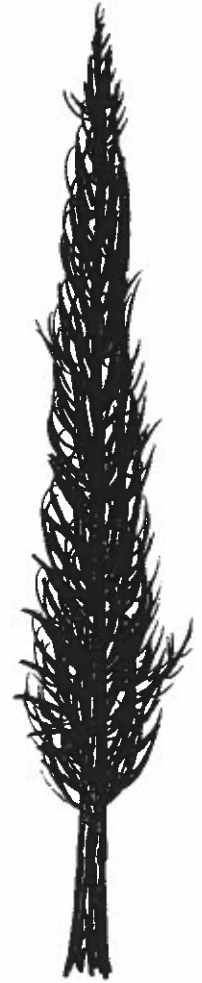
Larch



Siberian elm

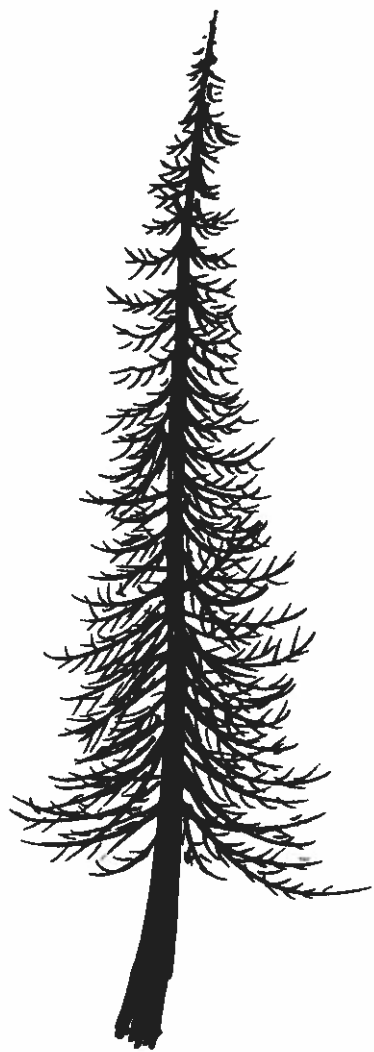


Wild cherry

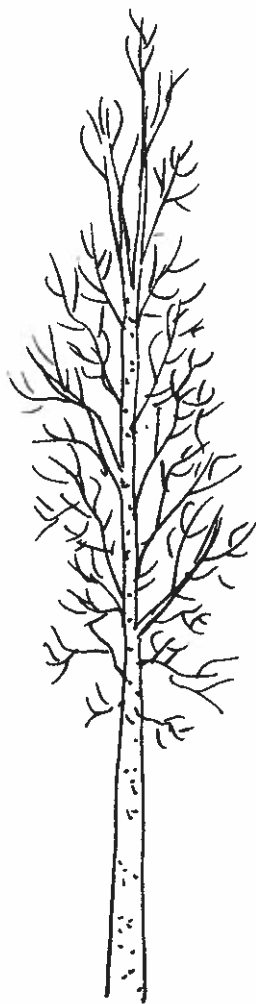


Cypress

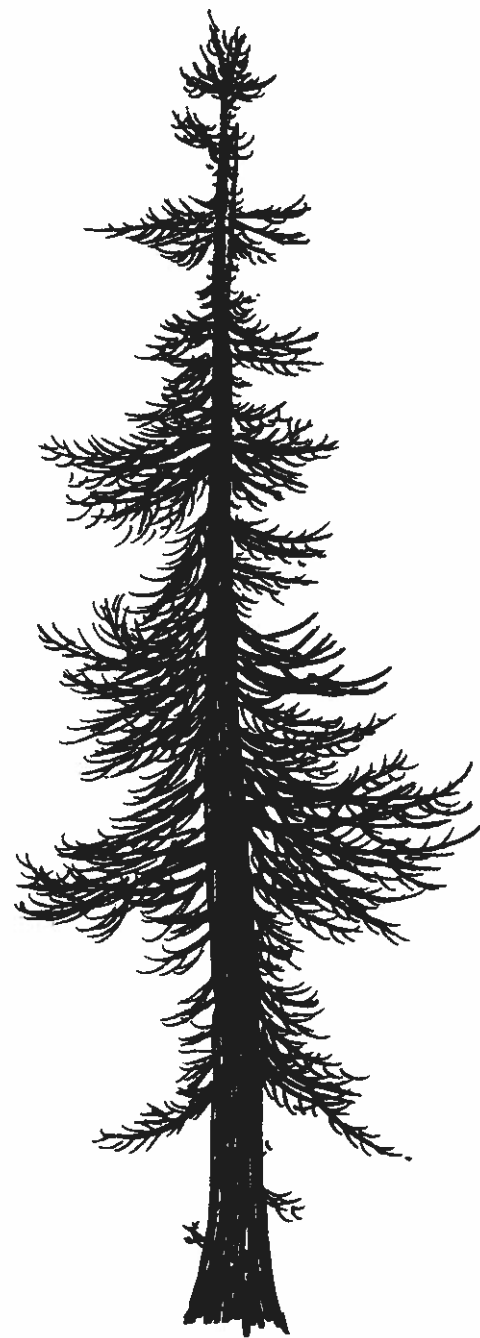
Let's try drawing some different trees using this pattern:
the larch, the Siberian elm, the wild cherry, the cypress.



Red fir



Aspen

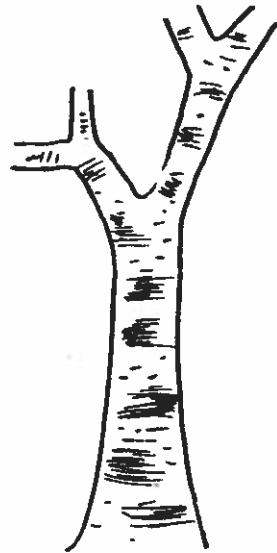


Sequoia

