

# Stefano Gervasoni's Cognition Through the Compositional Process of *Gramigna*. Methodology, Results Samples, Issues

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## ABSTRACT

In 2009, internationally renowned composer Stefano Gervasoni authorized researchers to delineate the genesis of his then most recent piece, *Gramigna*, a cycle of miniatures that was soon to be developed into an expanded version. The creative process of the existing version of *Gramigna* was documented via drafts and sketches. With regards to the creative process of newer miniatures added to *Gramigna* over the course of 2010, data collection during composition was favored versus retrospective monitoring. Then the composer's cognition along his course of action was recollected through four 'situation simulation interviews' in which the composer was asked to re-enact and comment on as many compositional procedures as possible, based on every trace of his activity gathered by the researchers. These two-hour long interviews were videotaped and transcribed. This data is highly suited to questioning various aspects of compositional cognition. Sample results are introduced, concerning: generation and use of rules, filling in the score in course of writing, decisions about ending or restarting a process.

## I. INTRODUCTION: RESEARCHING COMPOSITIONAL PROCESSES

The cognition of professional composers has rarely been the object of in-depth studies. The pioneering work of Julius Bahle (1936; 1939), a late member of the Würzburg School, did not give rise to any other significant investigation until a few studies were undertaken in the latter part of the century, particularly in educational psychology (as early as Bennett, 1976), musicology (Kerman, 1982) and semiotics (Mion, Thomas & Nattiez, 1982).

Empirical research by McAdams (2004) and Collins (2005) suggests that composition be viewed as a (complex) problem-solving issue. If creative artistic practice is to be distinguished from craftsmanship, the former definition might prove too restrictive to grasp every important aspect of composers' cognitive activity, including factors like emotional responses to listening and inner listening, or the willingness to acknowledge aesthetic breakthroughs. Donin & Theureau (2008) understand the creative activity of an expert composer as the generation of conflicting constraints and a partial implementation of sonic ideas, none of which are fully resolved. More broadly, the process of composition was defined through the setting and exploration of open creative situations in which various materials and ideas may be confronted, resulting in new, unexpected situations (as opposed of the perception of composition as walking straight through successive 'stages'). Further research is needed in order to confront the findings of the preceding studies and shape the methodological and epistemological framework adapted to such a complex object.

The APM (Analysis of Musical Practices) Research Group at IRCAM is devoted to empirical and theoretical research

into various aspects of contemporary concert music (see APM website, 2012). Musical performance as well as listening or composition are considered cultural, creative, situated, embodied practices that can be determined not only from scores but also through various in situ data collection methods. The intended outcome of such interdisciplinary research projects, which assemble music analysis and history, cognitive sciences, and social sciences, is better knowledge of both human cognition and art works.

A methodological framework for the study of contemporary music composition has been implemented through past projects: retrospective re-enactment of Philippe Leroux's creative process for *Voi(rex)* (Donin & Theureau, 2007); partial re-enactments and/or interviews during the creative process of Leroux's *Apocalypse*, Cipollone's *Concerto* (Sprenger-Ohana, 2007) and Florence Baschet's *StreicherKreis*; hybridizations between historical and empirical research into past creative processes whose composers are still alive and ready to delve into their own past documentation and memory (Tiffon & Sprenger-Ohana, 2012; Donin, 2012). In each case, the composer stays in his usual workplace or its facsimile and is then aided in recalling his actions and thinking at the time when he composed the piece under scrutiny. This basic principle is implemented according to the particular features of each composer, process and work. The typical output of a re-enactment session consists of: a video recording; a transcription of verbal exchanges (as well as of humming, gestures, etc.); an update of the paper and digital documentation (better labelling, classification, and understanding of the traces of the creative process).

A detailed discussion of our study of Gervasoni's acts of composition for *Gramigna*, including an in-depth account of the beginning of the creative process, can be read in Donin & Féron (2012). The aim of the present paper is more modest: summing up the main features of the study (Section II); introducing new results and issues that complement those previously published (Sections III and IV).

## II. GERVASONI AND *GRAMIGNA*

Stefano Gervasoni (b. 1962) is an Italian composer whose works are regularly played by the best soloists, ensembles and orchestras specializing in contemporary music. He is also a professor of composition at the Paris Conservatoire.

