
**Music Theory for Musicians
and Normal People**

Diatonic Harmony

Triads

ALTHOUGH A **CHORD** IS TECHNICALLY ANY COMBINATION OF NOTES PLAYED SIMULTANEOUSLY, IN **MUSIC THEORY** WE USUALLY DEFINE CHORDS AS THE COMBINATION OF **THREE OR MORE NOTES**.



SECUNDAL HARMONY



CHORDS BUILT FROM **SECONDS** FORM **TONE CLUSTERS**, WHICH ARE NOT **HARMONIC** SO MUCH AS **TIMBRAL**.

TERTIAL HARMONY



CHORDS BUILT FROM **THIRDS** (MORE SPECIFICALLY, FROM **MAJOR THIRDS** AND **MINOR THIRDS**) FORM THE BASIS OF MOST HARMONY IN THE **COMMON PRACTICE PERIOD**.

QUARTAL HARMONY



CHORDS BUILT FROM **PERFECT FOURTHS** CREATE A DIFFERENT SOUND, USED IN COMPOSITIONS FROM THE **EARLY 1900s** AND ONWARD.

QUINTAL HARMONY



CHORDS BUILT FROM **PERFECT FIFTHS** CAN BE RESPELLERED AS **QUARTAL CHORDS**, AND AS SUCH THEY DO NOT CREATE A SEPARATE SYSTEM OF HARMONY.

SEXTAL HARMONY? SEPTAL HARMONY? AS WITH QUINTAL HARMONY, THESE ARE THE SAME AS TERTIAL AND SECUNDAL HARMONY, RESPECTIVELY.

IS THE CHORD STILL **TERTIAL** IF IT IS BUILT FROM **DIMINISHED THIRDS** OR **AUGMENTED THIRDS**?

WELL, DIMINISHED THIRDS SOUND JUST LIKE **MAJOR SECONDS**, AND AUGMENTED THIRDS SOUND JUST LIKE **PERFECT FOURTHS**, SO...

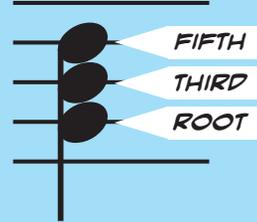
NO.



WHEN WE STACK THE CHORD IN **THIRDS** WITHIN **ONE OCTAVE**, WE GET WHAT IS CALLED THE **SIMPLE FORM** OF THE CHORD.

LET'S GET STARTED ON TERTIAL HARMONY WITH THE SMALLEST CHORD POSSIBLE: **THE TRIAD**.

THE **LOWEST** NOTE IN THE CHORD WHEN THE CHORD IS IN **SIMPLE FORM** IS CALLED THE **ROOT**. THE NAMES OF THE OTHER NOTES ARE BASED ON THEIR **INTERVAL** ABOVE THE ROOT.



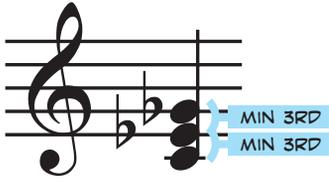
A TRIAD IS DEFINED AS A **THREE-NOTE CHORD**, BUT IN PRACTICE IT IS ALMOST ALWAYS USED TO REFER TO **TERTIAL** THREE-NOTE CHORDS.

INCIDENTALLY, **FOUR-NOTE CHORDS** ARE TECHNICALLY CALLED **TETRADS**, BUT WE USUALLY CALL THEM **SEVENTH CHORDS**, SINCE THEY ADD A **SEVENTH**.

THERE ARE **FOUR** WAYS TO CREATE A **TRIAD** USING **MAJOR** AND **MINOR THIRDS**:

THE DIMINISHED TRIAD

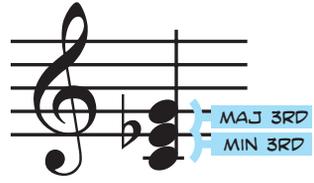
TWO **MINOR THIRDS** STACKED TOGETHER



c^o

THE MINOR TRIAD

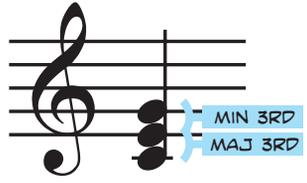
A **MAJOR THIRD** ON TOP A **MINOR THIRD** ON BOTTOM



c

THE MAJOR TRIAD

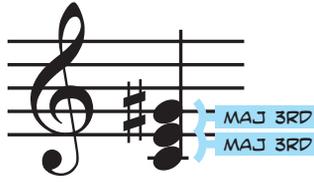
A **MINOR THIRD** ON TOP A **MAJOR THIRD** ON BOTTOM



C

THE AUGMENTED TRIAD

TWO **MAJOR THIRDS** STACKED TOGETHER



C⁺

WE LABEL TRIADS USING THEIR **ROOT** ("A **C MINOR TRIAD**"). THE ABBREVIATIONS SHOWN ABOVE, WHICH USE **UPPER CASE**, **LOWER CASE**, AND **SYMBOLS** TO SHOW CHORD TYPE, ARE CALLED **MACRO ANALYSIS**.

Triads in Inversion



LADIES AND GENTLEMEN, IT'S FRANZ JOSEPH HAYDN!

AND HE'S BROUGHT A MOVEMENT FROM HIS 1767 SONATA IN G MAJOR.



THANK YOU FOR HAVING ME. IN THIS PIECE I USE QUITE A FEW TRIADS.

OOH! LET'S SEE 'EM!

HERE'S ONE: IT HAS THE NOTES C, E AND G. IT'S A C MAJOR TRIAD! VERY NICE.

THANK YOU. SEE HOW THE NOTES ARE SPREAD OUT, AND NOT JUST STACKED IN THIRDS? IT'S STILL A TRIAD, THOUGH.

THIS ONE IS G, B, AND D... A G MAJOR TRIAD! BUT IT SOUNDS DIFFERENT, SOMEHOW.

THAT'S BECAUSE THE THIRD OF THE CHORD IS IN THE BASS... WHEN THAT HAPPENS, WE SAY THE CHORD IS IN FIRST INVERSION.

FIRST INVERSION? WHAT IS IT CALLED WHEN THE ROOT IS IN THE BASS, LIKE THE FIRST CHORD WE LOOKED AT?

THAT'S CALLED ROOT POSITION.

SO THIS ONE WITH D, F, AND A IS A D MINOR TRIAD... IN SECOND INVERSION!

EXACTLY! BECAUSE THE FIFTH IS IN THE BASS.

SO THE THING THAT MAKES A TRIAD ROOT POSITION, FIRST INVERSION OR SECOND INVERSION IS SIMPLY WHICH NOTE IS IN THE BASS?

IT'S HARD TO BELIEVE THAT THE SOUND OF THE CHORD CAN CHANGE SO MUCH JUST BECAUSE OF THE BASS NOTE.

THAT'S RIGHT! AND EACH ONE HAS ITS OWN CHARACTER.

I KNOW, RIGHT? IT'S AWESOME.



Figured Bass



Figure 1. The Basso Continuo

MUSICAL WORKS WRITTEN IN THE **BAROQUE ERA** WOULD OFTEN INCLUDE A PART CALLED THE **BASSO CONTINUO** WHICH WOULD CONSIST OF A **SINGLE BASS CLEF MELODIC LINE** WITH VARIOUS **NUMBERS AND ACCIDENTALS** PRINTED BENEATH THE NOTES.

NO, NO, NO... THERE WASN'T AN ACTUAL INSTRUMENT CALLED A **BASSO CONTINUO!** THE PART WAS PLAYED BY **TWO INSTRUMENTS:** A **BASS CLEF INSTRUMENT** LIKE **CELLO** OR **BASSOON**, AND A **KEYBOARD INSTRUMENT** LIKE A **HARPSICHORD**.

IN PERFORMANCES, THE **BASS CLEF INSTRUMENT** WOULD SIMPLY PLAY THE **GIVEN NOTES**, BUT THE **KEYBOARD PLAYER** WOULD **IMPROVISE** A PART BASED ON THE **NOTES AND THE SYMBOLS BELOW THE PART!**

SO THIS...

COULD BE PLAYED AS THIS!

