

# “Understood at Last”?: A Memetic Analysis of Beethoven’s “Bloody Fist”

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## Abstract

As a singular moment in the western canon, the opening of the recapitulation in the first movement of Beethoven’s Ninth Symphony, op. 125 (1824) has prompted a variety of structural/analytical (“introversive”) and expressive/hermeneutic (“extroversive”) readings. This paper explores its intertextual connections with a number of passages from Mozart’s *Don Giovanni* (1787/8) from a memetic perspective, outlining certain extra-musical interpretations – some related to Susan McClary’s controversial reading (McClary, 2002) of the passage – one might infer from the strong musical similarities. The memetic-psychological-neurobiological basis of these musical and verbal-conceptual connections, understood in terms of Nicholas Cook’s Conceptual Integration Network (CIN) (Cook, 2001) and William Calvin’s Hexagonal Cloning Theory (HCT) (Calvin, 1996), is amenable to computer-aided analysis and simulation.

## Keywords

Beethoven, Ninth Symphony, Mozart, *Don Giovanni*, memetics, Conceptual Integration Network (CIN), Hexagonal Cloning Theory (HCT)

## 1 Introduction: Introversive and Extroversive Perspectives on the First Movement of Beethoven’s Ninth Symphony

The opening of the recapitulation in the first movement of Beethoven’s Ninth Symphony is one of the most awe-inspiring moments in Western musical literature. It has motivated comment from a variety of perspectives, from the

“introversive” – the purely musical dimension – to the “extroversive” – the realm of extra-musical relationships. The latter include interpretations of meaning ranging from depictions of war, cosmic conflict and, most controversially, of sexual violence.

I attempt here to sketch a fresh reading of the passage, albeit one drawing partly on existing accounts; and I invoke memetics, both to support my interpretations and to exemplify its own virtues. Memetics fosters the formalization of intertextual relationships between the symphony and a work which is arguably one source for Beethoven’s passage, namely Mozart’s opera *Don Giovanni*. The hypothesized connections lead me to contend that, from an *introversive* perspective, Beethoven’s passage is not as singular as some commentators argue; and that, from an *extroversive* perspective, its connection to a work with text allows arguably more secure connotative readings of Beethoven’s passage than have hitherto been advanced.

## 2 A Memetic-Introversive Analysis of Aspects of Op. 125, I and Mozart’s *Don Giovanni*

Figure 1 xv shows bb. 299–329 of Beethoven’s movement on a “meme *particella*”, with “antecedent coindexes” (hypothesized precursors) to it shown on the smaller staves above and below, these numbered according to their sequential order in *Don Giovanni*.

In brief, the hypothesized memetic connections are as follows:

- **Museme a** is a falling  $\hat{1}-\hat{5}-\hat{1}$  melodic pattern and associated  $I_3^6$  harmony in Beethoven’s bb. 301–303. Antecedent coindexes in Mozart are shown in Figure 1 i, iv, v, vi, viii and ix.
- **Museme b** is the harmonic progression from a diminished seventh to a first inversion major chord in Beethoven’s bb. 300–301. An antecedent coindex in Mozart is shown in Figure 1 ix.
- **Museme c** outlines the scale degrees  $\hat{5}-\hat{1}-\hat{7}-\hat{6}-\hat{5}-\hat{4}$  in Beethoven’s bb. 318–319. Antecedent coindexes in Mozart (as  $\hat{2}-\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$  in G minor) are shown in Figure 1 iii and xii.
- **Museme d**, the scale-degree sequence  $\hat{5}-\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$  in Beethoven’s bb. 318–320, partially overlaps with Museme c. An antecedent coindex in Mozart is shown in Figure 1 viii.

Figure 1: Musemes in Mozart's *Don Giovanni*, K. 527 (1787/8) and Beethoven's Ninth Symphony, Op. 125 (1824),

I

(a) Page 1 of 3

This figure displays musical notation for two specific 'musemes' (musical motifs) identified in Mozart's *Don Giovanni* and Beethoven's Ninth Symphony. The score is organized into two main sections, Museme a and Museme b, each with its own set of staves.