### A. Framing the study

During an informal discussion on the topic of this project (then in the process of being defined), Stefano Gervasoni was immediately enthusiastic at the idea of participating. After two preliminary sessions (December 17<sup>th</sup> 2008 and November 20<sup>th</sup> 2009) in which composer and researchers discussed the project, it was agreed upon to study the creative process of *Gramigna*, a cycle of short pieces for cimbalom and ensemble (flute, clarinet, oboe, percussions, piano, violin, viola, cello).

Gervasoni began working on this cycle in summer of 2009; the four pieces he composed during this time were performed for the first time on September 28<sup>th</sup>. Then, he intended to pursue his writing, adding new pieces. Consequently, *Gramigna* seemed to present a number of advantages. First, its miniature compositional format suggested that periods of composition were limited and could easily be identified in the composer's schedule. These periods (both past and future), which related to a single process staggered over several months, also led us to modify or adapt our methodological approaches. Second, the fact that our project's involvement began right after part of the cycle had been written guaranteed that the works' essential intention had been neither induced nor influenced by its observers.

Re-enactment sessions began in January 2010 and were systematically videotaped. Our goal was to revisit the cycle's genesis in detail, and even more specifically the creative process behind the completed first four pieces. In order to recreate the setting in which Gervasoni composed, each session involved restoring all the pertinent elements of his workspace that related to the considered creative process: from pre-existing documents he had referred to during composition (scores, manuscripts of other works, instrumental notices) to new documents that he produced during the course of the process (sketches, drafts, computer files, manuscripts). The methodological detail of each given session depended partially on the manner with which the composer himself approached the miniature under consideration.

Videotaping allowed us to come back to the words, gestures and document sections that were brought into play during the session. A literal transcript, including every aspect relevant to the reconstruction of the creative process (composer's gestures and humming as well as elements of the documents he had pointed out), was then used as the basis for establishing an account of the steps involved in the compositional process, in addition to systematically identifying recurring themes. It also allowed us to confront this data with that collected during other sessions.

### B. *Gramigna's* new piece

After a first series of interviews based on previously composed pieces (I, II, III, IV), the composer had intended to pursue the composition of *Gramigna* on his own, and then be interviewed according to the previously established method. Indeed, in February 2010, he even asked the researchers if he might set himself up in IRCAM's library on a day off and begin the composition of a new piece. Saturday, March 6<sup>th</sup> was chosen. Unexpected methodological problems arose: such as, how to adapt data collection principles to almost real-time access to the creative act? How to approach the composer during the compositional process without disturbing him?

Gervasoni was seated alone in the library adjacent to our office, where we remained without being seen or heard by the composer. In order to follow the course of action we decided to photograph the documents he worked on every fifteen minutes. The camera was positioned just behind him in such a way as to frame the documents as they were manipulated and framed during the composition; we systematically tried to obtain a close-up of the manuscript he was progressively elaborating (Figure 1).

We never exchanged with the composer when we took pictures. He occasionally freely commented on what he was doing. These short comments (often verbal snippets) were not recorded but instead immediately reported on a paper sheet in which we also added our own comments when noting a specific attitude (concentration) or something important concerning the draft's evolution.



Figure 1. Stefano Gervasoni writing *Gramigna's* new fourth piece (IRCAM, Paris, March 6<sup>th</sup>, 2010, 12:30pm).

Gervasoni set up his belongings at 10:45am (laptop, scores and manuscripts of the achieved miniatures, music sheets, pencils). He worked until 3:45pm and allowed himself two short breaks at 12:45pm and 3:30pm respectively. During these two breaks and at this end of the session, we photocopied the manuscript. In the end, we were in possession of three different stages of the manuscript and a series of twenty-six pictures we took approximately every fifteen minutes. Gervasoni didn't achieve the composition of his new miniature that day but knew how he would finish it some bars further: he wrote a downward sign in the cimbalom's stave, indicating the presence of a falling movement.

During the following days, we studied these documents and prepared a portfolio that included photographs of different moments of composition. On 15 March 2010 we went to Gervasoni's home in Bergamo (Italia) to proceed with the situation simulation interview based upon documentation. For the first time we were in possession of intermediate stages of the manuscript with which to conduct the interview: this information was relevant to in order to verify chronological steps as described by the composer.