THE **NUMBERS AND SYMBOLS** PRINTED BELOW THE **BASSO CONTINUO** PART ARE CALLED THE **FIGURED BASS**. SO HOW DO YOU TURN FIGURED BASS INTO **CHORDS**?

FIRST OF ALL, IT'S IMPORTANT TO KNOW THAT THE **NOTE** GIVEN ON THE **BASS CLEF** PART IS ALWAYS THE **BASS NOTE OF THE CHORD**. AND REMEMBER: THE **BASS** IS NOT NECESSARILY THE **ROOT!**

SECOND, THE **NUMBERS** REPRESENT **INTERVALS** ABOVE THE **BASS**, EVEN THOUGH SOME NUMBERS ARE USUALLY LEFT OUT.

NOTE THAT THE **INTERVALS** ARE ALWAYS **DIATONIC**. DON'T WORRY ABOUT **INFLECTION...** JUST USE THE **NOTES** FROM THE **KEY SIGNATURE!**

IF THERE ARE **NO NUMBERS**, ADD A **THIRD** AND A **FIFTH** ABOVE THE **BASS**... YOU GET A **ROOT POSITION TRIAD!**

A **SIX** BY ITSELF INDICATES A **SIXTH** AND A **THIRD** ABOVE THE **BASS**, WHICH CREATES A **FIRST INVERSION TRIAD!**

A **SIX** AND A **FOUR** INDICATE A **SIXTH** AND A **FOURTH** ABOVE THE **BASS**, GIVING YOU A **SECOND INVERSION TRIAD!**

HERE, THE **SHARP** APPLIES TO THE **SIXTH** ABOVE THE **BASS**, SO WE ADD A **SHARP** TO THE **6**.

HERE, THERE IS **NO NUMBER** NEXT TO THE **SHARP**, SO WE APPLY IT TO THE **THIRD** ABOVE THE **BASS** NOTE.

NOTE THAT THERE IS A **NATURAL**, NOT A **FLAT**, NEXT TO THE **SIX**... IF IT WERE A **FLAT**, WE WOULD WRITE A **C FLAT**.

LASTLY, **ACCIDENTALS** ARE APPLIED TO THE **INTERVAL** THEY APPEAR WITH. IF YOU HAVE AN **ACCIDENTAL BY ITSELF**, IT APPLIES TO THE **THIRD** ABOVE THE **BASS**.

DON'T **OVERTHINK** THESE: IF THE **COMPOSER** WANTS A **NOTE RAISED** BY A **HALF-STEP** AND IT'S **FLATTED** IN THE **KEY SIGNATURE**, THE **FIGURED BASS** WILL HAVE A **NATURAL**, NOT A **SHARP**.

BY THE TIME THE **CLASSICAL PERIOD** GOT GOING, **COMPOSERS STOPPED INCLUDING** A **BASSO CONTINUO PART**, AND SO **FIGURED BASS** FELL OUT OF USE... WITH ONLY ONE **EXCEPTION: MUSIC THEORY CLASSES!**

REALIZING FIGURED BASS (WRITING **CHORDS** GIVEN A **FIGURED BASS LINE**) MAKES FOR AN **EXCELLENT EXERCISE** FOR **STUDENTS** TO LEARN **HOW TO WRITE** IN THE **COMMON PRACTICE PERIOD STYLE!**

WOOO!

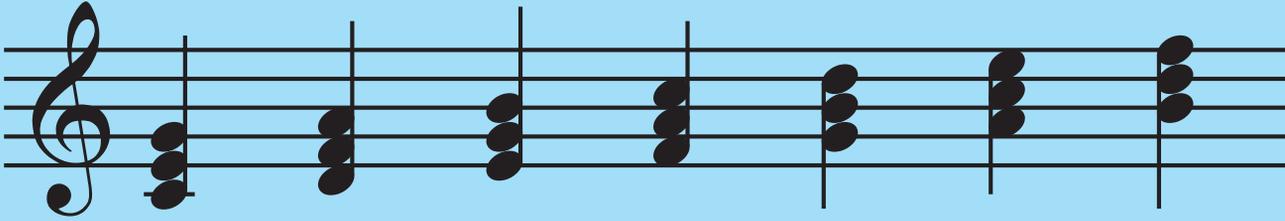
Triads Within Tonality

NOW THAT WE'RE FAMILIAR WITH HOW **TRIADS** WORK, IT'S TIME TO PUT THEM INTO THE CONTEXT OF A **KEY**.

SINCE WRITING MUSIC IN A PARTICULAR **KEY** MEANS USING THE NOTES IN THAT **KEY SIGNATURE**, IT STANDS TO REASON THAT MOST OF THE **CHORDS** WILL BE BUILT FROM **THOSE SAME NOTES!**

CHORDS WHICH USE NOTES FROM A PARTICULAR **KEY SIGNATURE** ARE SAID TO BE **DIATONIC** TO THAT KEY. **DIATONIC** MEANS "**FROM THE KEY...**" THAT MEANS **NO ACCIDENTALS!**

WE CAN QUICKLY SHOW ALL THE **DIATONIC TRIADS** IN A PARTICULAR **KEY** BY WRITING A **SCALE** IN THAT KEY AND BUILDING **TRIADS** ON **EACH NOTE**, USING ONLY THE NOTES IN THAT KEY.



WE REFER TO THESE CHORDS WITH **ROMAN NUMERALS** AS SHOWN HERE.

NOTICE HOW **CHORD TYPE** IS SHOWN BY **CAPITALS** OR **LOWER CASE?**

THESE CHORDS ARE ALSO SOMETIMES REFERRED TO BY THEIR **OFFICIAL NAMES!**

TONIC

SUPERTONIC

MEDIANT

SUBDOMINANT

DOMINANT

SUBMEDIANT

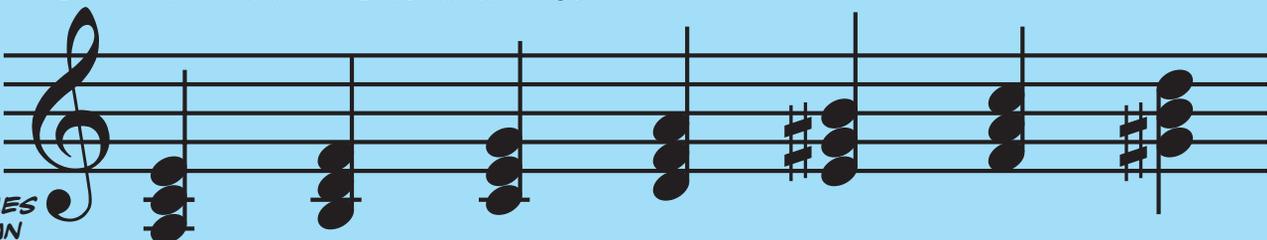
LEADING-TONE

THIS PATTERN OF **MAJOR, MINOR** AND **DIMINISHED** TRIADS IS THE **SAME** IN **EVERY MAJOR KEY!** THE **SUBDOMINANT TRIAD** IS ALWAYS **MAJOR**, AND THE **LEADING-TONE TRIAD** IS ALWAYS **DIMINISHED**, WHETHER YOU'RE IN **C MAJOR** OR **F SHARP MAJOR!**

WHY IS THE SIXTH CHORD CALLED THE **SUBMEDIANT**? WELL, JUST AS THE **MEDIANT** CHORD IS HALFWAY BETWEEN THE **TONIC** AND **DOMINANT** CHORDS, THE **SUBMEDIANT** CHORD IS HALFWAY BETWEEN THE **TONIC...** AND THE **SUBDOMINANT** A FIFTH **BELOW!**

BECAUSE THE **DOMINANT** AND **LEADING-TONE** TRIADS BOTH HAVE A STRONG TENDENCY TO RESOLVE TO **TONIC**, WE SAY THEY HAVE A "**DOMINANT FUNCTION.**" THE **SUBDOMINANT** AND **SUPERTONIC** CHORDS BOTH TEND TO RESOLVE TO THE **DOMINANT**, SO WE SAY THEY BOTH HAVE A "**SUBDOMINANT FUNCTION.**"

THE **DIATONIC TRIADS** IN **MINOR** WORK THE SAME WAY... SINCE WE'RE DEALING WITH **CHORDS**, WE USE THE **HARMONIC MINOR SCALE**. HOWEVER, IT'S IMPORTANT TO NOTE THAT COMMON PRACTICE PERIOD COMPOSERS **RAISED THE LEADING TONE** ONLY OVER **DOMINANT FUNCTION HARMONY**: THE **DOMINANT** AND **LEADING-TONE TRIADS!**



SAME NAMES AND **ROMAN NUMERALS...** DIFFERENT **CAPITALIZATION!**

i

ii°

III

iv

V

VI

vii°

Introduction to Part-Writing

AS WE LOOK AHEAD, WE'RE CONFRONTED WITH AN **UGLY TRUTH**:

THERE IS A LOT OF MUSIC IN THE HISTORY OF THE WORLD THAT IS WORTH STUDYING...

