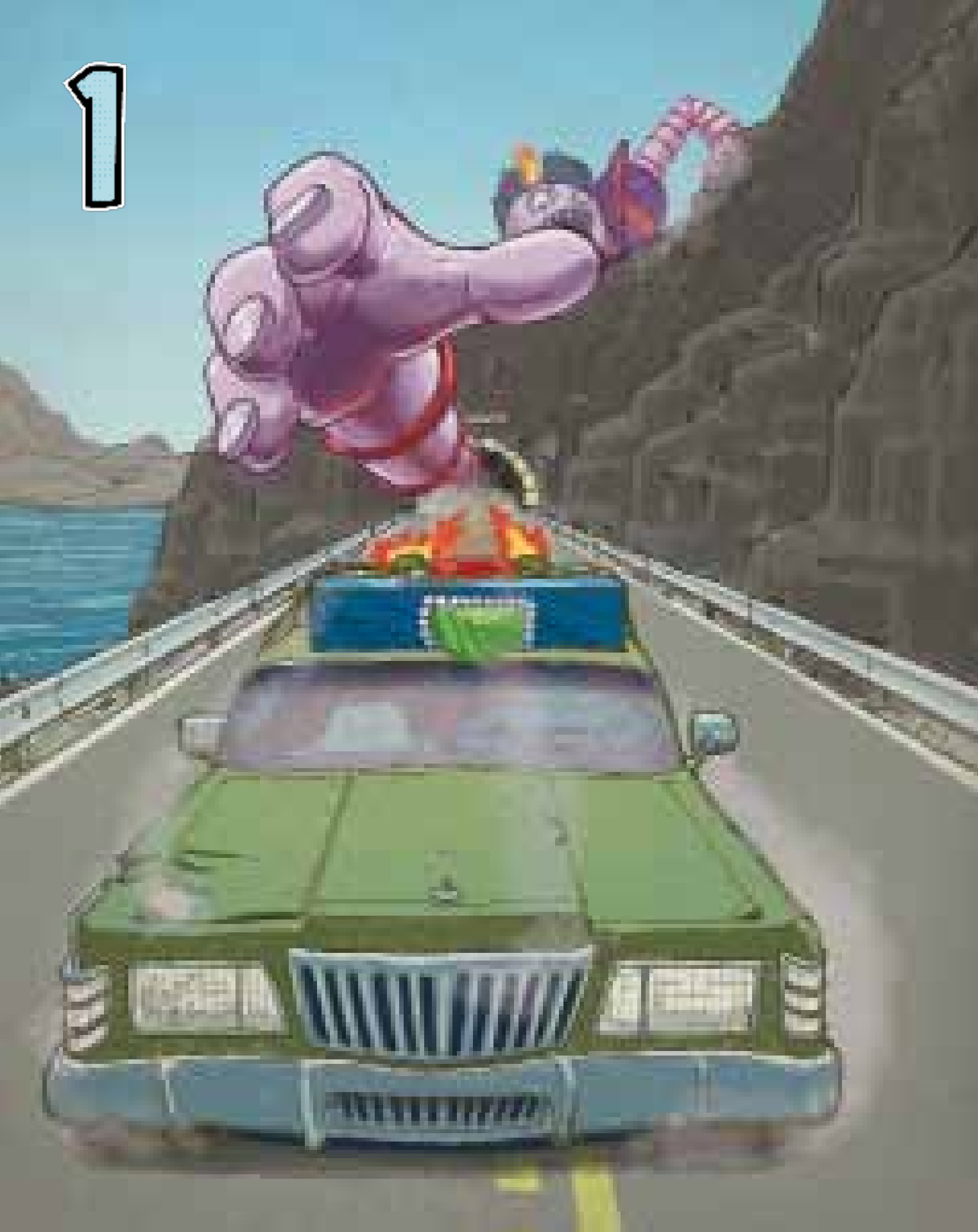
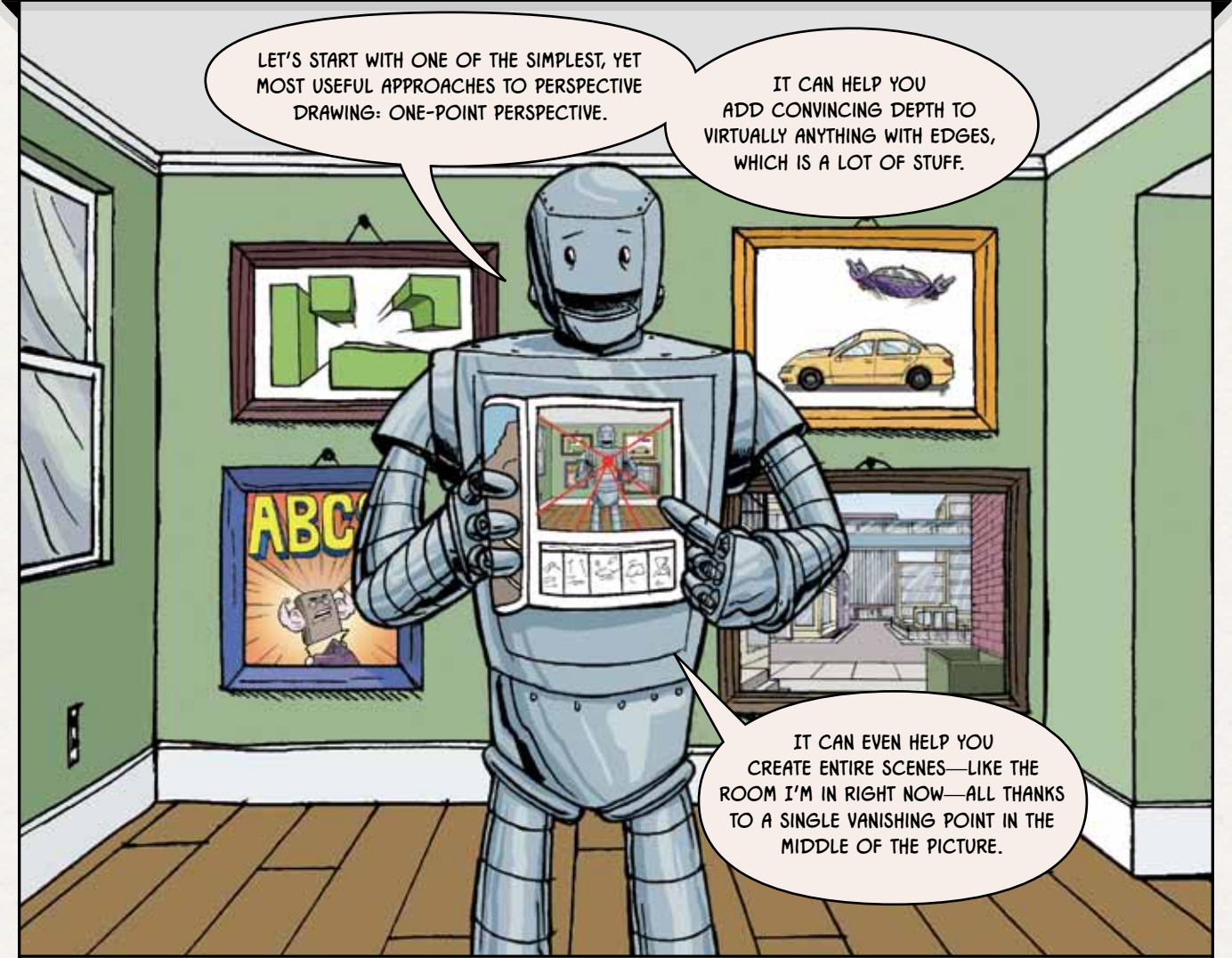