- Museme a:** This section includes two examples:
  - i) Mozart: *Don Giovanni*, No. 24, bars 433-437:** Shows a vocal line for Don Giovanni with lyrics "Don Gio - van". The notation includes dynamic markings such as *pp* (pianissimo), *f* (forte), and *ff* (fortissimo).
  - ii) Beethoven: *Don Giovanni*, No. 24, bars 592-596:** Shows a vocal line for Don Giovanni with lyrics "Ah!".
- Museme b:** This section includes two examples:
  - i) Mozart: *Don Giovanni*, No. 24, bars 1-5:** Shows the beginning of a vocal line.
  - ii) Beethoven: *Don Giovanni*, No. 24, bars 1-7:** Shows the beginning of a vocal line.

The notation includes various musical symbols such as notes, rests, slurs, and dynamic markings. The page number '1' is located at the top right, and the page number '3' is at the bottom center.

Mozart: Don Giovanni, relative before No. 2, bars 1-4

Don Ottavio: in soc - cor - so vo - lam.

Dominante: Ah del pa - dre in pe - ri - glio

Musette: Eb - ben che è è?

Zellina: Ver - rai!

Musette: La - - seia che

Musette: ver - se - rò se bi - so - gna.

Maria Anna: Ma dov' -

Musette: ven - ga. Ah se vi fos - se un bu - co da lug -

Zellina: gr!

Musette: 3/5

Musette: 4 -0-1,2,1,2

Musette: 4 -0-1,2,1,2,1,2

Mozart: Don Giovanni, No. 1, bars 144-146

Musette: di pug - nar

Musette: 3/2

Musette: te - co

Mozart: Don Giovanni, no. 24, bb. 512-16

Musette: Ho

Musette: Don Giovanni.

Muséme  $\frac{11121211211}{4}$

vii) Mozart: *Don Giovanni*, No. 13, bars 176-180

Muséme  $\frac{36}{4}$

v) Mozart: *Don Giovanni*, recitative No. 2, bars 56-59  
Don Ombra:  $\frac{5517}{4}$   
Ce - la - te, al lon - ta - na - a - ga gli oc - chi suo - i  
quel' - og - get - to d'or - osco

Larghetto:  $\frac{449}{4}$

v) Mozart: *Don Giovanni*, No. 24, bars 449-453  
Ah! post - ro! Ah! post - ro!  
Ah! post - ro, stam - tut - ti  
Muscéme  $\frac{1751, 6}{4}$

Muscéme  $\frac{320}{4}$

ff Muséme  $\frac{c}{4}$

Muscéme  $\frac{d}{4}$

Muscéme  $\frac{76}{4}$

v) Mozart: *Don Giovanni*, Overture, bb, 76-9

Muscéme  $\frac{575}{4}$

Il Comandatore: Nom - mi - co - re in pet - to  
pa - sca - bo - ni - ver - ti  
di - sce - tu - ni - sce - di - ce - di  
Muscéme  $\frac{454}{4}$

xi) Mozart: *Don Giovanni*, No. 24, bars 454-459

- **Museme *e*** is the descending diminished-seventh line of Beethoven’s bb. 327–9. Antecedent coindexes in Mozart are shown in Figure 1 ii, vii, x and xi.
- **Museme *f*** is a progression spanning Beethoven’s bb. 312–326 and consisting, here and in various contexts in Mozart, of three harmonies marked *x* ( $bII_{b_4}^6$ ), *y* ( $\sharp iv_5^{\sharp 6}/G^6$ ) and *z* ( $i_4^6$ ) on Figure 2.

### 3 A Conceptual-Extroversive Reading of Op. 125, I

These connections may well be purely *introversive*. But if *Don Giovanni* were one source of Beethoven’s passage, we might ask whether the musemic replication was motivated by Beethoven’s intending an *extroversive* connection between musemes and “verbal-conceptual memes”. Table 1 summarizes the attributes and locations of Musemes *a–f* in both works, together with their text-associations in *Don Giovanni*.

Arranging the associated text of Mozart’s musemes in the order they are replicated by Beethoven does not outline a coherent “episodic” narrative. The connection appears more “semantic”, in that the primary conceptual *topos* of *Don Giovanni*, the notion of *retribution*, together with various ancillary ideas, is generically attached to Beethoven’s passage by virtue of the strong musemic connections. In Mozart, these musemes highlight encounters between Don Giovanni and the Commendatore, and thereby articulate the conflict between liberty and order.