MUCH MORE THAN WE CAN HOPE TO COVER IN THE SPAN OF A FEW SEMESTERS.

SINCE WE CAN'T COVER IT ALL, WE HAVE TO CHOOSE A **SPECIFIC MUSICAL LANGUAGE** TO STUDY IN DEPTH.

LET'S START BY NARROWING THINGS DOWN TO THE **COMMON PRACTICE PERIOD**.



THE COMMON PRACTICE PERIOD IS THE MUSIC OF THE **BAROQUE, CLASSICAL AND ROMANTIC ERAS** IN **EUROPE AND AMERICA**. THE NAME COMES FROM THE FACT THAT MOST COMPOSERS USED A **COMMON MUSICAL LANGUAGE** DURING THIS TIME.

IT'S ESPECIALLY WORTH STUDYING BECAUSE MOST OF THE PIECES COMMONLY PERFORMED IN CONCERT ARE FROM THIS PERIOD...

BUT THERE IS A **TON** OF COMMON PRACTICE PERIOD MUSIC... MORE THAN WE CAN HOPE TO COVER. IS THERE A **REPRESENTATIVE STYLE** WE CAN SINK OUR ACADEMIC TEETH INTO?

...AND THE LANGUAGE FORMS THE BASIS FOR THE MOST **POPULAR** MUSICAL STYLES TODAY.

FOUR-VOICE CHORALE WRITING IS A GOOD STYLE TO STUDY FOR **SEVERAL REASONS**:

CHORALES HAVE A FAST **HARMONIC RHYTHM**, ALLOWING FOR A LARGER NUMBER OF CHORDS PER EXERCISE.

A LARGE PERCENTAGE OF COMMON PRACTICE PERIOD MUSIC CAN BE EASILY REDUCED TO **FOUR-VOICE COUNTERPOINT**.

THE **CANTATAS OF J.S. BACH** PROVIDE US WITH A TREMENDOUS AMOUNT OF CONSISTENTLY-WRITTEN FOUR-VOICE CHORALES.

ONE OF THE CHANGES TO THE CATHOLIC CHURCH PROPOSED BY **MARTIN LUTHER** WAS TO ALLOW MEMBERS OF THE **CONGREGATION** TO PARTICIPATE IN THE **SINGING OF THE LITURGY**.



OF COURSE, LUTHER WAS BRANDED A **HERETIC** FOR HIS PROPOSALS, AND BEGAN HIS **OWN** CHURCH IN WHICH TO IMPLEMENT HIS IDEAS.

MORE THAN TWO HUNDRED YEARS LATER, **J.S. BACH** WAS APPOINTED MUSICAL DIRECTOR AT THE **ST. THOMAS CHURCH** IN **LEIPZIG, GERMANY** AND, IN THE SPIRIT OF LUTHER, WROTE **FIVE YEARS' WORTH OF LITURGICAL MUSIC**.



EACH OF THESE WORKS, CALLED **CANTATAS**, WERE BUILT AROUND A **HYMN MELODY** HARMONIZED IN **FOUR PARTS** FOR CONGREGATIONAL SINGING.

BY ANALYZING BACH'S CANTATAS, WE CAN CONSTRUCT A **SET OF "RULES"** FOR WRITING IN FOUR-VOICE COMMON PRACTICE PERIOD MUSICAL STYLE, ALLOWING US TO STUDY IT IN DEPTH.

Part-Writing: The Vertical Rules

TO BEST UNDERSTAND HOW COMMON PRACTICE PERIOD COMPOSERS WROTE MUSIC, WE ARE GOING TO LEARN HOW TO *WRITE MUSIC* USING THEIR MUSICAL STYLE.



IT'S *WRONG* TO THINK THESE WERE "RULES" FOR THE COMPOSERS... THEY WERE JUST WRITING WHAT *SOUNDED GOOD* TO THEM.

SO THE PATTERNS WE SEE IN THEIR MUSIC, THE THINGS THEY CONSISTENTLY *DID* OR *DIDN'T DO*, ARE GOING TO BECOME "RULES" FOR US IN OUR WRITING.

NOR SHOULD WE TREAT THESE AS RULES FOR WRITING MUSIC IN *GENERAL*... EACH STYLE OF WRITING HAS ITS *OWN* SET OF PATTERNS, AND THUS ITS OWN "RULEBOOK." AS A COMPOSER, YOU GET TO WRITE *YOUR OWN RULES* FOR YOUR OWN STYLE!

WE'RE GOING TO START WITH THE *VERTICAL RULES*... THAT IS, THE RULES THAT PERTAIN TO BUILDING A *SINGLE CHORD* IN *FOUR-VOICE HARMONY*.

FIRST, THE DISTANCE BETWEEN *SOPRANO AND ALTO* AND BETWEEN *ALTO AND TENOR* MUST BE AN *OCTAVE OR LESS*.

THE TENOR AND BASS CAN BE AS *FAR APART* AS YOU WANT!

SECOND, THE VOICES MUST BE KEPT IN THEIR *PROPER ORDER*; FOR EXAMPLE, THE *TENOR* SHOULDN'T BE *HIGHER* THAN THE *ALTO*. (BACH DID THIS NOW AND THEN, BUT IT WAS ONLY WHEN HE WANTED TO INCORPORATE SOME *SPECIAL MELODIC SHAPES*.)

THIRD, SINCE WE HAVE *FOUR VOICES* AND ONLY *THREE NOTES* IN A *TRIAD*, ONE OF THE NOTES SHOULD BE *DOUBLED*. FOR TRIADS IN *ROOT POSITION*, WE TYPICALLY DOUBLE THE *ROOT* OF THE CHORD UNLESS FORCED (BY OTHER RULES) TO DO OTHERWISE.

LASTLY, EACH VOICE SHOULD STAY IN ITS *RANGE*. THESE ARE *CONSERVATIVE* RANGES FOR *MODERN SINGERS*, BUT REMEMBER THAT BACH'S CHORALES WERE REALLY WRITTEN FOR *AMATEURS*: THE *COMMON PEOPLE* WHO ATTENDED *CHURCH* IN *LEIPZIG*!

Part-Writing: The Horizontal Rules



THE **SUPREME GOAL** OF PART-WRITING IS **GOOD VOICE LEADING**...
MAKING EACH INDIVIDUAL VOICE PART **EASY TO SING** BY AVOIDING
AWKWARD INTERVALS OR **LARGE LEAPS**!

BEFORE WE GET TO THE SPECIFIC **DO'S** AND **DON'TS**, LET'S TAKE A LOOK
AT SOME **IMPORTANT CHARACTERISTICS** OF FOUR-VOICE PART-WRITING:

NOTE HOW EACH VOICE MOVES
AS **LITTLE AS POSSIBLE**, GOING
TO THE **NEAREST CHORD TONE**
IN EACH SUBSEQUENT CHORD!

IN SOME CASES, THE VOICE
CAN SIMPLY STAY ON THE **SAME**
NOTE. THIS IS CALLED
KEEPING THE COMMON TONE,
AND IT'S **ALWAYS COOL**!

IT'S COMMON FOR THE BASS TO
MOVE IN THE **OPPOSITE DIRECTION**
OF THE **UPPER THREE VOICES**.
THIS IS CALLED **CONTRARY MOTION**
AND IT HELPS MAINTAIN
VOICE INDEPENDENCE.