1



ONE-POINT PERSPECTIVE



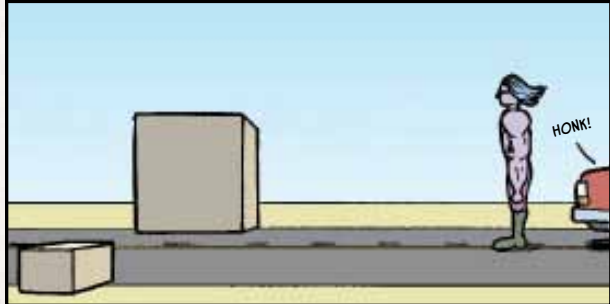
BY THE TIME YOU FINISH THIS CHAPTER, YOU SHOULD BE ABLE TO:

<p>IDENTIFY A ONE-POINT PERSPECTIVE SYSTEM.</p>	<p>RECOGNIZE WHEN AND WHEN NOT TO USE ONE-POINT PERSPECTIVE.</p>	<p>DRAW A VARIETY OF OBJECTS WITH ONE-POINT PERSPECTIVE DEPTH.</p>	<p>FIND THE CENTER OF RECTANGLES IN PERSPECTIVE.</p>	<p>DRAW VERTICAL AND HORIZONTAL LINES CONSISTENTLY.</p>

ONE-POINT PERSPECTIVE OVERVIEW

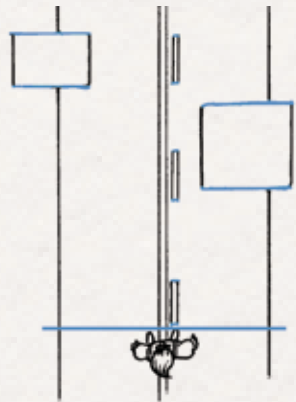
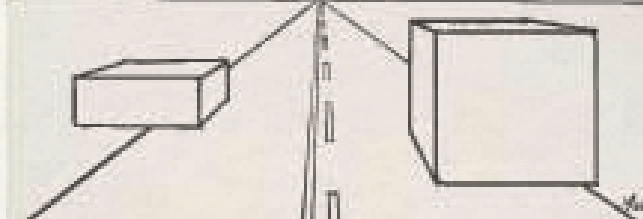
LET'S BEGIN WITH A BRIEF EXPLANATION OF HOW ONE-POINT PERSPECTIVE WORKS.

SAY YOU'RE IN THE MIDDLE OF THE ROAD, LOOKING STRAIGHT AHEAD AT SOME BOXES, AND YOU WANT TO DRAW WHAT YOU SEE.



AS LONG AS YOU KEEP LOOKING STRAIGHT OUT, YOUR DRAWING WOULD LOOK SOMETHING LIKE THIS.

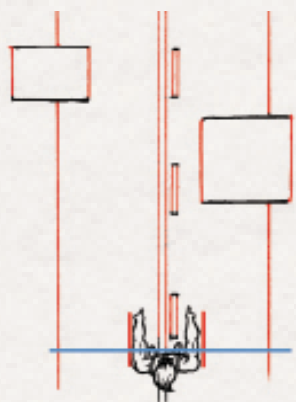
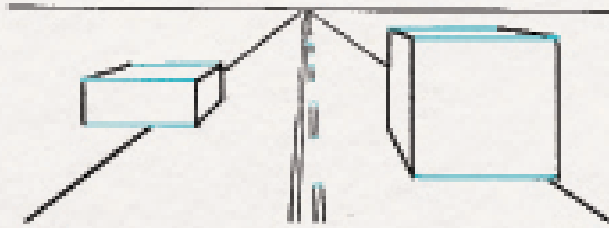
NOTICE THAT THE VERTICAL EDGES OF THE BOXES ARE DRAWN WITH VERTICAL LINES. (SOMETIMES IT'S NOT SO OBVIOUS.)



ANY EDGES THAT GO STRAIGHT ACROSS YOUR FIELD OF VISION (SHOWN IN BLUE) SHOULD BE DRAWN WITH **PERFECTLY HORIZONTAL** LINES.

YOU COULD ALSO THINK OF THESE LINES AS BEING PARALLEL TO YOUR SHOULDERS (AS LONG AS YOU DON'T TURN YOUR HEAD OR SHIFT YOUR EYES).

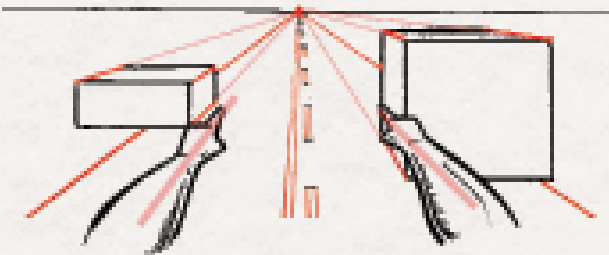
PARALLEL TO SHOULDERS = HORIZONTAL LINES



OTHER EDGES ARE PARALLEL TO YOUR LINE OF SIGHT AND **PERPENDICULAR** TO YOUR SHOULDERS.

THESE LINES WOULD NEVER INTERSECT IN REALITY, NO MATTER HOW LONG THEY ARE...

...BUT IN YOUR DRAWING THEY WOULD, AS IF THEY'RE ALL LINED UP TO A SINGLE **VANISHING POINT (V.P.)** IN THE MIDDLE OF THE PICTURE.



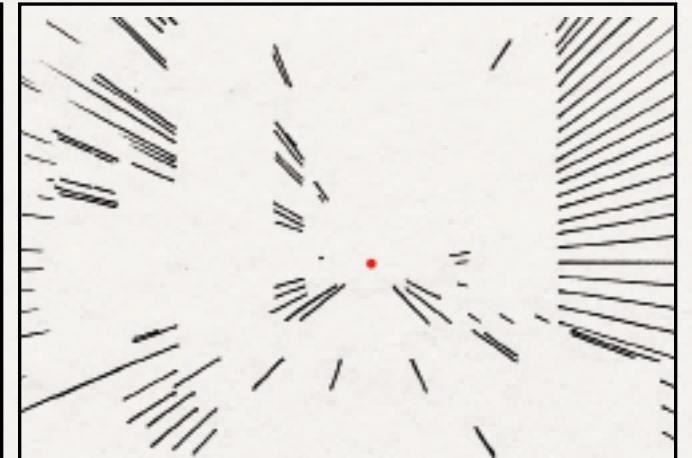
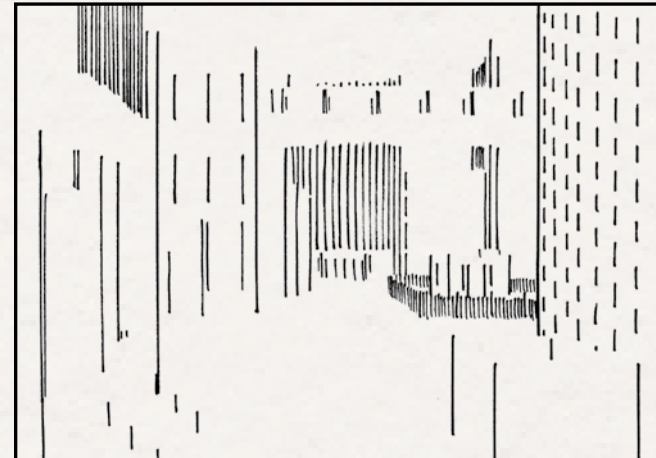
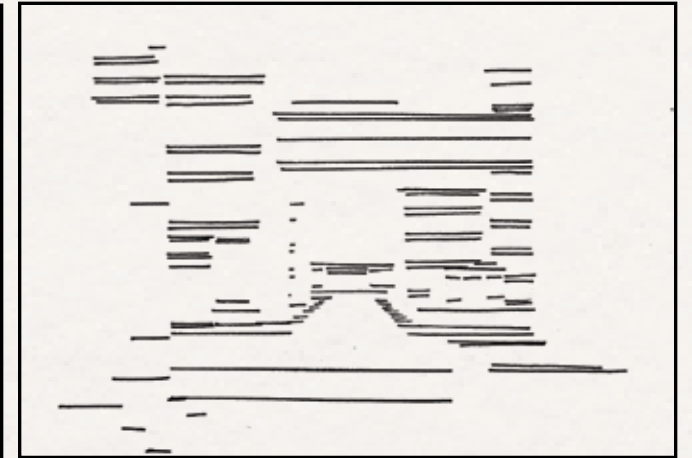
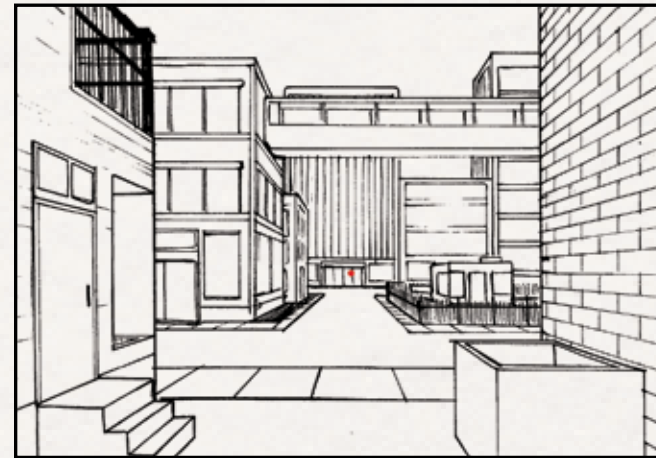
THIS LAST BEHAVIOR, WHERE PARALLEL LINES APPEAR TO GO TO A VANISHING POINT, IS CALLED **CONVERGENCE**.