If we accept Donna Anna’s account of her confrontation with Giovanni at the start of the opera, the hypothesized connections align with Susan McClary’s controversial “rape” metaphor for Beethoven’s passage. Indeed, it recuperates her original reading, despite her strategic retreat from it. McClary argued that “the point of recapitulation . . . unleashes one of the most horrifyingly violent episodes in . . . music”. This was coded as a specifically sexual violence in her initial reading, outlined in a 1987 article, in which she spoke of “the throttling, murderous rage of a rapist incapable of attaining release”.

In the article’s reprint, in her 1991 book *Feminine Endings*, McClary excised this passage and foregrounded violence rather than (failed) rape. Nevertheless, the interpretation of sexual violence is sustained by McClary’s re-quotation in *Feminine Endings* of Adrienne Rich’s poem “The Ninth Symphony of Beethoven Understood at Last as a Sexual Message” (1972), with

Figure 2:  $V^7/bII$  versus  $G^6$  Harmonic Museme in Mozart's *Don Giovanni* and Beethoven's Ninth Symphony, I

i) K457, I

Museme f-1

122 x 123 y 124 x 125 y 126

ii) K527, Overture

Museme f

27 x 28 y 29 z

$bII^{\#6}$   $\#iv^{\#6} (G^6)$   $I^{\#6}$

iii) K527, No. 2

Museme f1

36 y1 37 x1 40 42 y 43 v

$V^7/bII$   $bII^{\#6}$   $vii^{\#7}/v$   $\#iv^{\#6} (G^6)$  v

iv) K527, No. 24

Museme f2

538 x 539 y 540 x2 541 542

$bII^{\#6}$   $V^7/bII$   $bII^{\#6}$   $vii^{\#7}/vii$   $vii^{\#3}$

v) Op. 125, I

Museme f3

312-314 y2 315 z1 ... 326 x1

$V^{\#7}/bII$   $V^{\#3}/bII$   $I^{\#6}$   $bII^{\#6}$

Table 1: Musemes  $a-f$  in Mozart's *Don Giovanni* and Beethoven's Ninth Symphony, I

Museme	Attributes	Number and Bar location in <i>Don Giovanni</i>	Explicit and Implicit Text content in <i>Don Giovanni</i>	Bar location in Op. 125, I
$a$	$\hat{1}-\hat{5}-\hat{1}$ recitative figure	Overture: 1-4 No. 24: 433-436	- ‘Don Giovanni, a cenar teco’ / ‘Don Giovanni, you invited me to dine with you’ ( <i>hedonism, retribution</i> )	301-303, and <i>passim</i>
$b$	$\text{vii}^{\#6}_5/\text{V}-\text{V}^{\#3}_3$ or $\text{vii}^{\#4}_3-\text{I}^{\#3}_3$ harmonic progression	No. 24: 433-436	‘Don Giovanni, a cenar teco’	299-301
$c$	$\hat{5}-\hat{1}-\hat{7}-\hat{6}-\hat{5}-\hat{4}$ in i or $\hat{2}-\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$ in iv melodic figure	No. 1: 145-146 No. 24: 514-515	‘[Va, non mi degno] di pugnar teco’ / ‘[Go, I don’t want] to fight with you’ ( <i>evasiveness</i> ) ‘[Ho fermo il cuore in petto:] non ho timor: [verrò!]’ / ‘[My heart is beating steadily] I’m not afraid. [I’ll come!]’ ( <i>masculine resistance</i> )	318-320
$d$	$\hat{5}-\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$ or $\hat{3}-\hat{3}-\hat{2}-\hat{1}-\hat{7}-\hat{1}$ melodic figure	No. 24: 6-7 No. 24: 18-19	‘Già la mensa è preparata’ / ‘The table is already prepared’ ( <i>appetite/excess/hedonism</i> )	318-320
$e$	sometimes infilled falling $\hat{6}-\hat{(\sharp 2)/\hat{2}}-\hat{4}^{\#}$ melodic figures	Overture: 77-78 No. 13: 176-180 No. 24: 449-450 No. 24: 455-459	- ‘Bisogna aver coraggio’ / ‘We must be courageous’ ( <i>retribution</i> ) ‘Ah padron! Siam tutti morti!’ / ‘Oh master! We’re all going to die!’ ( <i>retribution</i> ) ‘Non si pasce di cibo mortale, chi si pasce di cibo celeste’ / ‘No nourishment from mortal food for one who is nourished by celestial food’ ( <i>higher purpose</i> )	327-329
$f$	$\text{V}^7/\text{II}$ versus $\text{G}^6$ harmonic museme	Overture: 27-9 No. 2: 36-42 No. 24: 538-540	- ‘[Caro padre!   Padre amato! Io manco  , io moro.]’ / ‘[Dear father! Beloved father ... I am fainting. [I am dying.]’ ( <i>Anna as victim</i> ) ‘Pentiti! – No!’ / ‘Repent! – No!’ ( <i>retribution; aggressive resistance</i> )	312-326