THE BASS LINE, SINCE IT PROVIDES
THE **FOUNDATION** OF THE **HARMONY**
IN EACH CHORD, TENDS TO INCLUDE
LARGER LEAPS THAN THE OTHER
THREE VOICES, BUT THAT'S OKAY.



VOICE INDEPENDENCE?

FOUR-VOICE HARMONY IS A FORM OF **COUNTERPOINT**,
WHICH IS THE COMBINATION OF **MORE THAN ONE**
MELODY PLAYED SIMULTANEOUSLY. IN COUNTERPOINT,
EACH VOICE IS **EQUALLY IMPORTANT**; NO VOICE IS
GIVEN A ROLE OF ACCOMPANIMENT TO ANOTHER VOICE.

IN COUNTERPOINT, IT IS IMPORTANT FOR EACH VOICE TO
BE **INDEPENDENT**; THAT IS, NO TWO VOICES SHOULD BE
DOING THE **EXACT SAME THING**. IF TWO (OR MORE)
VOICES WERE MOVING IN **PARALLEL**, THE **RICHNESS**
OF THE **TEXTURE** WOULD BE **REDUCED**.

AS A RESULT, COMMON PRACTICE COMPOSERS WERE
VERY CONSISTENT IN AVOIDING TWO OR MORE VOICES
THAT MOVED IN **PARALLEL PERFECT OCTAVES**, **PARALLEL**
PERFECT FIFTHS, OR **PARALLEL PERFECT UNISONS**!

PARALLEL
OCTAVES!

PARALLEL
FIFTHS!

PARALLEL
UNISONS!

THERE ARE ALSO A FEW OTHER
RULES THAT APPLY TO THIS STYLE:

WHEN YOU HAVE THE **LEADING TONE**
IN AN **OUTER VOICE** (SOPRANO OR
BASS) IT MUST RESOLVE TO THE
TONIC IN THE NEXT CHORD.

YOU MAY NOT MOVE ANY VOICE
BY AN INTERVAL OF AN
AUGMENTED SECOND
OR AN **AUGMENTED FOURTH**.

THE **GOOD NEWS**:
YOU CAN AVOID ALL THREE OF
THESE BY DOING THE FOLLOWING
WHENEVER POSSIBLE:

1. **KEEP THE COMMON TONE!**
2. **MOVE TO THE NEAREST CHORD TONE!**
3. **USE CONTRARY MOTION!**

Part-Writing: Using Inversions



WHEN COMMON PRACTICE COMPOSERS USED *INVERTED CHORDS* IN FOUR-VOICE WRITING, THEY FOLLOWED SOME *GENERAL PATTERNS* REGARDING WHICH NOTE OF THE CHORD SHOULD BE *DOUBLED*.

ROOT POSITION	FIRST INVERSION			SECOND INVERSION			
<p>IN ROOT POSITION TRIADS, COMPOSERS USUALLY DOUBLED THE ROOT, WHICH IS IN THE BASS OF THE CHORD.</p> 	<p>THE DOUBLING OF FIRST INVERSION TRIADS DEPENDS ON THE TYPE OF THE CHORD BEING WRITTEN.</p> <table border="0"> <tr> <td data-bbox="299 386 585 695"> <p>IN MAJOR FIRST INVERSION TRIADS, COMPOSERS DOUBLED THE SOPRANO OF THE CHORD.</p>  </td> <td data-bbox="585 386 871 695"> <p>IN MINOR FIRST INVERSION TRIADS, COMPOSERS DOUBLED THE BASS OR SOPRANO OF THE CHORD.</p>  </td> <td data-bbox="871 386 1063 695"> <p>IN DIMINISHED FIRST INVERSION TRIADS, THEY DOUBLED THE BASS OF THE CHORD.</p>  </td> </tr> </table>			<p>IN MAJOR FIRST INVERSION TRIADS, COMPOSERS DOUBLED THE SOPRANO OF THE CHORD.</p> 	<p>IN MINOR FIRST INVERSION TRIADS, COMPOSERS DOUBLED THE BASS OR SOPRANO OF THE CHORD.</p> 	<p>IN DIMINISHED FIRST INVERSION TRIADS, THEY DOUBLED THE BASS OF THE CHORD.</p> 	<p>IN SECOND INVERSION TRIADS, COMPOSERS USUALLY DOUBLED THE FIFTH, WHICH IS IN THE BASS OF THE CHORD.</p> 
<p>IN MAJOR FIRST INVERSION TRIADS, COMPOSERS DOUBLED THE SOPRANO OF THE CHORD.</p> 	<p>IN MINOR FIRST INVERSION TRIADS, COMPOSERS DOUBLED THE BASS OR SOPRANO OF THE CHORD.</p> 	<p>IN DIMINISHED FIRST INVERSION TRIADS, THEY DOUBLED THE BASS OF THE CHORD.</p> 					

HERE'S **ANOTHER** WAY TO THINK OF IT: THE **ONLY** TIME YOU CAN'T DOUBLE THE **BASS** IS IN **FIRST INVERSION MAJOR TRIADS**, WHERE YOU SHOULD DOUBLE THE **SOPRANO** INSTEAD.

OKAY, WE KNOW **HOW** TO USE INVERSIONS IN FOUR-PART WRITING... BUT **WHEN** CAN WE USE THEM?

THE ONLY "RULE" REGARDING **ROOT POSITION TRIADS** AND **FIRST INVERSION TRIADS** IS THAT **DIMINISHED TRIADS** ARE ALWAYS PLACED IN **FIRST INVERSION**.

vii^o₆
ii^o₆

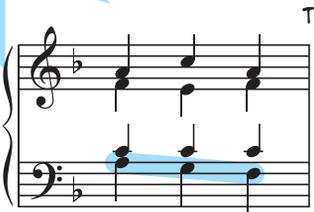
OTHER THAN THAT, YOU CAN USE **ROOT POSITION** AND **FIRST INVERSION** ESSENTIALLY **WHENEVER YOU WANT!** IT'S **SECOND INVERSION TRIADS** THAT HAVE THE **BIG RESTRICTIONS**.

THE CADENTIAL ⁶/₄ CHORD IS A TONIC TRIAD IN SECOND INVERSION FOLLOWED BY A ROOT-POSITION **DOMINANT CHORD** AT A CADENCE.



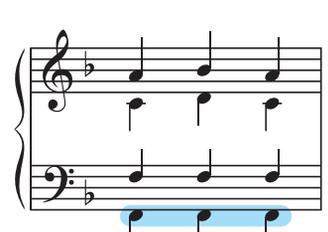
F: I⁶₄ V I

THE PASSING ⁶/₄ CHORD IS A CHORD PLACED IN SECOND INVERSION WHERE THE BASS IS TREATED LIKE A **PASSING TONE**: THE MIDDLE NOTE OF A **STEPWISE LINE** MOVING UP OR DOWN.



F: I⁶ V⁶₄ I

THE PEDAL ⁶/₄ CHORD IS A SECOND INVERSION CHORD WHERE THE BASS IS TREATED LIKE A **PEDAL TONE**: A NOTE PRECEDED AND FOLLOWED BY THE **SAME NOTE**.



F: I IV⁶₄ I

IF YOU WRITE A **SECOND INVERSION TRIAD** AND IT'S NOT ONE OF **THESE THREE SITUATIONS**, THEN YOU ARE **NOT** WRITING IN THE **COMMON PRACTICE PERIOD STYLE!** THE COMPOSERS OF THE STYLE JUST DIDN'T USE THESE CHORDS **WILLY-NILLY**.



Part-Writing: Melodic Minor



IN THE COMMON PRACTICE PERIOD, COMPOSERS USED HARMONIC MINOR BY DEFAULT. BUT WHEN AUGMENTED SECONDS OCCURRED, THEY TURNED TO A HERO FOR HELP: MELODIC MINOR!

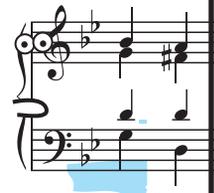
SO ANYWAY, AFTER WE GOT HIM TRANSPOSED BACK TO TONIC, HE BEGAN TO MODULATE AGAIN, AND...