AND CONVERGENCE TO A SINGLE VANISHING POINT IN THE MIDDLE OF THE PICTURE, ALONG WITH HORIZONTAL AND VERTICAL LINES, IS THE ESSENCE OF ONE-POINT PERSPECTIVE.

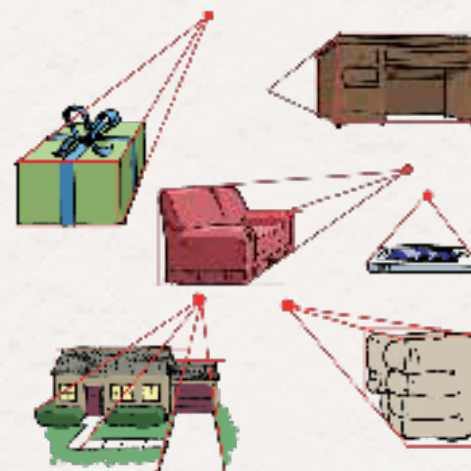
USING ONE-POINT PERSPECTIVE

BECAUSE OF THE WAY HUMANS HAVE BUILT AND ORGANIZED THE WORLD AROUND US, YOU CAN DRAW A LOT OF STUFF USING ONLY A VANISHING POINT AND VERTICAL AND HORIZONTAL LINES.



OF COURSE, THERE ARE USUALLY OTHER ANGLES AND CURVES MIXED IN, TOO. BUT ONE-POINT PERSPECTIVE CAN STILL BE USED TO CORRECTLY DRAW THE CORE SHAPE.

EVEN FOR OBJECTS WITH NO OBVIOUS RIGHT ANGLES, YOU CAN STILL USE ONE-POINT PERSPECTIVE TO ARRANGE THEM IN A SCENE.



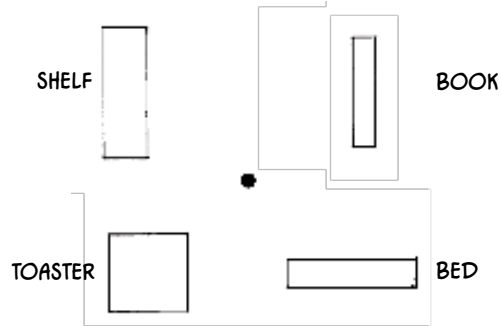
NOW THAT YOU KNOW HOW ONE-POINT PERSPECTIVE WORKS, LET'S PUT IT INTO ACTION!

ONE-POINT PERSPECTIVE BOXES

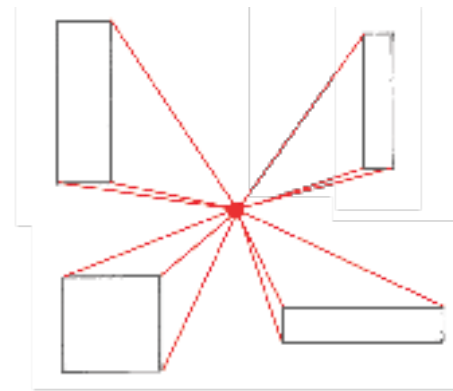
THE MOST COMMON STRATEGY FOR DRAWING OBJECTS IN ONE-POINT PERSPECTIVE IS TO START WITH A SIMPLE BOX. LET'S DRAW A FEW AND THEN TURN THEM INTO EVERYDAY OBJECTS.

1 PLACE A VANISHING POINT IN THE MIDDLE OF YOUR PICTURE AND DRAW SOME RECTANGLES WITH HORIZONTAL AND VERTICAL LINES.

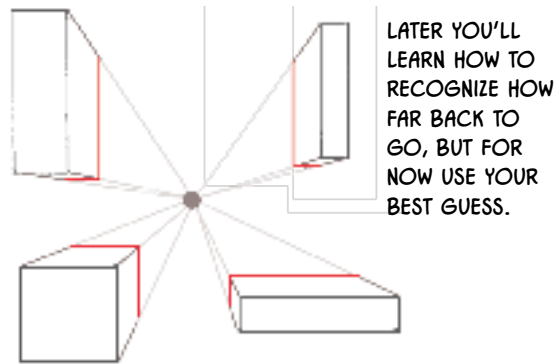
THESE SIMPLE RECTANGLES WILL BE...



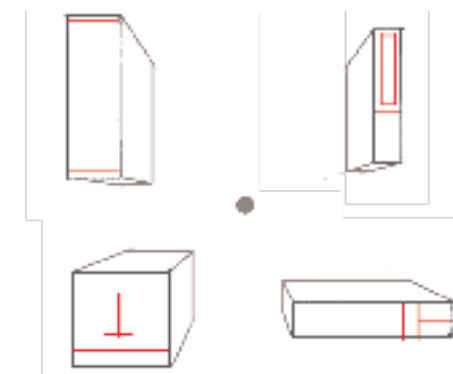
2 CONNECT THE VERTICES (CORNERS) OF THE RECTANGLES TO THE VANISHING POINT.



3 DRAW THE BACK EDGES BY **REDRAWING** THE ORIGINAL VERTICAL AND HORIZONTAL LINES.

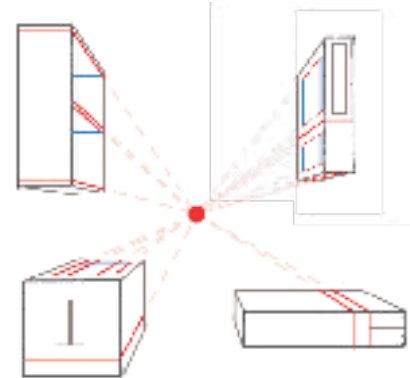


4 ADD LINES TO THE FRONT OF THE OBJECTS USING ADDITIONAL HORIZONTAL AND VERTICAL LINES.



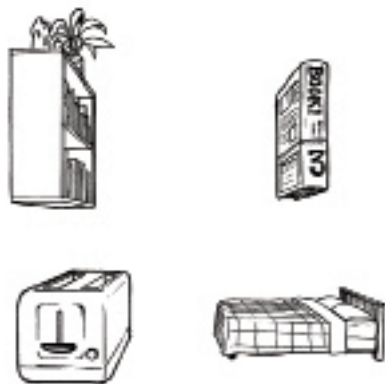
5 WRAP THE LINES AROUND THE SIDES AND TOPS, AND ANGLE THEM TOWARDS THE VANISHING POINT.

CONTINUE TO USE ONLY HORIZONTAL, VERTICAL OR VANISHING POINT LINES, EVEN INSIDE THE OBJECTS!