Red fir, aspen and the big evergreen sequoia.



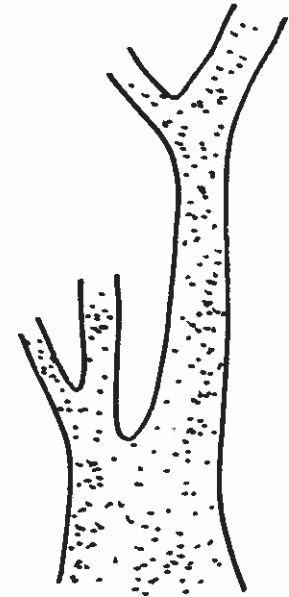
Cork oak



Birch

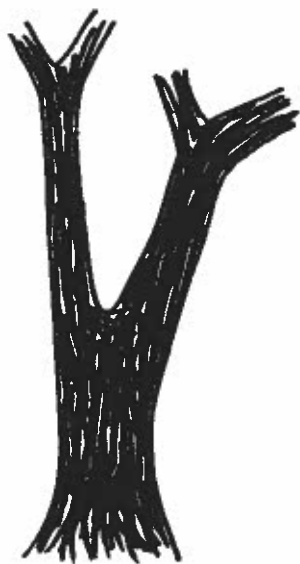


Elm



.....?

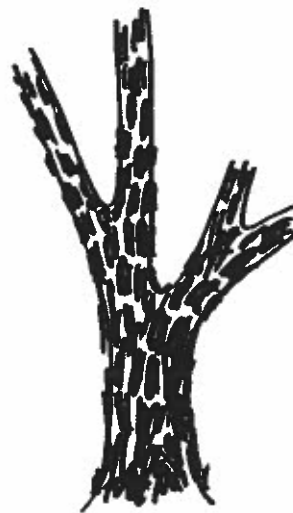
All trees have bark. Some trees have a smooth trunk that seems like cast-iron, others have a skin that peels, like wrapping. Some trunks are shiny and some are matt. Some have jutting bark, others just have scattered dots.