ATTENTION! ATTENTION!
WE NEED ASSISTANCE WITH A **NEW PATIENT** IN EMERGENCY TREATMENT ROOM **3B... STAT!**

WHAT SEEMS TO BE THE **PROBLEM, SIR?**

WELL, I THOUGHT I'D TRANSPOSE TO **MINOR**, YOU KNOW, TO SURPRISE THE FAMILY... SO I DID, AND THEN I RAISED ALL MY **LEADING TONES**, BECAUSE I'M A COMMON PRACTICE PERIOD PROGRESSION, RIGHT?

OKAY, SURE. SO WHAT'S WRONG?



I'VE GOT **AUGMENTED SECONDS!**

GASP



PAGING... DR. MELODIC MINOR!

DOCTOR, WHAT CAN WE DO?

FOR THIS CASE OF **ASCENDING AUGMENTED SECONDS**, I PRESCRIBE A **RAISED SIXTH SCALE DEGREE!**

OOH... IT MAKES A **MAJOR IV CHORD!**

IV⁶



AND THAT MAKES A **MINOR V CHORD!**

AND FOR THESE **DESCENDING AUGMENTED SECONDS**, WE'RE GOING TO USE AN **UNRAISED SEVENTH!**

v



MY AUGMENTED SECONDS... THEY'RE **CURED!**

ALL IN A **DAY'S WORK**, MY GOOD MAN. NOW LET'S TURN TO THE UNPLEASANT MATTER OF THE **BILL.**

CURE YOUR AUGMENTED SECONDS WITH MELODIC MINOR TODAY!

The Harmonic Cadences



A **CADENCE** IS GENERALLY CONSIDERED TO BE THE **LAST TWO CHORDS** OF A **PHRASE, SECTION OR PIECE**. THERE ARE **FOUR TYPES** OF CADENCES, EACH WITH THEIR OWN SPECIFIC **REQUIREMENTS** AND **VARIATIONS**.

AN **AUTHENTIC CADENCE** CONSISTS OF A **DOMINANT FUNCTION CHORD (V OR VII)** MOVING TO **TONIC**.

TO BE CONSIDERED A **PERFECT AUTHENTIC CADENCE**, A CADENCE MUST MEET **ALL** OF THE FOLLOWING CRITERIA:

- IT MUST USE A **V CHORD** (NOT A VII)
- BOTH CHORDS MUST BE IN **ROOT POSITION**
- THE SOPRANO MUST **END** ON THE **TONIC**
- THE SOPRANO MUST **MOVE BY STEP**

G: V I

IF THE CADENCE DOESN'T MEET **ALL** OF THOSE CRITERIA, IT'S CONSIDERED TO BE AN **IMPERFECT AUTHENTIC CADENCE!**

G: vii°6 I

G: V₆₄ I

A **PLAGAL CADENCE** CONSISTS OF A **SUBDOMINANT FUNCTION CHORD (IV OR II)** MOVING TO **TONIC**.

TO BE CONSIDERED A **PERFECT PLAGAL CADENCE**, A CADENCE MUST MEET **ALL** OF THE FOLLOWING CRITERIA:

- IT MUST USE A **IV CHORD** (NOT A II)
- BOTH CHORDS MUST BE IN **ROOT POSITION**
- THE SOPRANO MUST **END** ON THE **TONIC**
- THE SOPRANO MUST **KEEP THE COMMON TONE**

G: IV I

IF THE CADENCE DOESN'T MEET **ALL** OF THOSE CRITERIA, IT'S CONSIDERED TO BE AN **IMPERFECT PLAGAL CADENCE!**

G: IV⁶ I

G: ii I⁶

A **HALF CADENCE** IS ANY CADENCE THAT ENDS ON THE **DOMINANT CHORD (V)**.

G: I V

A SPECIFIC TYPE OF HALF CADENCE IS THE **PHRYGIAN CADENCE**, WHICH MUST MEET THE FOLLOWING CRITERIA:

- IT OCCURS ONLY IN **MINOR**
- IT USES A **IV CHORD** MOVING TO **V**
- THE SOPRANO AND BASS MOVE **BY STEP** IN **CONTRARY MOTION**
- THE SOPRANO AND BASS BOTH **END** ON THE **FIFTH SCALE DEGREE**

e: iv⁶ V

e: iv V

A **DECEPTIVE CADENCE** IS A CADENCE WHERE THE **DOMINANT CHORD (V)** RESOLVES TO SOMETHING **OTHER THAN TONIC...** ALMOST ALWAYS THE **SUBMEDIANT CHORD (VI)**.

G: V vi



REALLY, IT'S THE **PSYCH-OUT CADENCE**, IN THAT YOU **EXPECT** IT TO RESOLVE TO TONIC, BUT IT **DOESN'T**.

AND, IN FACT, IT'S MORE COMMON TO SEE THIS IN THE **MIDDLE** OF THE PHRASE RATHER THAN THE **END...** WHERE YOU MIGHT CALL IT A **"CADENCE-LIKE STRUCTURE"**!

Harmonic Progression

HOW DID COMPOSERS OF THE **COMMON PRACTICE PERIOD** DECIDE WHICH ORDER TO PUT **CHORDS** IN? DID THEY JUST THROW THEM DOWN ON PAPER **HAPHAZARDLY?**

AS A MATTER OF FACT, THERE ARE CERTAIN CHORD PROGRESSIONS THAT APPEAR **MORE FREQUENTLY**, AND THERE ARE OTHERS THAT ARE **AVOIDED** PRETTY CONSISTENTLY. WHILE THE CHOICES WERE ALWAYS BASED ON WHAT **SOUNDED GOOD** TO THE COMPOSER, THEORISTS CAN FIND A **PATTERN** IN THEIR CHOICES THAT WE CAN USE TO EASILY REMEMBER WHICH CHORD PROGRESSIONS **WORK** AND WHICH ONES **DON'T**.

ONE WAY TO UNDERSTAND THIS PATTERN IS TO THINK IN TERMS OF **ROOT MOVEMENTS**. A ROOT MOVEMENT IS THE BASIC INTERVAL BETWEEN THE ROOT OF ONE CHORD AND THE ROOT OF THE NEXT CHORD. YOU DON'T HAVE TO WORRY ABOUT THE INTERVAL'S **INFLECTION**, JUST ITS **DISTANCE** AND **DIRECTION**.

FOR EXAMPLE, TO DETERMINE THE ROOT MOVEMENT HERE, WE LOOK AT THE **ROOT** (NOT **BASS**) OF EACH CHORD AND FIGURE THE **INTERVAL** BETWEEN THEM.



A TO B IS **DOWN A SEVENTH**, BUT SINCE OCTAVES DON'T MATTER, WE INVERT IT TO **UP A SECOND**.

SO HERE'S THE PATTERN: COMMON PRACTICE PERIOD COMPOSERS GENERALLY USED ROOT MOVEMENTS OF **UP A SECOND**, **DOWN A THIRD**, AND **DOWN A FIFTH**!



THAT'S NOT SAY THAT THEY **NEVER** USED OTHER ROOT MOVEMENTS, BUT IT DIDN'T HAPPEN VERY OFTEN.

REMEMBER... SINCE **INFLECTION** DOESN'T MATTER, WE CAN IGNORE **ACCIDENTALS** WHEN WE FIGURE THE ROOT MOVEMENTS.



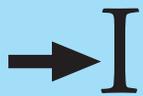
SEQUENCES OF CHORDS THAT **DON'T** FOLLOW THIS PATTERN ARE CALLED **RETROGRESSIONS**, AND THEY ARE CONSIDERED **UNSTYLISTIC**.



SO, FOR EXAMPLE, A **G CHORD** TO AN **E CHORD** IS DOWN A THIRD, BUT SO IS **G** TO **E FLAT**, AND **G SHARP** TO **E FLAT**!

"UNSTYLISTIC" IS A POLITE WAY OF SAYING "THE **COMPOSERS DIDN'T** DO IT SO YOU **SHOULDN'T** DO IT EITHER!"