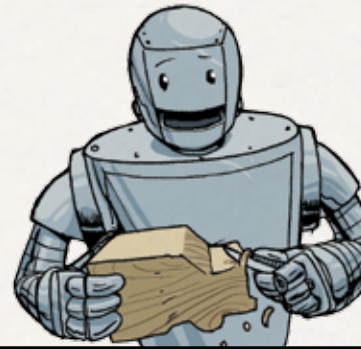
6 ROUND OFF THE EDGES AND ADD DETAILS.

BE AWARE OF LINE THICKNESS AS YOU WORK. I USE THICK LINES FOR THE OUTSIDE, THIN LINES FOR THE INSIDE AND BROKEN LINES FOR SOFT EDGES.

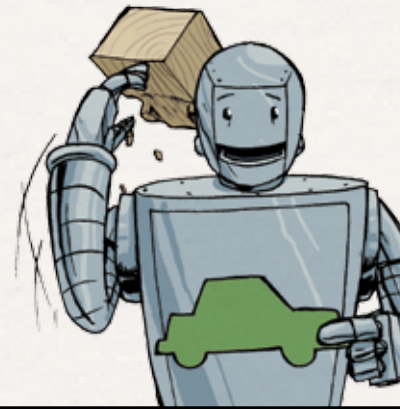


AN ALTERNATIVE APPROACH

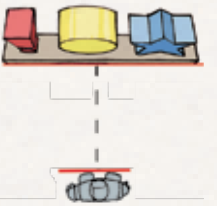
TURNING RECTANGLES INTO BOXES AND THEN CARVING OUT ANGLES AND CURVES IS GREAT FOR DRAWING IN PERSPECTIVE AND IT'S NECESSARY WITH TWO-POINT AND THREE-POINT PERSPECTIVE.



BUT ONE-POINT PERSPECTIVE ALSO OFFERS AN ALTERNATIVE APPROACH—STARTING WITH ANGLES AND CURVES FIRST.



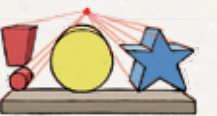
THAT'S BECAUSE ONE-POINT DEALS WITH OBJECTS THAT ARE SQUARE TO THE VIEWER.



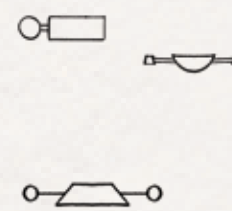
WHICH MEANS YOU CAN DRAW THAT FRONT SURFACE AS IS, CURVES AND ALL.



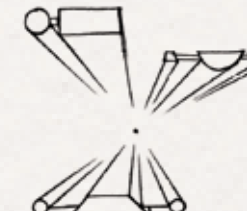
THEN SIMPLY CONNECT THE VERTICES TO THE VANISHING POINT TO GET DEPTH.



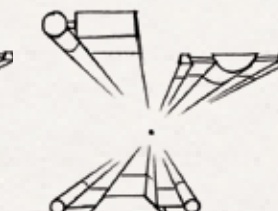
A FUN EXERCISE TO PRACTICE THIS CONCEPT IS TO DRAW GROUPS OF RANDOM SHAPES AND LINES.



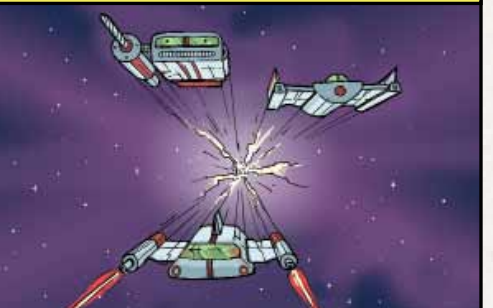
CONNECT THEM TO A VANISHING POINT...



...AND REDRAW THE BACK EDGES WITH THE SAME ANGLES AND CURVES AS THE ORIGINAL ONES.

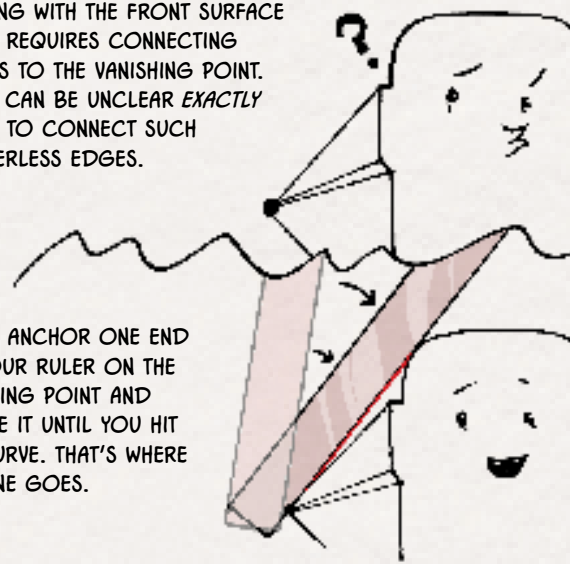


USE ADDITIONAL PERSPECTIVE LINES TO TURN THEM INTO SOMETHING COOL, LIKE SPACESHIPS! PEW, PEW, PEW!

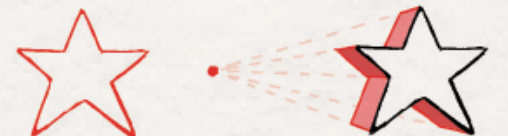


STARTING WITH THE FRONT SURFACE OFTEN REQUIRES CONNECTING CURVES TO THE VANISHING POINT. BUT IT CAN BE UNCLEAR EXACTLY WHERE TO CONNECT SUCH CORNERLESS EDGES.

SIMPLY ANCHOR ONE END OF YOUR RULER ON THE VANISHING POINT AND ROTATE IT UNTIL YOU HIT THE CURVE. THAT'S WHERE THE LINE GOES.



ONCE YOU GET USED TO DRAWING IN PERSPECTIVE, YOU'LL DANCE BACK AND FORTH BETWEEN THE TWO APPROACHES. IN THE MEANTIME, HERE'S A GUIDELINE: IF IT'S A SINGLE, FLAT PLANE, THEN YOU HAVE THE OPTION OF STARTING WITH THE FRONT.



BUT IF THE SIDE PARALLEL TO YOUR SHOULDERS IS NOT FLAT, YOU SHOULD START WITH THE BOX AND ADD THE ANGLES IN LAST.



ONE-POINT DEPTH FOR WORDS AND SYMBOLS

USING ONE-POINT PERSPECTIVE TO ADD DEPTH TO TEXT AND SYMBOLS CAN HAVE A BIG IMPACT ON YOUR WORK, AND IT'S EASY TO DO. (EXCEPT FOR THE "S," BUT WE'VE GOT A TRICK FOR THAT!)

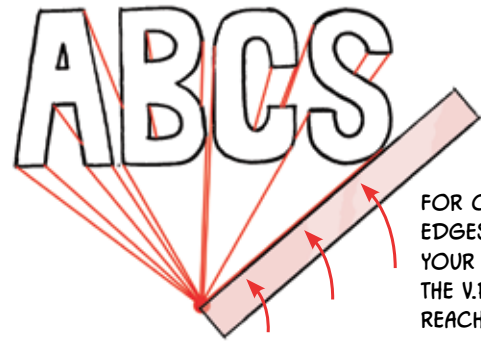
1 DRAW SOME BLOCK LETTERS, AND PLACE A VANISHING POINT IN THE MIDDLE OF THE PICTURE.

ABCS

THEY DON'T HAVE TO BE STRAIGHT—CURVES OR SLANTS ARE OKAY, TOO.

ABCS
ABCS

2 CONNECT YOUR VERTICES TO THE VANISHING POINT (V.P.).

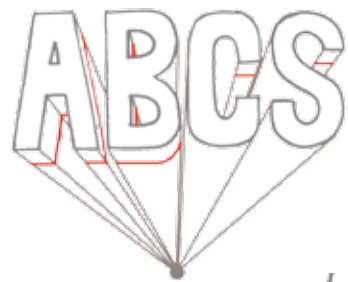


FOR CURVED EDGES, ROTATE YOUR RULER FROM THE V.P. UNTIL YOU REACH THE EDGE.