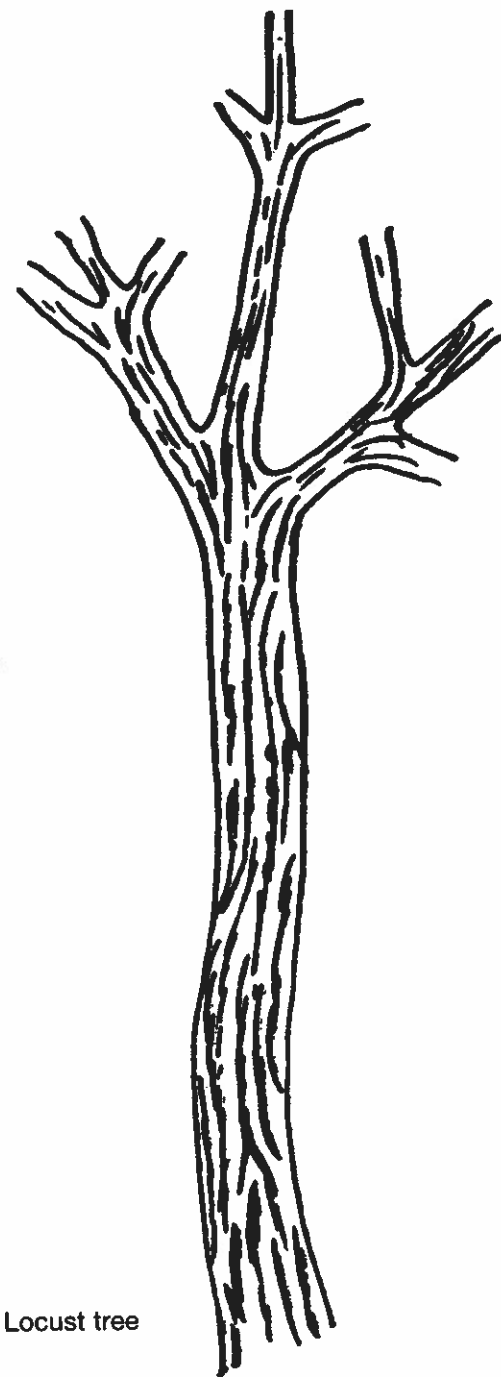
Chestnut



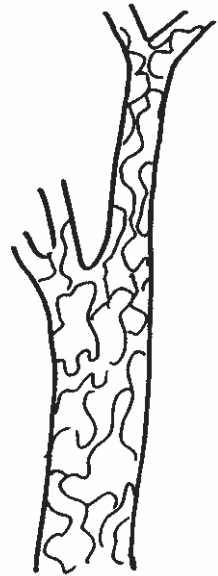
.....?