Figure 2. Stefano Gervasoni commenting on the new piece's manuscript (at the composer's home, March 15<sup>th</sup>, 2010, image extracted from the video).

Gervasoni was set up at his desk. One experimenter was in charge of conducting the interview. The other checked that the composer's explanations with regards to the course of action were coherent with the different stages of the manuscript (Figure 2).

### III. DELINEATING THE COGNITION OF THE GERMINATING COMPOSER

#### A. Defining the piece to be

Gervasoni's fifth piece was from the beginning designed to become no. IV of the cycle (the current fourth piece will be positioned further on). In order to begin the composition of this fifth piece, Gervasoni decides to reuse the first one (whose construction was meticulously analysed in Donin & Féron (2012)). This choice was obvious to the composer given that in September 2009, at the first performance of *Gramigna*'s initial version, the first piece was also placed just before the fourth. Therefore, even then, Gervasoni had clearly anticipated composing a new fourth piece (we denote as nIV for "new fourth") that would be an extension of the first.

#### B. Selecting a starting point

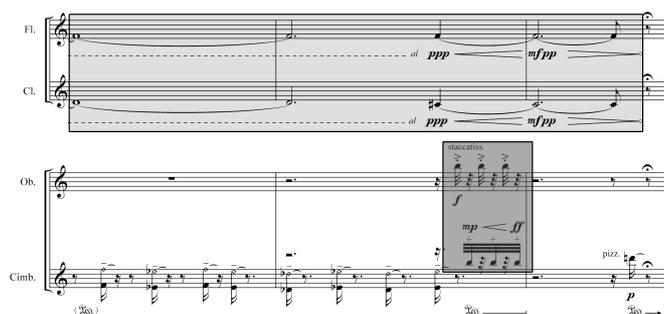
Gervasoni wonders whether the first piece should be adopted unchanged or slightly modified. Due to an unintended pitch incoherence on the second bar (an Ab played by the cimbalom), he chooses to modify this pitch and consequently certain other minute details.

The composer starts to work directly on a photocopy of the original first movement. The latter grows from limited material: a short musical cell for cimbalom repeated and varied three times. The organization of rhythms and pitches for each occurrence is dependent upon specific rules Gervasoni implemented during the course of action (see Donin & Féron, 2012). In fact, the Ab played by the cimbalom does not abide by the rule: the composer encircles it in order not to forget to change it later. He then glances through the rest of the score, crosses out the last bar which won't be useful for nIV, and begins writing music on a new sheet.

Since nIV is designed as an extension and development of the first piece, Gervasoni wished to develop two pre-existing musical ideas (Figure 3). The first element – and true starting point of the composition – is the rhythmic pattern of fast and regular repeated notes played by the cimbalom and the oboe: "I really have to begin right with the idea's development instead of waiting for it to be repeated; which would be too artificial" explained the composer (Gervasoni, 2010; all subsequent quotes stem from this interview/re-enactment session). The second element is "third intervals" (major or minor) played by the flute and the clarinet.

#### C. Finding a path toward germination

Gervasoni's idea is to first deal with the accompaniment. Therefore, he doesn't begin with writing the soloist part. Instead, he focuses on the rhythmic part on the clarinet and the flute, which are managed as a pair. In the first piece these two instruments maintain stable third intervals. Here, they are required to play "rhythmic thirds": a quick repetition of two notes distant from a (major or minor) third. Both the interval and the rhythmic structure are really linked to different initial elements of the first movement.



**Figure 3. Excerpt of *Gramigna I* (m. 5-7). Gervasoni used two musical ideas to start the composition of nIV. A rhythmic pattern of fast repeated notes (highlighted in dark grey) is played by the oboe and the cimbalom; a stable third interval is played by the flute and the clarinet (highlighted in light grey). © Edizioni Suvini Zerboni - SugarMusic S.p.A., Milano.**

After writing several bars of this accompaniment, Gervasoni focuses on the cimbalom-oboe part that continues to play the rhythmic pattern consisting of alternating identical notes between the two instruments. In the original first piece this pattern occurs twice on note B: first with the viola, then with the oboe (dark grey square on Figure 3). Gervasoni does not want to precisely reiterate this pattern one more time: it would be "too superficial" according to him. Therefore he extends the pattern and progressively shifts pitches.