its shocking imagery of incipient sexual violence. It is that first reading, despite McClary's partial renunciation, from which I primarily draw here.

Adrienne Rich (1929–2012):

“The Ninth Symphony of Beethoven Understood at Last as a Sexual Message” (1972)

A man in terror of impotence  
or infertility, not knowing the difference  
a man trying to tell something  
howling from the climacteric  
music of the entirely  
isolated soul  
yelling at Joy from the tunnel of the ego  
music without the ghost  
of another person in it, music  
trying to tell something the man  
does not want out, would keep if he could  
gagged and bound and flogged with chords of Joy  
where everything is silence and the  
beating of a bloody fist upon  
a splintered table.

Beethoven's own circumstances may have motivated an imaginative transfer of the semantic constellation of the opera to the symphony movement. It is possible that, if the first movement of the symphony were indeed associated by Beethoven, via the *Don Giovanni* borrowings, with notions of transgression and violent retribution, then the focus of his various tensions may have been his sister-in-law, Johanna van Beethoven (1786–1869). Long an object of stony disapproval, Beethoven regarded her, rightly or wrongly, as the wellspring of his misery. Even though their legal conflict over the custody of his nephew, Karl, had been resolved in Beethoven's favour in July 1820, Karl continued to see his mother surreptitiously and, in Beethoven's view, came to be corrupted by her malign influence.

Is it conceivable that Beethoven regarded himself as in some sense a Don Giovanni figure in relation to his sister-in-law? If so, there are two scenarios through which this transference might have been channelled:

- *either* he saw himself as exacting revenge – in a distortion of the opera's theme of retribution *for* sexual and physical violence – *through* imagined sexual and physical violence on his Joh/Anna;

- *or* he perhaps felt that he *himself* deserved punishment, imaginatively through musical cross-association, for a similarly imaginary violation of Joh/Anna.

For both of these horrible scenarios, we might also ask – despite the consensus that the underlying motivation for rape often stems from a quest for power and control – whether the violence was perhaps motivated by sublimated desire for Joh/Anna on Beethoven’s part?

Thus, while Beethoven could never enact his feelings of violence against (or his desire for) his sister-in-law, he could certainly play them out imaginatively in music, by means of memetic transference from an antecedent work which develops many of the same themes. In this sense, from the perspective of Mozart’s musemes, their association with verbal-conceptual memes relevant to Beethoven’s biographical and psychological circumstances conferred upon them a clear selective advantage.