Maritime pine



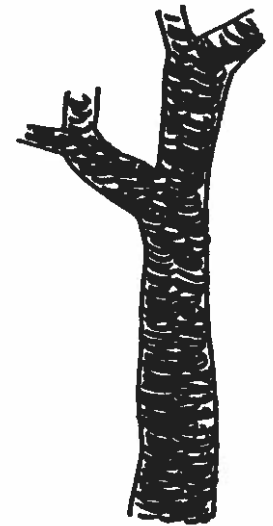
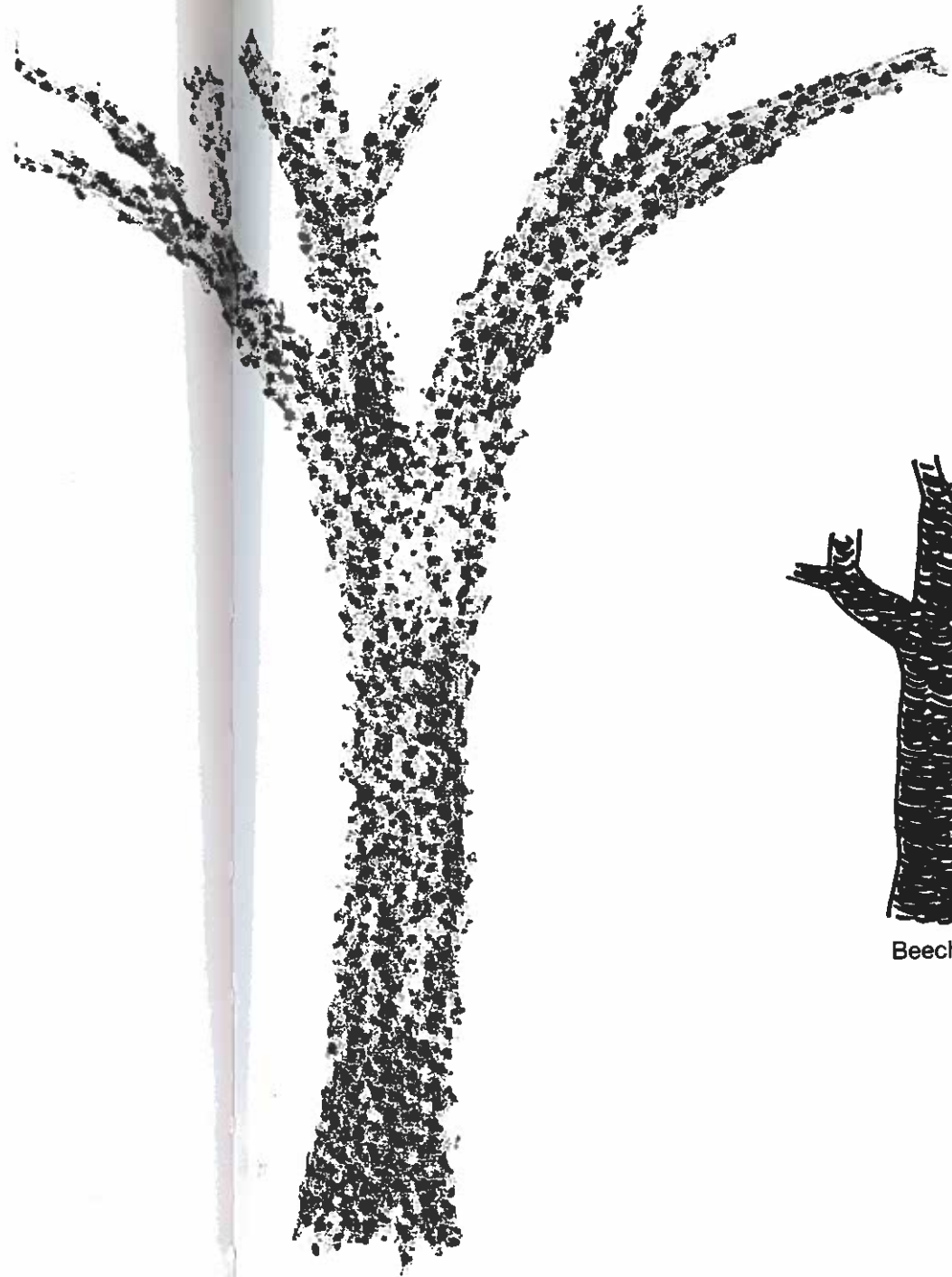
Locust tree