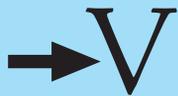
THERE ARE ALSO FOUR SIMPLE EXCEPTIONS TO THIS PATTERN:



ANY CHORD CAN MOVE TO TONIC,



TONIC CAN MOVE TO ANY CHORD,



ANY CHORD CAN MOVE TO DOMINANT,

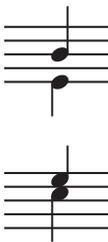


AND THE LEADING-TONE TRIAD MUST MOVE TO TONIC.



LET'S TRY IT... SAY YOU HAVE A SUPERTONIC CHORD AND YOU ARE TRYING TO DECIDE WHAT CHORD TO USE TO FOLLOW IT.

YOU CAN MOVE UP A **SECOND** TO A **MEDIANT** CHORD...



iii

YOU CAN MOVE DOWN A **THIRD** TO A **LEADING-TONE** CHORD...



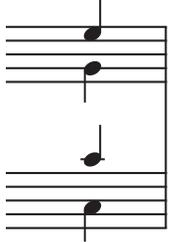
vii^{o6}

YOU CAN MOVE DOWN A **FIFTH** TO A **DOMINANT** CHORD...



V

OR YOU CAN USE THE FIRST EXCEPTION AND GO TO A **TONIC** CHORD!



I

Diatonic Common Chord Modulation

MODULATION IS THE PROCESS OF CHANGING TO A DIFFERENT KEY WITHIN A PIECE OF MUSIC.

THERE ARE SEVERAL DIFFERENT WAYS TO MODULATE; PERHAPS THE SIMPLEST IS THE **UNPREPARED MODULATION**, WHERE THE MUSIC PAUSES AND SUDDENLY CHANGES KEY, OFTEN UP A **HALF-STEP**.



COMMON PRACTICE PERIOD COMPOSERS, HOWEVER, PREFERRED A PARTICULAR TYPE OF MODULATION THAT REQUIRED A LITTLE MORE PLANNING: THE **DIATONIC COMMON CHORD MODULATION**. AS THE NAME SUGGESTS, THIS USES A CHORD WHICH IS **DIATONIC** IN BOTH THE **OUTGOING KEY** AND THE **NEW KEY**.

HEY... WHAT IS THIS PORTRAIT DOING HERE?



LET'S SAY WE'RE STARTING OFF IN **C MAJOR**... HERE IS A LIST OF ALL THE KEYS WHICH HAVE CHORDS IN **COMMON** WITH C MAJOR (THE SPECIFIC CHORDS ARE HIGHLIGHTED):

FOR INSTANCE, THE **I CHORD** IN **G MAJOR** IS **G-B-D**...

G: I ii iii IV V vi vii°

a: i ii° III iv V VI vii°

...WHICH IS THE **V CHORD** IN **C MAJOR**!

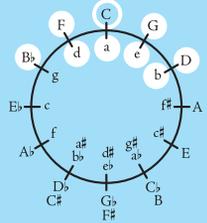
F: I ii iii IV V vi vii°

e: i ii° III iv V VI vii°

KEYS WHICH HAVE CHORDS IN COMMON LIKE THIS ARE CALLED **RELATED KEYS**.

C: I ii iii IV V vi vii°

NOTICE HOW THESE KEYS ARE ALL CLOSE TO ONE ANOTHER ON THE **CIRCLE OF FIFTHS**.



D: I ii iii IV V vi vii°

d: i ii° III iv V VI vii°

Bb: I ii iii IV V vi vii°

b: i ii° III iv V VI vii°

TO USE THIS TYPE OF MODULATION, A COMPOSER WOULD **PIVOT** THE HARMONY AROUND THE CHORD THAT FIT INTO BOTH KEYS. AS **THEORISTS**, WE SHOW THIS **PIVOT CHORD** BY ANALYZING THE CHORD IN **BOTH KEYS**.

C: I ii V I vi
e: iv V VI iv V i

NOTE THAT THE **PIVOT CHORD** IS **ALWAYS** THE **LAST CHORD** THAT CAN BE ANALYZED IN THE **OLD KEY**... THE FIRST ACCIDENTALS WILL ALWAYS OCCUR IN THE CHORD **IMMEDIATELY FOLLOWING** THE **PIVOT CHORD**!

Non-Harmonic Tones



A **NON-HARMONIC TONE** IS A NOTE THAT DOESN'T FIT INTO A CHORD. WE CLASSIFY NON-HARMONIC TONES BY HOW THEY ARE **APPROACHED** AND **RESOLVED!**

NAME	ABBREVIATION	APPROACH	RESOLUTION	NOTES	EXAMPLE
PASSING TONE	PT	STEP	STEP	RESOLVES BY CONTINUING IN THE SAME DIRECTION AS THE APPROACH.	
NEIGHBORING TONE	NT	STEP	STEP	RESOLVES BY RETURNING TO THE NOTE PRECEDING THE NON-HARMONIC TONE.	
APPOGGIATURA	APP	LEAP	STEP	RESOLVES IN OPPOSITE DIRECTION FROM APPROACH.	
ESCAPE TONE	ET	STEP	LEAP	RESOLVES IN OPPOSITE DIRECTION FROM APPROACH.	
CHANGING TONES	CT	ANY	STEP	TWO NON-HARMONIC TONES ON EITHER SIDE OF THE NOTE OF RESOLUTION.	
ANTICIPATION	ANT	ANY	COMMON TONE	A CHORD TONE PLAYED BEFORE THE REST OF THE CHORD ARRIVES.	
SUSPENSION	SUS	COMMON TONE	STEP	A NOTE HELD OVER FROM A PREVIOUS CHORD AND RESOLVED DOWN.	
RETARDATION	RET	COMMON TONE	STEP	A NOTE HELD OVER FROM A PREVIOUS CHORD AND RESOLVED UP.	
PEDAL TONE	PED	COMMON TONE	COMMON TONE	A CHORD TONE WHICH TEMPORARILY BECOMES A NON-HARMONIC TONE.	

SUSPENSIONS ARE TYPICALLY FURTHER IDENTIFIED **BY NUMBER**. THE FIRST NUMBER REPRESENTS THE INTERVAL BETWEEN THE **NOTE OF SUSPENSION** AND THE **BASS**. THE SECOND NUMBER REPRESENTS THE INTERVAL BETWEEN THE **NOTE OF RESOLUTION** AND THE **BASS**.

THE EXCEPTION TO THIS RULE IS THE **2-3** OR **BASS** SUSPENSION, WHERE THE NUMBERS REPRESENT THE INTERVALS BETWEEN THE **BASS** (WHERE THE SUSPENSION OCCURS) AND WHICHEVER VOICE HAS THE NOTE WHICH IS A **SECOND** (NOT COUNTING OCTAVES) ABOVE THE BASS.

**4-3
SUS**

**7-6
SUS**

**9-8
SUS**

**2-3
(BASS)
SUS**

hey, it's
kids!**SPARKY THE MUSIC THEORY DOG!**

Q: Dear Sparky:
Can you elaborate on why suspensions are identified by numbers? Also, what should one watch out for when writing suspensions in four-part harmony?

--S.S., Detroit, MI

A: WOOF!*

***TRANSLATION:** WHEN ANALYZING SUSPENSIONS, IT IS IMPORTANT TO IDENTIFY BOTH THE **NOTE OF SUSPENSION** (THE NON-HARMONIC TONE ITSELF) AND THE **NOTE OF RESOLUTION** (THE NOTE THAT COMES RIGHT AFTER THE NON-HARMONIC TONE IN THE SAME VOICE).

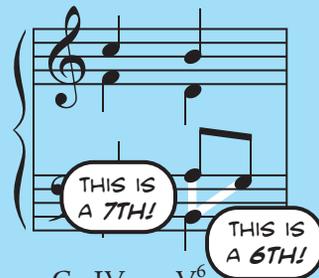


THIS A IS THE
NOTE OF SUSPENSION...
IT DOESN'T BELONG IN
THIS G MAJOR TRIAD.