## 4 Towards an Introversive-Extroversive Synthesis

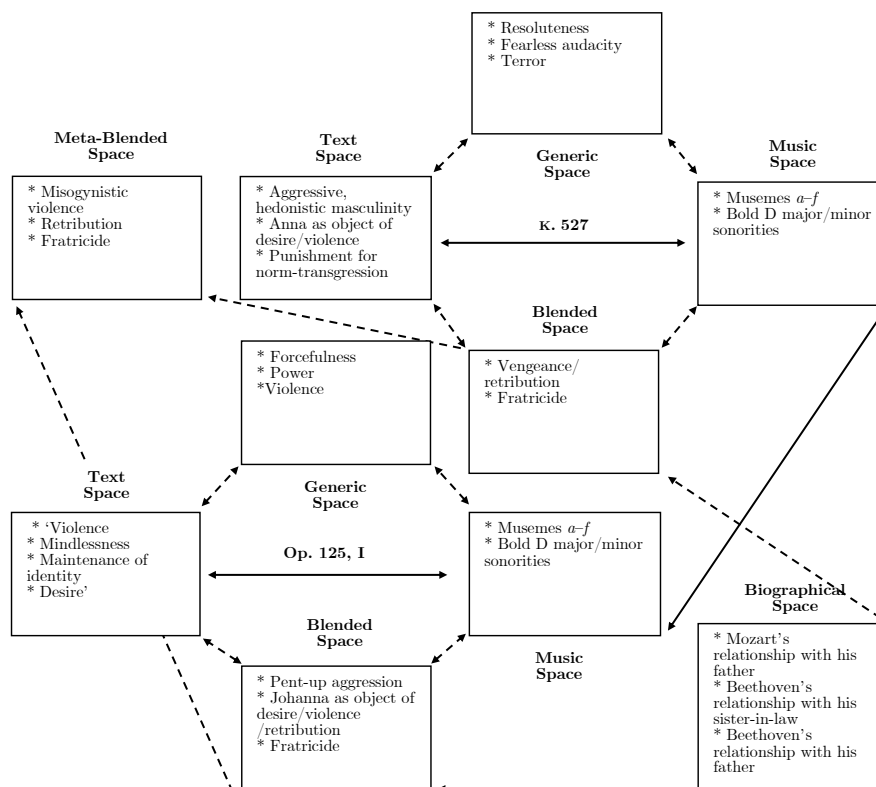
To formalize this mediation between the introversive and the extroversive, we might invoke Nicholas Cook’s notion of the “conceptual integration network” (CIN). This proposes that even notionally “absolute” music can be treated as an instance of *multimedia*, in that it integrates a number of *spaces*:

- a “music space”;
- a “text space”;
- a “generic space” (where “there must be common attributes presented by the various media in question . . . [without] which there would be no perceptual interaction between them”); and
- a “blended space” (“in which the attributes unique to each medium are combined, resulting in the emergence of new meaning”).

In the case of memetic transmission between works, we can extend this model, by means of a *composite CIN*, to represent connections and potential semantic transference. This allows mappings between compositions related in one or more of their spaces to be extended by means of extrapolated connections involving other, corresponding spaces. Figure 3 shows a composite CIN for *Don Giovanni* and the first movement of the Ninth Symphony.

**The CIN for *Don Giovanni*** identifies:

Figure 3: Composite CIN for Mozart's *Don Giovanni* and Beethoven's Ninth Symphony, I



- the *music space* elements of Musemes *a–f* and the bold D major/minor sonorities;
- the *text space* concepts of aggressive and hedonistic masculinity, Anna as the object of desire and violence, and punishment for transgression of societal and class norms (derived from the italicized terms in Table 1);
- the *generic space* concepts of resoluteness, fearless audacity, and terror; and
- the *blended space* concepts of vengeance and retribution, and fratricide.

**The CIN for Op. 125, I**, after that abstracted by Cook from McClary’s (revised) reading, identifies:

- the *music space* elements of Musemes *a–f* and the bold D major/minor sonorities;
- the *text space* concepts (from McClary) of “violence, mindlessness, the maintenance of identity, and desire”;
- the *generic space* concepts of forcefulness, power and violence; and
- the *blended space* concepts of pent-up aggression, Joh/Anna as the object of desire, violence and retribution, and fratricide.

The *music spaces* of both CINs are closely connected, given their hypothesized memetic relationships and their more general textural and tonal alignments (represented by the solid arrow connecting the two CINs). Given this, we can hypothesize correspondences between the two works’ *generic spaces* and their *blended spaces*, such that a “meta-blended space” might be extrapolated (dotted arrows). This identifies the concepts of misogynistic violence, retribution, and fratricide as arguably common to the two works and draws on a “biographical space” as supporting evidence for the linkage.