Eucalyptus



Plane tree



Beech

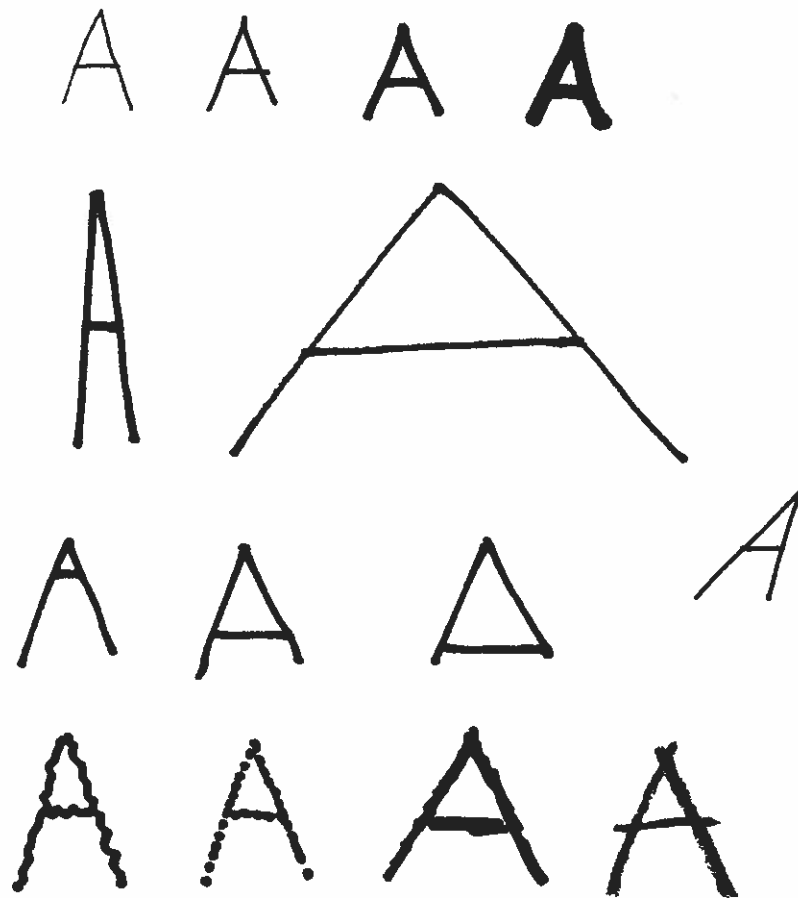
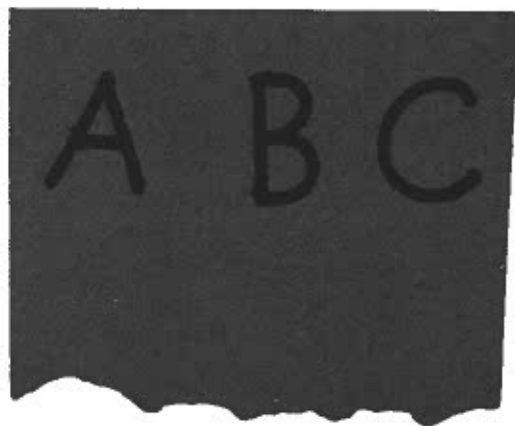
At this point someone says: I can't draw, I'm hopeless at drawing. I'm absolutely useless at drawing, I can't draw anything, nothing at all. These are people who are terrified of making fools of themselves, of drawing something wrong or everything wrong, so they refuse to draw.

Apart from the fact that everyone is free to draw or not to draw, among these there are people who say these things and feel they would like to draw, but as an adult they are afraid of showing they don't know how to draw things even a child can draw.

You can say this to these people: - do you know how to do these drawings? - (and on the blackboard or on a piece of paper you draw an A, a B and a C in capital letters). These are just the first three letters of the alphabet, they'll say. You can answer that these are the three drawings that represent the first three letters of the alphabet and that one is made up of straight lines, one of straight lines and curved ones and one is made up only of curves.

Well, I know how to do those, they'll say. Well, and you know how to do them not only with a pen but with a pencil too, with a felt-tip too, with a crayon as well... you know how to make them narrow or wide, high or low, with straight lines or wavering lines...

Of course, we know how to do those.



B B B B B

B B B

B B B

Y Y Y Y

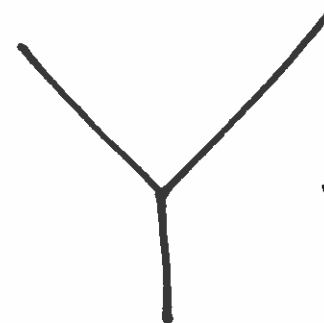
And do you know how to draw the letter Y?