IT RESOLVES TO
THIS G, WHICH DOES
FIT IN THE CHORD.
IT'S THE **NOTE OF
RESOLUTION!**

C: IV V⁶

IN ALMOST EVERY CASE,
THE SUSPENSION IS
THEN LABELED USING
TWO INTERVALS: THE
INTERVAL BETWEEN THE
NOTE OF SUSPENSION
AND THE **BASS**, AND THE
INTERVAL BETWEEN THE
NOTE OF RESOLUTION
AND THE **BASS**.

THIS IS
A 7TH!THIS IS
A 6TH!C: IV V⁶...SO IT'S A
7-6 SUSPENSION!

WHEN **WRITING** AN EXAMPLE WHICH INCLUDES A SUSPENSION, IT IS VERY OFTEN USEFUL TO **BEGIN** BY WRITING THE CHORD THAT IS GOING TO CONTAIN THE SUSPENSION, **THEN** ADDING THE SUSPENSION, AND FINISHING BY WRITING THE **CHORD OF APPROACH**.

THIS IS
A 2ND!THIS IS
A 3RD!

C: vi V

...SO IT'S A
2-3 SUSPENSION!

THE ONLY EXCEPTION TO THIS IS THE **2-3 SUSPENSION**, WHERE THE SUSPENSION OCCURS IN THE **BASS**. FOR THIS ONE, WE LOOK AT THE INTERVAL BETWEEN THE NOTES OF SUSPENSION AND RESOLUTION AND THE **NEAREST CHORD TONE**, WHICHEVER VOICE IT MAY BE IN.

THE REAL TRICK, THOUGH, IS TO **PLAN AHEAD...** IF YOU ARE PLANNING TO WRITE A PARTICULAR TYPE OF SUSPENSION, YOU NEED TO THINK ABOUT THE **INTERVAL THAT NEEDS TO BE PRESENT** IN THE CHORD THAT INCLUDES YOUR SUSPENSION.

FOR THE **9-8 SUSPENSION**, THE SUSPENSION RESOLVES TO AN **OCTAVE** ABOVE THE BASS... THAT'S **EASY**, SINCE ANY CHORD CAN INCLUDE AN OCTAVE.

FOR THE **7-6 SUSPENSION**, THE SUSPENSION RESOLVES TO A **SIXTH** ABOVE THE BASS. THAT MEANS YOU CAN'T USE A CHORD IN **ROOT POSITION**, BECAUSE THEY HAVE A FIFTH AND A THIRD ABOVE THE BASS. YOU NEED A **FIRST** OR **SECOND INVERSION TRIAD!**

FOR THE **4-3 SUSPENSION** AND **2-3 SUSPENSION**, YOU NEED A CHORD WITH A **THIRD** ABOVE THE BASS... WHICH MEANS YOU CAN USE ANYTHING **EXCEPT** A **SECOND INVERSION TRIAD**.

DOING STUFF THE SPARKY WAY IS ALWAYS FUN!

Diatonic Seventh Chords



HERE THEY ARE IN MAJOR AND MINOR.

REMEMBER: WE ONLY RAISE THE LEADING-TONE OVER DOMINANT-FUNCTION HARMONY!

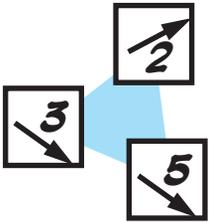
WHAT ARE THEY?

DIATONIC SEVENTH CHORDS ARE THE SEVENTH CHORDS YOU CAN CREATE USING ONLY THE NOTES IN A PARTICULAR KEY.

C: I⁷ ii⁷ iii⁷ IV⁷ V⁷ vi⁷ vii^{o7}

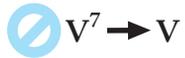
a: i⁷ ii^{o7} III⁷ iv⁷ V⁷ VI⁷ vii^{o7}

IN HARMONIC PROGRESSIONS, DIATONIC SEVENTHS CAN BE USED ANYWHERE YOU CAN USE A DIATONIC TRIAD WITH THE SAME ROOT.



IN FACT, THESE CHORDS CAN BE APPROACHED AND RESOLVED USING ANY OF THE SAME THREE **ROOT MOVEMENTS** AS TRIADS USE.

WITH THE DIATONIC SEVENTH CHORDS, WE ADD A FOURTH ROOT MOVEMENT: **THE COMMON ROOT**. HOWEVER, THIS ROOT MOVEMENT CAN ONLY BE USED TO **INCREASE TENSION**, SO GOING FROM A **SEVENTH CHORD** TO A **TRIAD** IS AVOIDED.



WHEN USING THESE CHORDS IN FOUR-PART WRITING - IN FACT, WHEN YOU USE **ANY** SEVENTH CHORD IN FOUR-PART WRITING, YOU MUST ALWAYS, **ALWAYS** REMEMBER TO...

THE SEVENTH OF THE CHORD IS MOST OFTEN APPROACHED BY **THE COMMON TONE**.

HOWEVER, IT IS OKAY TO APPROACH THE SEVENTH FROM BELOW BY A STEP OR A LEAP, OR FROM ABOVE BY A STEP.

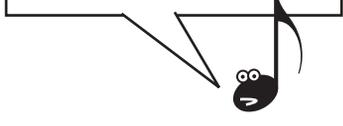
YOU MUST **NEVER** APPROACH THE SEVENTH BY A **LEAP** FROM **ABOVE**!

RESPECT THE SEVENTH!

THE SEVENTH OF THE CHORD IS **ALWAYS** RESOLVED **DOWN** BY **STEP**. ALWAYS!

NO, I'M SERIOUS. DON'T **EVER** RESOLVE THE SEVENTH OF A SEVENTH CHORD ANY OTHER WAY.

DOING SO WILL CAUSE YOU **CERTAIN DEATH!**



REMEMBER, **DIATONIC** MEANS "**FROM THE KEY.**" SO A DIATONIC CHORD IS ONE THAT ONLY USES NOTES IN THE KEY SIGNATURE. **NO ACCIDENTALS!**

THERE ARE EIGHT POSSIBLE TYPES OF SEVENTH CHORDS IN TERTIAL HARMONY, BUT THE COMPOSERS OF THE COMMON PRACTICE PERIOD ONLY USED **FIVE**:

THE MAJOR SEVENTH

THE MAJOR-MINOR SEVENTH

THE MINOR SEVENTH

THE HALF-DIMINISHED SEVENTH

THE FULLY DIMINISHED SEVENTH



WE USE "°7" FOR HALF-DIMINISHED SEVENTHS AND "o7" FOR FULLY DIMINISHED SEVENTHS.

SEVENTH CHORDS HAVE **FOUR** NOTES, SO DOUBLING IN FOUR-PART HARMONY IS NOT AN ISSUE... BUT IF YOU NEED TO USE IRREGULAR DOUBLING, **DOUBLE THE ROOT** AND **OMIT THE FIFTH**.

The Dominant Seventh

THE **DOMINANT SEVENTH** IS THE **DIATONIC SEVENTH CHORD** BUILT ON THE **FIFTH SCALE DEGREE**. WE ALREADY DISCUSSED DIATONIC SEVENTH CHORDS... WHY GIVE **THIS ONE** ALL THIS SPECIAL ATTENTION?

FOR ONE THING, THE DOMINANT SEVENTH IS, BY FAR, THE **MOST COMMON SEVENTH CHORD** USED BY THE COMPOSERS OF THE COMMON PRACTICE PERIOD.

BUT ANOTHER REASON FOR SPENDING A LITTLE EXTRA TIME WITH IT IS THE FACT THAT THERE ARE A FEW THINGS THAT APPLY TO IT THAT **DON'T APPLY** TO THE **OTHER** DIATONIC SEVENTH CHORDS.



FIRST, A NOTE ON **TERMINOLOGY**:

THE TERMS "MAJOR-MINOR SEVENTH" AND "DOMINANT SEVENTH" ARE NOT INTERCHANGEABLE! "MAJOR-MINOR SEVENTH" IS THE CHORD'S **TYPE**, AND "DOMINANT SEVENTH" IS THE **ROLE** THE CHORD PLAYS IN THE **CONTEXT OF A PARTICULAR KEY**.

IT'S JUST A MAJOR-MINOR SEVENTH...



UNTIL IT'S PLACED IN A PARTICULAR KEY!