3 DRAW A LIGHT LINE AS A GUIDE FOR WHERE YOU'D LIKE THE DEPTH TO END. IF YOUR LETTERS HAVE AN OVERALL CURVE, THEN THIS GUIDE SHOULD MATCH IT.



NEXT, DRAW THE BACK EDGES OF THE LETTERS THE SAME AS THE FRONT, USING YOUR GUIDE LINE TO DRAW THE BOTTOMS FIRST. HOLD OFF ON THE TRICKIER CURVES UNTIL STEP 4.

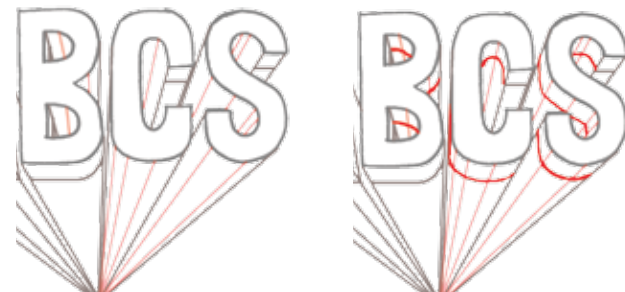


NO!



AS YOU'RE WORKING, TRY TO MATCH THE EXACT ANGLE OF THE ORIGINAL LETTER'S LINES. SOMETIMES IT CAN BE TRICKY, LIKE THE SIDE OF THE "A."

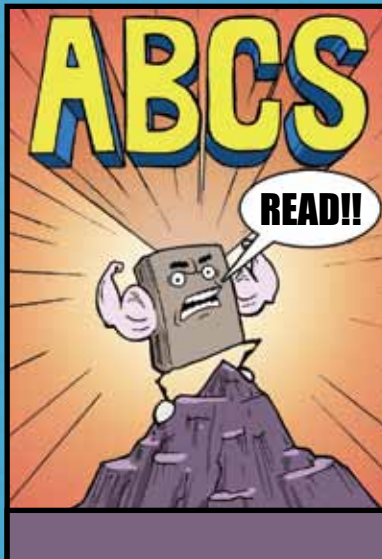
4 FOR MORE DIFFICULT CURVES, LIKE THE "S," DRAW A FEW ADDITIONAL LIGHT LINES TO THE V.P. TO HELP BREAK UP THE CURVE.



NOW YOU CAN SEE THE COMPLEX CURVE AS A SERIES OF SIMPLE ARCS. DRAW THEM ONE AT A TIME AND SMOOTH OUT.

5 ENHANCE THE 3-D EFFECT BY SHADING ALL SURFACES THAT ARE FACING THE SAME DIRECTIONS WITH THE SAME COLORS OR TONES. A FEW OTHER LINES COMING FROM THE V.P. CAN ADD ENERGY.

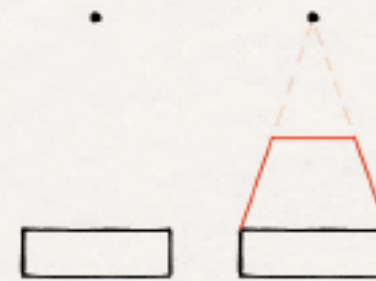
ONE-POINT PERSPECTIVE LETTERS ARE GREAT FOR DESIGN PURPOSES SINCE THE VANISHING POINT MAKES A GREAT FOCAL POINT.



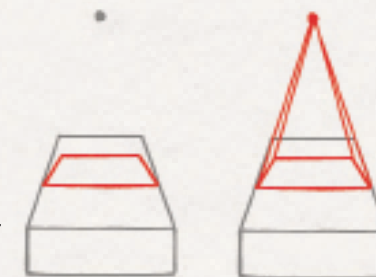
CARS IN ONE-POINT PERSPECTIVE

DRAWING A CAR IN ONE-POINT PERSPECTIVE CAN BE A GREAT EXAMPLE OF WHEN TO CARVE STUFF OUT OF BOXES AND WHEN TO START WITH THE SIDE PARALLEL TO YOUR SHOULDERS.

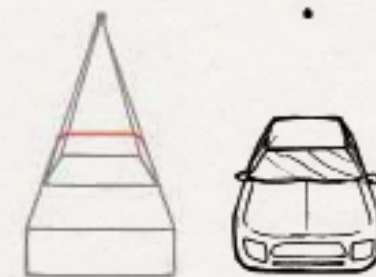
WHEN DRAWING A CAR FROM THE FRONT, START WITH A BOX SINCE THE GRILL AND WINDSHIELD AREN'T A SINGLE, FLAT SURFACE.



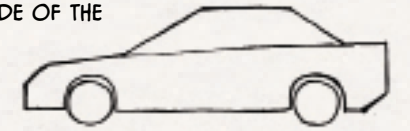
FOR THE CANOPY, START BY DRAWING THE WINDSHIELD. CREATE A WIDE TRAPEZOID SINCE THE WINDSHIELD IS SLOPED AWAY FROM YOU AND CANOPIES ARE PINCHED IN A BIT ON THE SIDES.



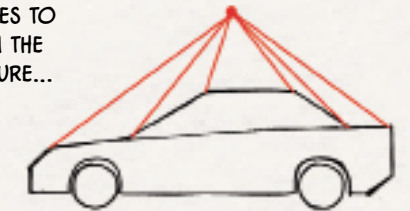
SOFTEN THE EDGES AND ROUND OUT THE CORNERS. LOOKING AT A REFERENCE HERE REALLY HELPS!



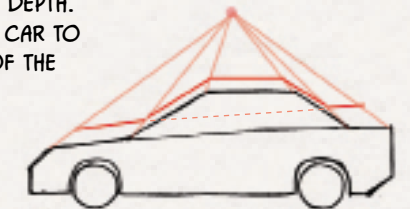
FOR THE SIDE VIEW OF A CAR*, BEGIN WITH THE ANGLES AND CURVES SINCE THE SIDE OF THE CAR IS MOSTLY FLAT.



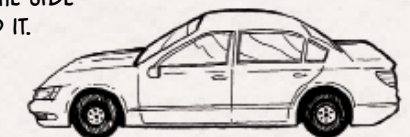
CONNECT THE VERTICES TO A VANISHING POINT IN THE MIDDLE OF THE PICTURE...



...THEN CAP OFF THE DEPTH. DRAW THROUGH THE CAR TO LINE UP THE DEPTH OF THE TRUNK AND HOOD.



FINISH BY SOFTENING THE EDGES. THE SLANT OF THE CANOPY AT THE WINDOWS ISN'T NOTICEABLE FROM THE SIDE VIEW, SO DISREGARD IT.



*CARS COME IN ALL SHAPES AND SIZES, BUT HERE ARE SOME GENERAL TRENDS...

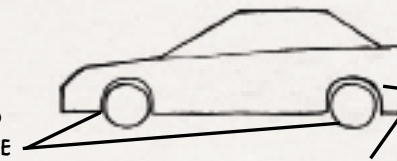
THE CANOPY IS ABOUT 2/3 OF THE TOTAL LENGTH, OFTEN MORE.

THE HOOD IS MUCH LONGER THAN THE TRUNK.



THE BODY IS ABOUT SIX TIMES LONGER THAN IT IS TALL, FLAT ON THE BOTTOM AND SLOPED ON THE TOP.

WHEELS ARE CLOSE TO THE FRONT EDGE. SAME GOES FOR THE BACK.



ANGLE THE BACK A BIT AT THE BOTTOM.

WHEEL WELLS EXTEND MOST OF THE WAY AROUND THE WHEEL ITSELF.