The violin and the viola form another instrumental pair, responsible for creating a new independent layer characterised by third intervals that slowly fluctuate thanks to glissandi.

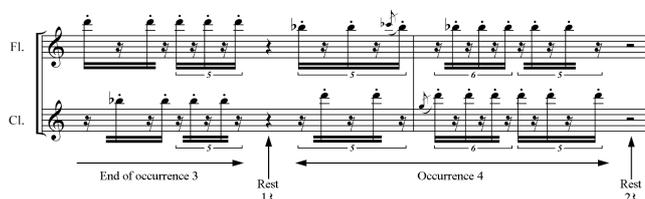
Finally, the cello and the piano, that form a fourth instrumental pair, are added to play a type of interruptive gesture that separates the different occurrences.

The entire beginning of this new compositional stage is built around these four instrumental pairs whose temporal and pitch organizations follow different rules we shall now attempt to summarize.

#### D. Main rules used in the next pages

##### *Flute-Clarinet pair*

The flute and the clarinet alternately play the two notes that compose the third interval. The "rhythmic third" might be assimilated to a type of trill (sixteenth notes alternately played by the two instruments) that is produced over a certain time before rhythmically fluctuating thanks to tuplets (Figure 4).



**Figure 4. *Gramigna nIV* (m. 10-11) – Example of the "rhythmic third" produced by the flute-clarinet pair. This excerpt is showing the end of the original process as characterized by the last appearance of the stable rhythmic pattern and the beginning of the derivate process that implements rests. © Edizioni Suvini Zerboni - SugarMusic S.p.A., Milano.**

This process and the rules that govern it are perfectly clear during the first three occurrences (*i.e.* until the first beat of m. 10): the stable rhythmic period becomes shorter and the fluctuating period becomes longer, yet the rhythmic

fluctuations are always gradual – no rhythmic discontinuity occurs.

- Occurrence 1: stable period during three quarter notes, followed by an acceleration (quintuplet).
- Occurrence 2: stable period during two quarter notes followed by an acceleration/deceleration (quintuplet, sextuplet, quintuplet).
- Occurrence 3: stable period during one quarter note followed by an interrupted acceleration (quintuplet).

Gervasoni knows this is the last occurrence given that the duration of the next trill would be equal to zero quarter note. At this precise moment, he stops focusing on this part and returns to m. 7 to write the cimbalom-oboe part, followed by the viola-violin part, all of which are guided by different rules described below. Returning to m. 10, the question is how to continue the process begun with the flute and the clarinet? Gervasoni decides to integrate a silence instead of the stable rhythmic period and to progressively increase its duration. The first rest (one quarter note) is positioned after the short rhythmic acceleration (quintuplet) that is concluding the original process (stable period + rhythmic fluctuation); the derivate process (silence + rhythmic fluctuation) can come into play (Figure 4).

- Occurrence 4: silence (one quarter rest) and rhythmic acceleration/deceleration (quintuplet, sextuplet, quintuplet).
- Occurrence 5: silence (two quarter rests) and rhythmic acceleration/deceleration (quintuplet, sextuplet, septuplet, sextuplet, quintuplet).
- Occurrence 6: silence (three quarter rests), rhythmic acceleration (quintuplet, sextuplet) and end of the process.

#### Cimbalom-Oboe pair

The rhythmic pattern of thirty-second notes that occurs at the end of the original first movement (dark grey square on Figure 3) is extended and now counts twelve notes (except for the first occurrence at m. 7 where there are only eleven notes).

The rule implemented by Gervasoni aims to maintain the pattern's length and to gradually reduce the rest time between the ten successive occurrences: 10, 9, 7, 6, 5, 4, 2 and 1 sixteenth rests (Figure 5). Pitch choice is guided by three tied conditions: 1) the gradual transformation of the original B pitch, 2) the progressive shift towards high tessitura 3) the refusal to repeat new pitches more than twice per instrument within one occurrence.

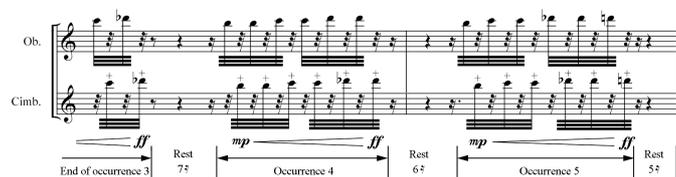


Figure 5. *Gramigna* nIV (m. 10-11) – Example of the rhythmic pattern produced by the cimbalom-oboe pair. Time interval between each occurrence is decreasing and new higher pitches are inserted. © Edizioni Suvini Zerboni - SugarMusic S.p.A., Milano.