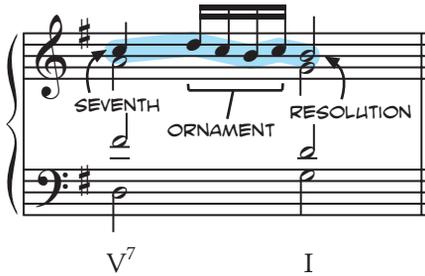
THE REASON THESE ARE OFTEN CONFUSED IS THAT IN **POPULAR AND JAZZ THEORY**, THE TERM "DOMINANT" IS USED TO LABEL THE CHORD **TYPE** INSTEAD OF THE CHORD'S **ROLE**.



THE OTHER IMPORTANT THING TO KNOW ABOUT THE DOMINANT SEVENTH CHORD IS THAT COMMON PRACTICE PERIOD COMPOSERS WOULD SOMETIMES USE SOME **NON-STANDARD** WAYS OF RESOLVING THE **SEVENTH**!

THE **ORNAMENTAL RESOLUTION**

IN THIS RESOLUTION, THE SEVENTH IS STILL RESOLVED **DOWN BY STEP**, BUT IT TAKES AN ORNAMENTAL "**DETOUR**" BEFORE GETTING THERE.

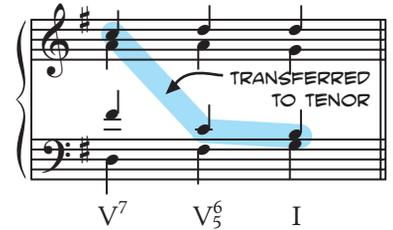


THE ORNAMENT CAN BE ANY SHAPE OR LENGTH, BUT IT **MUST** RESOLVE TO THE NOTE **DOWN A STEP** FROM THE SEVENTH OF THE SEVENTH CHORD.

THE **TRANSFERRED RESOLUTION**

THIS IS THE "HOT POTATO" RESOLUTION: INSTEAD OF BEING RESOLVED DOWN BY STEP IN THE SAME VOICE, THE SEVENTH IS **PASSED TO ANOTHER VOICE** IN ANOTHER DOMINANT SEVENTH CHORD.

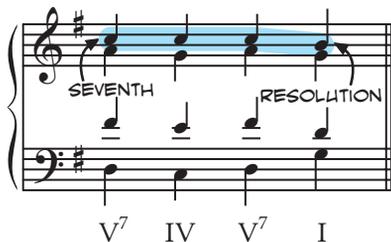
THE SEVENTH STILL NEEDS TO RESOLVE **DOWN BY STEP** BY WHATEVER VOICE IS THE LAST TO HAVE IT.



IF THE BASS VOICE GETS IT, HE **RESOLVES IT IMMEDIATELY**, ENDING THE FUN FOR EVERYONE.

THE **DELAYED RESOLUTION**

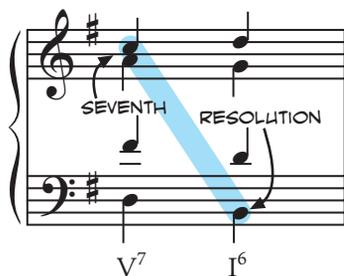
HERE, THE RESOLUTION OF THE SEVENTH IS **DELAYED** BY MOVING TO SOME OTHER CHORD (USUALLY THE **SUBDOMINANT**) AND HAVING THE SEVENTH OF THE CHORD **HOLD OUT** UNTIL THE DOMINANT SEVENTH RETURNS.



AFTER THE **V⁷ RETURNS**, THE VOICE THAT HAS THE SEVENTH SHOULD **STILL** RESOLVE IT APPROPRIATELY!

THE **BASS RESOLUTION**

IN THIS RESOLUTION, THE SEVENTH OF THE CHORD IS STILL RESOLVED **DOWN BY STEP**, BUT THE NOTE IT RESOLVES TO APPEARS IN THE **BASS VOICE**.



THE VOICE THAT **HAD** THE SEVENTH RESOLVES **UP**, USUALLY BY **STEP**.



Extended Harmonies

SO FAR, WE'VE TALKED ABOUT TWO TYPES OF TERTIAL CHORDS: **TRIADS** AND **SEVENTH CHORDS**. REMEMBER, TERTIAL CHORDS ARE CHORDS CONSTRUCTED BY STACKING **MAJOR** AND **MINOR THIRDS**!

DIMINISHED TRIAD	MINOR TRIAD	MAJOR TRIAD	AUGMENTED TRIAD

NOW, THERE ARE **FOUR** TYPES OF **TRIADS** AND **EIGHT** TYPES OF **SEVENTH CHORDS**, EVEN THOUGH COMMON PRACTICE PERIOD COMPOSERS ONLY USED **FIVE** OF THEM.

DIMINISHED DIMINISHED SEVENTH CHORD	DIMINISHED MINOR SEVENTH CHORD	MINOR MINOR SEVENTH CHORD	MINOR MAJOR SEVENTH CHORD	MAJOR MINOR SEVENTH CHORD	MAJOR MAJOR SEVENTH CHORD	AUGMENTED MAJOR SEVENTH CHORD	AUGMENTED AUGMENTED SEVENTH CHORD

SO THAT MAKES FOR **TWELVE** CHORD TYPES SO FAR... BUT WHAT IF WE KEEP GOING? WHAT OTHER CHORD TYPES CAN WE MAKE BY STACKING MAJOR AND MINOR THIRDS? TERTIAL CHORDS WITH **FIVE**, **SIX** AND **SEVEN** NOTES ARE CALLED **NINTH CHORDS**, **ELEVENTH CHORDS** AND **THIRTEENTH CHORDS** RESPECTIVELY.

SUDDENLY THE POSSIBILITIES INCREASE FROM TWELVE...

...TO 124!

THE **GOOD NEWS**: COMMON PRACTICE PERIOD COMPOSERS ONLY USED THESE "EXTENDED HARMONIES" AS **DIATONIC CHORDS** ON THE **DOMINANT**.

SERIOUSLY: THESE ARE THE ONLY EXTENDED HARMONIES USED BY COMMON PRACTICE PERIOD COMPOSERS. IN FACT, THE **V¹¹** AND **V¹³** WEREN'T USED MUCH BEFORE THE **ROMANTIC ERA**.

G: V⁹ G: V¹¹ G: V¹³

WHAT ABOUT A **FIFTEENTH CHORD**? TRY IT: IF YOU ADD ANOTHER THIRD ON TOP OF A THIRTEENTH, YOU ARE JUST **DOUBLING THE ROOT**. SO TERTIAL HARMONY STOPS AT **13!**

NOW, WHEN WE PUT THESE CHORDS INTO **FOUR-PART HARMONY**, WE'VE GOT A PROBLEM: THEY ALL HAVE MORE THAN FOUR NOTES. SO WE HAVE TO MAKE THE TOUGH CALL: WHICH ONES DO WE CUT FROM THE TEAM?

WE NEED TO KEEP THE **ROOT** BECAUSE IT DEFINES THE CHORD. SIMILARLY, THE **THIRD** IS WHAT MAKES THE CHORD TERTIAL.

THE **SEVENTH** ACTS AS A **BRIDGE** TO THE EXTENDED HARMONY, PREVENTING THE CHORD FROM COMING ACROSS AS **TWO SEPARATE HARMONIES** PLAYED AT THE SAME TIME.

THIRTEENTH
THIRD
SEVENTH
ROOT
C: V¹³

FINALLY, THE **NINTH**, **ELEVENTH** OR **THIRTEENTH** OF THE CHORD IS WHAT DEFINES IT AS A NINTH, ELEVENTH OR THIRTEENTH CHORD.

SO HOW DO YOU PUT THESE IN FOUR-PART HARMONY? **OMIT THE FIFTH** AND USE ONLY THE **NINTH**, **ELEVENTH** OR **THIRTEENTH** AS NECESSARY.

OH, AND IF YOU'RE WORRIED ABOUT INVERSIONS: **STOP**. IN THE COMMON PRACTICE PERIOD, EXTENDED HARMONIES ARE ALMOST ALWAYS FOUND IN **ROOT POSITION**.