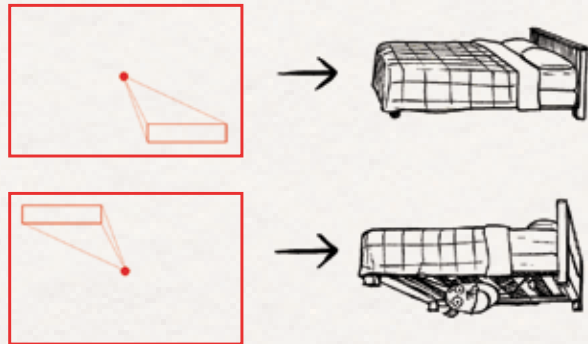
TRUCK BASICS:



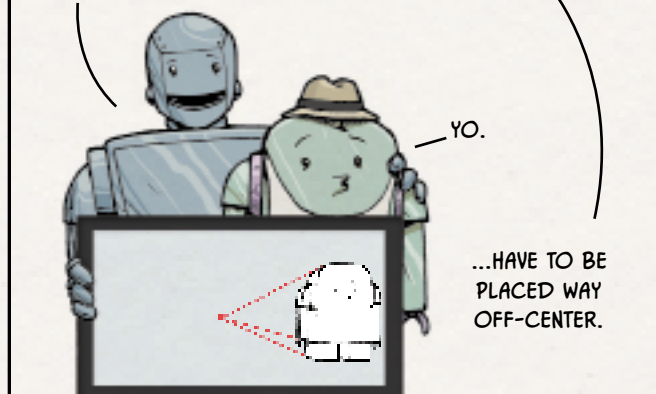
- WHEELS CENTERED BELOW HOOD AND TRUCK BED
- SEVEN TIMES LONGER THAN TALL
- BACK WHEELS SCOOTED IN MORE
- STRAIGHT BODY, SLOPED HOOD

ONE-POINT PERSPECTIVE LIMITATIONS

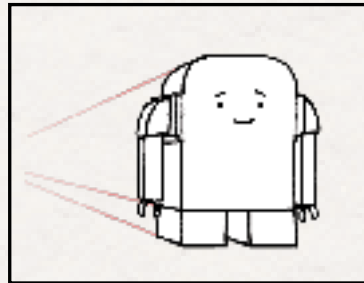
YOU MAY HAVE NOTICED THAT WHERE YOU PUT YOUR OBJECT ON THE PAGE DETERMINES WHICH SIDES YOU END UP DRAWING.



AND SINCE THE VANISHING POINT *HAS* TO STAY IN THE MIDDLE OF THE PICTURE WITH ONE-POINT PERSPECTIVE, ANY OBJECTS I WANT TO DRAW WITH DEPTH, LIKE MY PAL STUBBOT HERE...

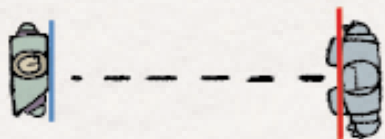


BUT WHAT IF I REALLY WANT HIM CENTERED, WHILE STILL REVEALING SOME OF HIS DEPTH?

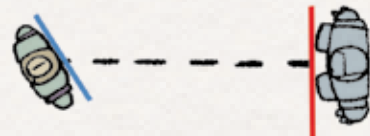


WELL, I COULD CHEAT AND MOVE THE VANISHING POINT AWAY FROM THE CENTER. IT WOULD LOOK OKAY...

...BUT IT WOULD SUGGEST THAT STUBBOT'S SIDES AREN'T PERPENDICULAR.



INSTEAD, THIS PICTURE REALLY NEEDS TO BE DRAWN SO THAT STUBBOT IS NO LONGER SQUARE TO MY SHOULDERS. AND THAT MEANS THIS DRAWING NO LONGER FITS THE REQUIREMENTS FOR A ONE-POINT PERSPECTIVE DRAWING!



INSTEAD, I'LL NEED TWO-POINT PERSPECTIVE.

WE'LL GET TO THAT IN CHAPTER 3.

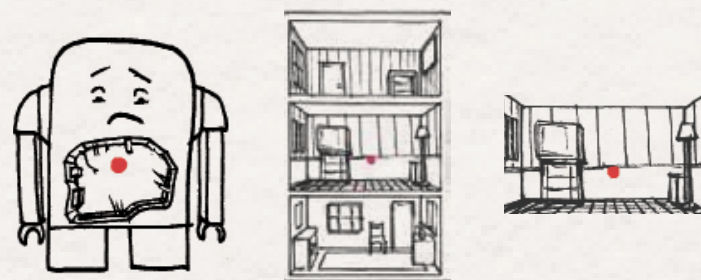
SORRY.



INDEED, THAT'S ONE-POINT'S BIG LIMITATION: YOU CAN'T REALLY SEE DEPTH ON THE OBJECTS THAT ARE IN THE MIDDLE OF YOUR PICTURE.

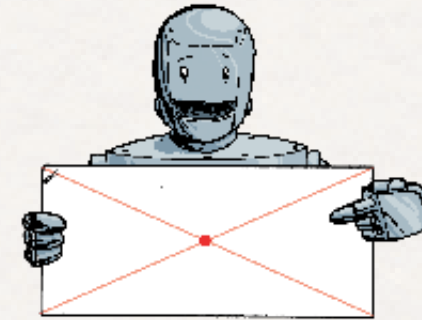


THERE ARE PLENTY OF EXCEPTIONS, OF COURSE.



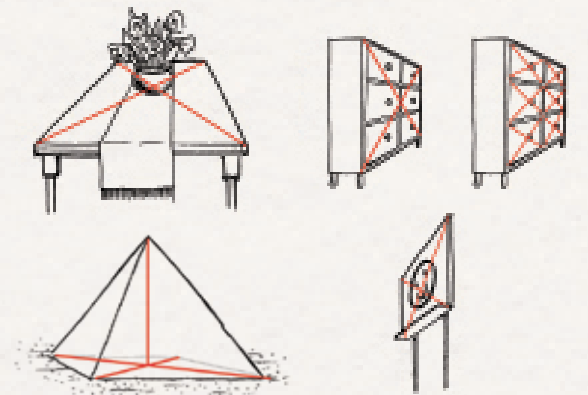
DIVIDING SPACES IN HALF WITH AN X

REGARDLESS OF WHERE WE DRAW AN OBJECT, THERE IS OFTEN A NEED TO LOCATE ITS CENTER. THANKFULLY, IT'S PRETTY EASY. JUST DRAW AN X.



INDEED, THE DEAD CENTER OF ANY RECTANGLE IS THE INTERSECTION OF ITS DIAGONALS.

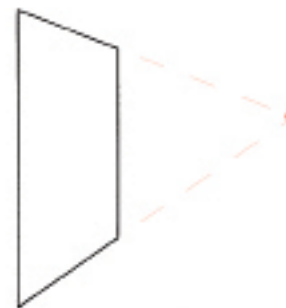
THIS GOES FOR RECTANGLES DISTORTED BY PERSPECTIVE, TOO. IT'S A BIG HELP IN ALL KINDS OF SCENARIOS.



DIVIDING RECTANGLES WITH AN X: A WINDOW

LET'S BREAK DOWN HOW THE X STRATEGY CAN BE USED TO DIVIDE UP A COUPLE OF WINDOWS.

1 DRAW A WINDOW WITH VERTICAL LINES AND LINES THAT GO TO THE VANISHING POINT.

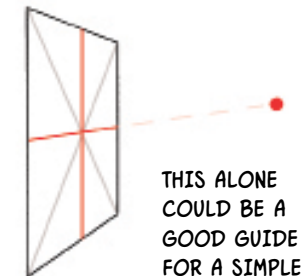


2 DRAW LINES THAT CONNECT THE OPPOSITE CORNERS TO MAKE AN X.



DRAW THEM LIGHTLY SINCE YOU'LL BE ERASING THEM LATER.

3 DIVIDE THE WINDOW INTO FOUR EQUAL SECTIONS USING A VERTICAL LINE, THE VANISHING POINT AND THE MIDDLE OF YOUR X.



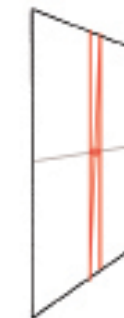
THIS ALONE COULD BE A GOOD GUIDE FOR A SIMPLE WINDOW.

4 OR, YOU CAN CREATE A MORE SOPHISTICATED WINDOW.

DRAW AN ANGLED LINE THAT PASSES THROUGH THE CENTER OF THE RECTANGLE.