#### Violin-Viola pair

These two string instruments create a background layer by simultaneously playing slow glissandi, whose duration is consistently equal to a whole note (Figure 6). The temporal

organization of this element is independent from the two preceding pairs. Nevertheless, the harmonic material is again derived from thirds.

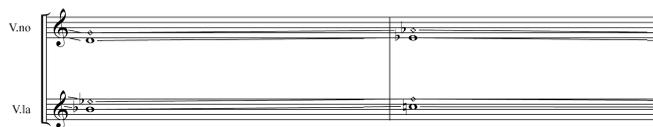


Figure 6. *Gramigna* nIV (m. 10-11) – Example of the fluctuating third produced by the violin-violin pair. © Edizioni Suvini Zerboni - SugarMusic S.p.A., Milano.

#### Cello-Piano pair

Gervasoni wishes to re-deploy the “interruptive gesture” – thus characterizing the brief and noisy sound played by the cello at the end of the original first piece. Temporal and harmonic effects considerably enrich this gesture. First, the composer chooses to maintain a harmonic pitch before using a downward glissando that extends over onto the interruptive sound. Secondly, this sharp effect is counterbalanced with short harmonic sounds on piano (Figure 7).

This new complex pattern occurs four times: the interruptive noisy sound is always synchronized with breaks that occur during the clarinet-flute part. The composer’s objective is to “prolong using an echo effect” the repeated pitches played by both wind instruments. The intensity of the interruptive sound on cello becomes more important (*f*, *ff*, *fff*, *ffff*) with every iteration.

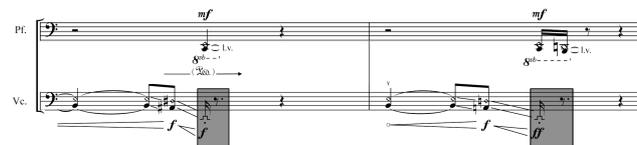


Figure 7. *Gramigna* nIV (m. 10-11) – Example of the musical gesture produced by the cello-piano pair. The interruptive noisy sounds played by the cello are highlighted in grey. © Edizioni Suvini Zerboni - SugarMusic S.p.A., Milano.

## IV. TWO PROBLEMS SAMPLES

### A. Filling in a missing part

As previously noticed (subsection III.C), Gervasoni first focused on modifying *Gramigna* I (hence defining pages 1-3 of nIV), and then began writing page 4 scoring the flute and the clarinet, followed by the oboe and the cimbalom. Yet only the right hand of cimbalom is involved, since, together with the oboe, it forms a single pattern of repeated notes.

What next? Gervasoni might seem to wish for the cimbalist to be part of the entire texture of the ensemble instead of a main soloist role. In reality it is not the case: the lower stave is left blank in order for something different to come enrich the cimbalom part (Figure 8). The very nature of this enriching element should not be determined too early. Thus, the compositional process goes on to further define the content of two other parts: violin and viola (see subsection III.D), before coming back around to the cimbalom. So now, how to fill in the cimbalom missing hand?

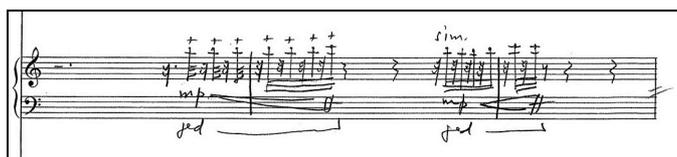


Figure 8. Manuscript of *Gramigna* nIV, cimbalom (m. 7-9), photocopied at 12:45pm during a coffee break. Courtesy of Stefano Gervasoni.

As he writes the cimbalom right hand part, Gervasoni already thinks about contrasting its dryness (due to the playing mode), with the addition of notes that would “resonate freely”. At that stage, he was still considering writing those notes on the same staff.