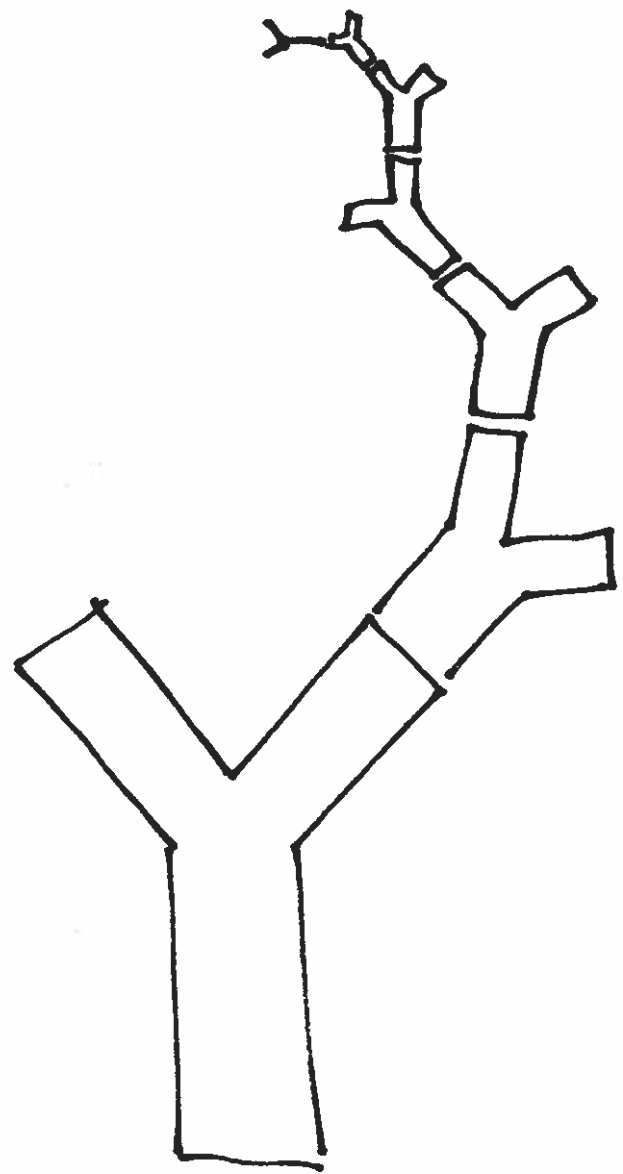
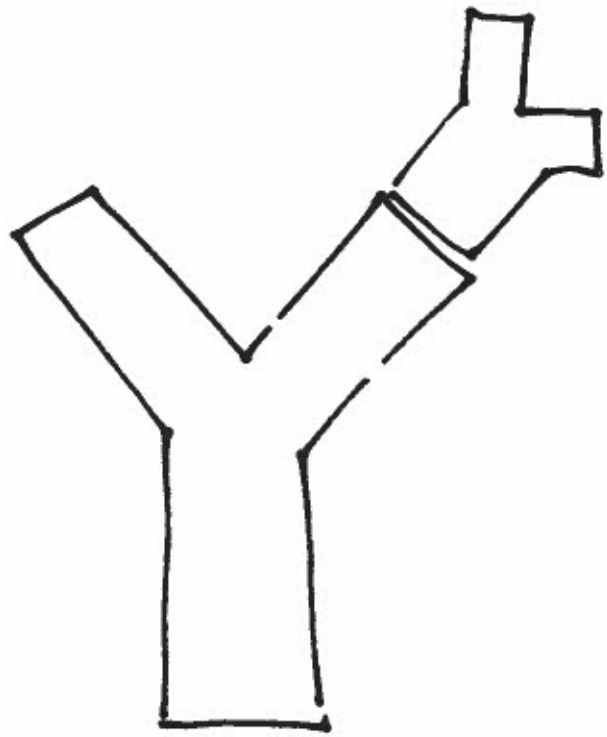
Certainly.

And can you draw it high or low or narrow or wide or
wavering or fine or thick?

Certainly.

Well then, draw a big fat Y and then on the two raised arms
continue the drawing with two more smaller Ys and so on ...
you'll draw yourself a tree.





the branch that follows is always more slender than the one before it