5 USE THE LINE AS A DIAGONAL FOR A NEW RECTANGLE.



YOU NOW HAVE A GUIDE FOR TWO EQUALLY SIZED SECTIONS SEPARATED BY AN INTERVAL.

6 USE ADDITIONAL HORIZONTAL, VERTICAL AND VANISHING POINT LINES TO FINISH THE TRIM.



KEEPING HORIZONTAL AND VERTICAL LINES TRUE

UP NEXT, WE'RE GOING TO DRAW AN ENTIRE SCENE WITH ONE-POINT PERSPECTIVE, SO NOW'S A GOOD TIME TO BRING UP AN IMPORTANT TOPIC...

...BUT THAT CAN BE DIFFICULT IF, LIKE MOST HUMANS, YOU DRAW WITH YOUR PAPER CROOKED. I GOTTA ADMIT, SOMETIMES I DO IT, TOO. DON'T TELL THE OTHER ROBOTS!

...CROOKED DRAWING!

SINCE ONE-POINT PERSPECTIVE IS SO RELIANT ON HORIZONTAL AND VERTICAL LINES, IT'S CRUCIAL TO DRAW THESE LINES...

THERE ARE LOTS OF TOOLS AVAILABLE TO HELP YOU KEEP YOUR LINES TRUE.

BUT IN LIEU OF MECHANICAL METHODS, YOU CAN SIMPLY COMPARE YOUR RULER TO THE BOTTOM OF THE PAGE FOR HORIZONTAL LINES...

...AND TO THE SIDES OF THE PAGE FOR VERTICAL LINES.

IT'S A BASIC CONCEPT, BUT IT CAN BE A REAL GAME CHANGER IF YOU MAKE IT INTO A HABIT.

SOME KIND OF DELIBERATE METHOD TO KEEP YOUR VERTICAL AND HORIZONTAL LINES TRUE IS ESSENTIAL WITH ONE-POINT PERSPECTIVE.

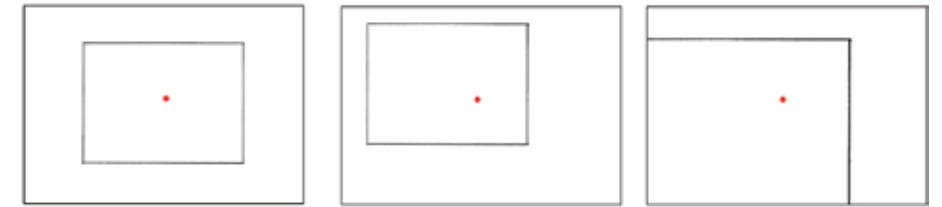
BUT DON'T GIVE IN! KEEP YOUR HORIZONTAL LINES HORIZONTAL AND YOUR VERTICAL LINES VERTICAL!

OTHERWISE, YOU MIGHT SUCCUMB TO YOUR INSTINCTS TO HINT AT THE PERPENDICULAR ANGLES THAT LINES HAVE WHEN SEEN HEAD-ON.

A ONE-POINT PERSPECTIVE ROOM

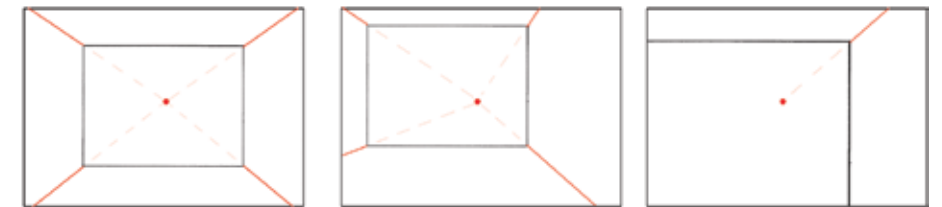
LET'S WRAP UP THE CHAPTER BY DRAWING A ROOM. KEEP YOUR EYE ON THOSE HORIZONTAL AND VERTICAL LINES IN THE LATER STEPS!

1 BEGIN WITH A VANISHING POINT IN THE MIDDLE OF YOUR PICTURE. THEN DRAW A WIDE RECTANGLE ANYWHERE YOU WANT AROUND THE VANISHING POINT. THIS RECTANGLE IS THE BACK WALL OF THE ROOM.



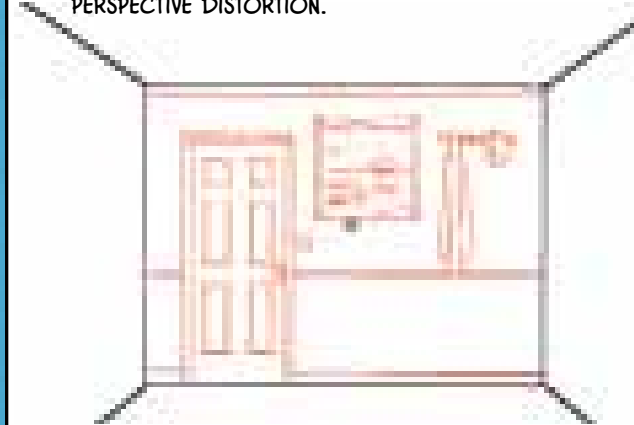
(I'LL BE USING THIS ONE.)

NEXT, USE THE VANISHING POINT TO DRAW THE TOP AND BOTTOM OF THE WALLS TO THE SIDE.

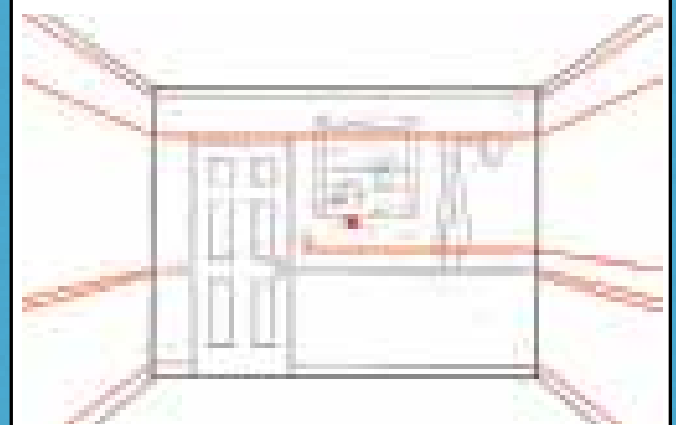


DO YOU SEE THE ROOMS? SOMETIMES IT'S NOT OBVIOUS AT FIRST.

2 SINCE THE BACK WALL IS PARALLEL TO YOUR SHOULDERS, YOU CAN DRAW IT WITHOUT ANY PERSPECTIVE DISTORTION.



3 WRAP RELEVANT HORIZONTAL LINES FROM THE BACK WALL TO THE SIDE WALLS, EXTENDING THEM WHEN NECESSARY.

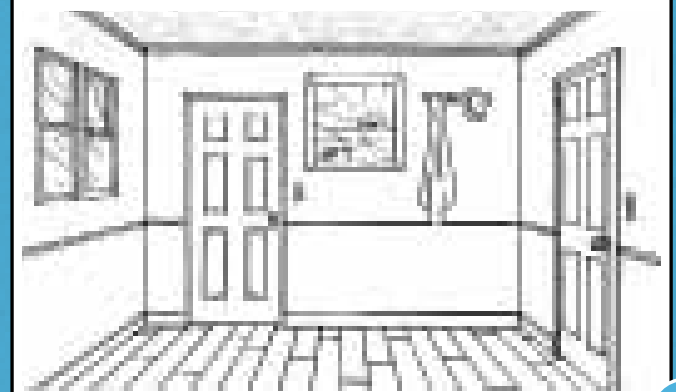


4 USING THE LINES FROM STEP 3 AS GUIDES, DRAW VERTICAL AND VANISHING POINT LINES FOR A DOOR, A WINDOW OR ANYTHING ELSE. USE X'S TO SET UP DETAILS.



ADD FLOORING WITH HORIZONTAL AND VANISHING POINT LINES.