Fratricide further aligns *Don Giovanni* with the symphony. Hans Keller implicates Haydn as a father figure to Mozart, citing Mozart’s allegedly mocking uses of F minor in various works. Keller contends that “the ionisation of F minor was a subtle means whereby Mozart’s unconscious allowed itself to discharge its ambivalence [to Haydn], which would have been absolutely intolerable on the conscious level”. The death of the Commendatore, in a passage in F minor, might be understood in this context, but it is not inconceivable that Leopold Mozart, for whom the Commendatore was a proxy,

was the intended “victim”. This is not a new reading, yet it is supported by Mozart’s apparent ambivalence towards his father.

Beethoven is arguably also committing a form of fratricide by these connections, because he entertained a Freudian “family romance” which air-brushed his real father – the alcoholic court tenor Johann van Beethoven – from history and replaced him by a noble parent. For years, Beethoven did nothing to correct rumours that he was the illegitimate son of King Friedrich Wilhelm II of Prussia. Indeed, the dedicatee of the Ninth Symphony was Friedrich Wilhelm II’s son, Friedrich Wilhelm III – on the bizarre logic of the family romance, Beethoven’s own “half-brother”.

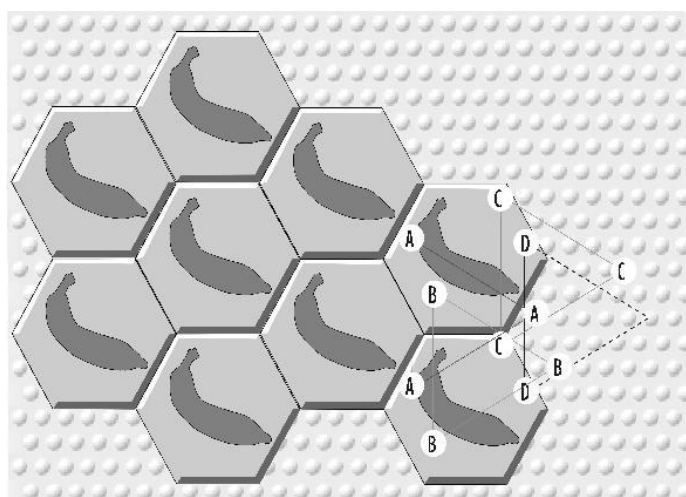
The various arrows in Figure 3 represent associations between phenomena in different dimensions by which meaning emerges. William Calvin’s *Hexagonal Cloning Theory* (HCT) hypothesizes how these associations might be implemented in the brain. It proposes that the neuronal “minicolumns” distributed regularly across the surface of the cortex are organized into resonating *triangular arrays* in response to perceptual stimulation or memory recall. As represented in Figure 4 (Calvin, 1996, p. 48), arrays are organized into *hexagonal plaques*, each encompassing a set of coordinated attributes, such as the pitches of a museme. Copying of hexagons over the surface of cortex occurs according to Darwinian principles, the “victorious” configuration representing the best alignment with a perceived or remembered pattern.

Within a given region of cortex, several hexagons may be supported by embedded “attractors” in the connectivity. This may account for the overlapping encoding of Musemes  $c$  and  $d$ , as two discrete musemes which nevertheless share certain pitches. The HCT also offers a mechanism for introversive-extroversive linkages because, beyond the localized connections implicated in hexagonal cloning, Calvin hypothesizes “*faux-fax* links”, longer-range connections between hexagons in one brain area – such as those encoding musemes in the auditory cortex – with hexagons in other areas – such as those encoding verbal-conceptual memes in the pre-frontal cortex.

## 5 Conclusion: A Truer Understanding?

This paper has offered only a limited overview of how introversive and extroversive thought is related. But it has at least suggested that accounts of musical structure and meaning can be built upon a memetic foundation; and that this foundation can support fresh insights – many able to be explored and modelled computationally – into particular works. In the case of the connections hypothesized between Mozart’s *Don Giovanni* and Beethoven’s Ninth Symphony, a number of structural, historical and biographical insights

Figure 4: Hexagonal “Paving” of Cerebral Cortex by Interdigitating Triangular Arrays (Calvin, 1996, p. 48)



– perhaps even, “at last”, a truer “understanding”, in Rich’s words – appear to have emerged.

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