5 ADD DETAILS, BUT WAIT UNTIL WE STUDY THE HORIZON LINE IN CHAPTER 2 BEFORE YOU ADD PEOPLE OR FURNITURE...

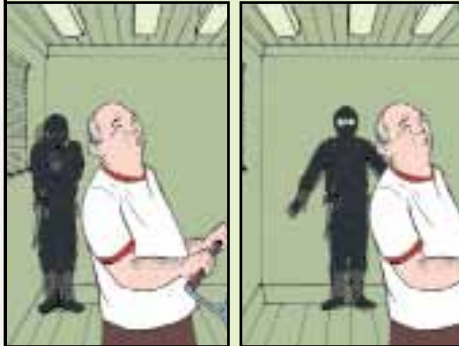


LET'S END THE CHAPTER WITH A FEW MISCELLANEOUS BUT IMPORTANT ONE-POINT PERSPECTIVE NOTES:

INSTEAD OF CONNECTING OBJECTS TO THE VANISHING POINT, DRAW LINES ON THE OPPOSITE SIDE TO CREATE A SENSE OF IMPENDING DOOM!



THE VIEWER'S EYE WILL BE DRAWN TO THE MIDDLE OF THE PICTURE OVER THE VANISHING POINT. BE AWARE OF WHAT YOU PUT THERE.



NINJAS NEVER HIDE OVER A VANISHING POINT!

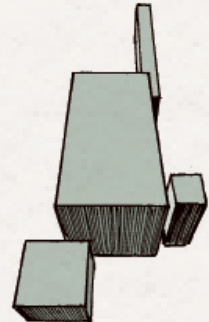
LINES RADIATING FROM THE VANISHING POINT CAN EMPHASIZE MOVEMENT OR DRAMA.

EVEN IF THEY ARE ABSTRACT LINES, THEY APPEAR TO REPRESENT THE MOVEMENT OF AIR... OR SOMETHING. **ZOOM!**



AND I ALREADY MENTIONED THAT ONE-POINT PERSPECTIVE CAN'T BE USED TO DRAW STUFF THAT'S NOT SQUARE TO YOUR SHOULDERS, BUT BEWARE OF THESE OTHER **NON-USSES**:

YOU CAN'T USE IT WHEN YOU WANT THE VIEWER TO FEEL LIKE THEY ARE LOOKING UP OR DOWN. YOU'LL NEED TWO VANISHING POINTS FOR THAT.



YOU CAN'T REALLY USE IT WITH ROUNDED OBJECTS LIKE THESE EITHER.

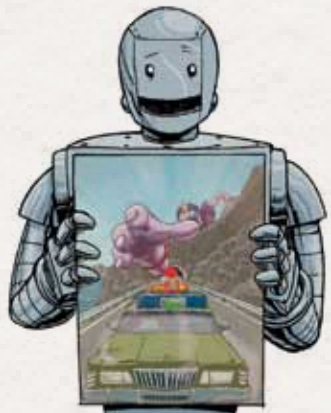


I MEAN, YOU CAN, BUT THEY SUDDENLY DEVELOP HARD EDGES AND TAKE ON DIFFERENT MEANINGS.

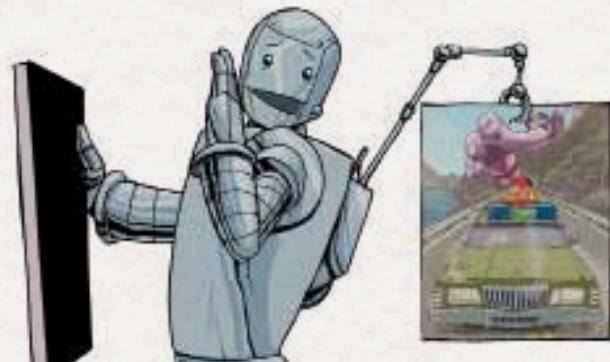


(WE'LL COVER TECHNIQUES FOR THESE TYPES OF DRAWINGS LATER.)

FINALLY, YOU KNOW HOW I'VE BEEN SAYING TO KEEP THE VANISHING POINT IN THE MIDDLE? THAT'S 100% CORRECT! OTHERWISE, YOU WOULDN'T TRULY BE SQUARE TO THE SUBJECT AND WOULD NEED TO USE TWO- OR THREE-POINT PERSPECTIVE.



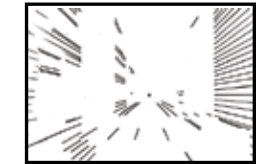
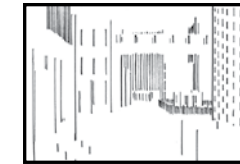
BUT THIS IS ART, SO IF YOU NEED TO CHEAT TO MAKE THE PICTURE WORK BETTER, THEN GO FOR IT.



ONE-POINT PERSPECTIVE IS A DRAWING TECHNIQUE USED TO MAKE THE VIEWER FEEL LIKE THEY ARE SQUARE TO THE SUBJECT(S).



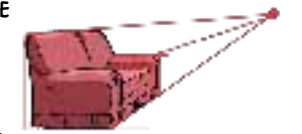
WITH ONE-POINT PERSPECTIVE, ALL VERTICAL LINES ARE DRAWN VERTICALLY, LINES THAT ARE PARALLEL TO YOUR SHOULDERS ARE DRAWN HORIZONTALLY AND LINES THAT ARE PARALLEL TO YOUR LINE OF SIGHT ARE DRAWN WITH LINES THAT GO TO A VANISHING POINT IN THE MIDDLE OF THE PICTURE.



BUT NOT OBLIQUE TO THEM.



YOU CAN DRAW A LOT OF STUFF WITH JUST THESE THREE DIRECTIONS, OR YOU CAN DRAW THEM LIGHTLY AS STRUCTURE LINES AND ADD CURVES AND DETAILS LATER.



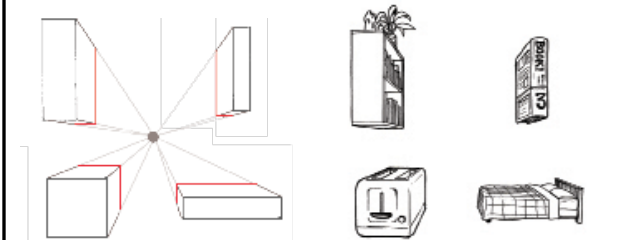
BUT BECAUSE THE VANISHING POINT IS IN THE MIDDLE, YOU CAN'T SEE THE DEPTH OF OBJECTS IN THE MIDDLE OF YOUR PICTURE...



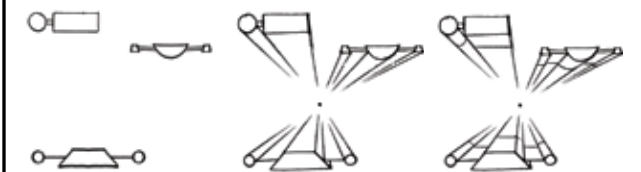
...UNLESS IT'S AN OBJECT YOU CAN SEE THROUGH OR INTO, LIKE A DAMAGED ROBOT OR A ROOM.



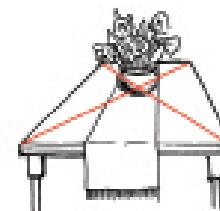
FOR SOME OBJECTS, STARTING OFF WITH A BOX IS THE IDEAL FIRST STEP IN ONE-POINT PERSPECTIVE.



BUT FOR OTHERS, IT'S EASIER TO START WITH CURVED OR ANGLED LINES FOR THE SIDES FACING FORWARD.



YOU CAN INTERSECT THE DIAGONALS (MAKE AN X) TO FIND THE CENTER OF A RECTANGLE, EVEN IF IT'S DISTORTED BY PERSPECTIVE.



KEEPING HORIZONTAL AND VERTICAL LINES TRUE IS IMPORTANT. YOU CAN USE THE EDGES OF YOUR PAPER AS A REFERENCE.

AND FOR SOME, YOU'LL NEED TO USE BOTH APPROACHES INTERMITTENTLY.