When he returns to the cimbalom, Gervasoni more precisely envisions how those notes will occur:

“I liked the idea of repeated notes we listen to, yet also that something exists when they are removed (...). Then we forget what has happened and hear only the halo that remains. And then we do the same thing, and again the same thing with a slight time interval: that note [shows last note of cimbalom, m. 10] is listened to”.

The embedding of “*lascia vibrare*” notes among the terminal notes of the dry pattern implies their being written down on the bottom staff.

Gervasoni has yet to choose the pitches. Here the fact that numerous features of the passage have already been determined comes into play. Instead of restricting the choice of pitches through any formalised process, Gervasoni allows himself to select notes without the help of a “rule”.

In retrospect, however, questions from the researchers led Gervasoni to challenge the ‘freedom’ with which he had added resonant notes at the end of each cimbalom/oboe utterance. In total, fifteen of these notes, selected from eight different pitch classes, were inserted into bars 7-14 in the left-hand of the cimbalom part. Further re-enactment allowed him to recall some criteria for the selection of pitches. These criteria undoubtedly were undoubtedly barely conscious at the time, and less formalised than the rules laid out below might suggest, but they were nonetheless decisive:

- 1) Pitches should differ from those already present in the score (i.e. Bb, B, C, Db, D), then form progressively the chromatic whole together with them;
- 2) The ordering of new pitches shouldn’t follow a systematic procedure—typically avoiding a ‘fanning out effect’ in the manner of György Ligeti (i.e. A, Bb, Ab, B, G, C, Gb, Db, etc.);
- 3) Wait as long as possible before making use of the Bb, which has already been played so often by the clarinet.

One wouldn’t fully succeed in describing the preceding items as ‘rules’ (however implicit). What Gervasoni lays out here are *options*, which implement his way of interpreting the whole compositional situation he has set up to this point. The main option consists of inserting a contrasting type of element within the soloist’s part, which implies contrasting two types of sonorities (dry vs. resonant); contrasting freedom vs constraint as regards the rhythmic placement and the pitch; contrasting two complementary subsets of the chromatic whole.

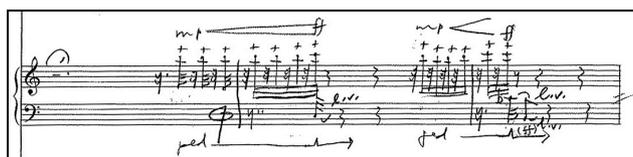


Figure 9. Manuscript of *Gramigna* nIV, cimbalom (m. 7-9), photocopied at 3:30pm during lunch break. Courtesy of Stefano Gervasoni.

Though implemented during the preparation of the very first bars involved, this contrast does not result in a sharp contrast for the listener between cimbalom’s left hand and the rest. The basic idea is to progressively allow ‘something behind’ the pre-existing texture to appear. Added notes become more and more perceptible as the major third-pattern is repeated, hence allowing a fragmented figure to emerge from the texture—“a melody that is in the process of being generated in an increasingly audible way”. This is an emerging feature of the compositional process from Gervasoni’s point of view:

“I was happy with the result that yielded the superimposition of two procedures, because I saw that by adding the resonant notes, this melodic idea becomes more and more important. Before it was the isolated notes, after it becomes a real melody despite of the attempts at interruption made by the repeated notes. It creates an interesting musical situation”.

Such is the compositional situation that follows the one introduced at the beginning of the present section. The new situation is defined by the coexistence of two developing phenomena (a series of textural motives developing according to strict rules, and an emerging melodic element) as well as the progressive balance in favor of the later. Expanding this “interesting musical situation” will be the composer’s main task from ca. 1:00pm to ca. 4:00pm as he develops his material and rules for another six bars (i.e., until the middle of the seventh page of the manuscript).

## B. Breaking the rules

A new kind of problem arises at this point.

As previously noted (subsection III.D, Cimbalom-Oboe pair), Gervasoni has chosen to maintain the pattern’s length and to gradually reduce the duration of the rests between the ten successive occurrences: 10, 9, 7, 6, 5, 4, 2 and 1 sixteenth-note rests. That last occurrence takes place precisely at m. 14, in which two almost identical motives (based on D, Eb and E) succeed one another. Since this rule was “inflexible”, Gervasoni was able to automatically complete the oboe score before any other individual part.



Figure 10. Picture of m. 14 (p. 7 in the manuscript) at 2:07pm.

A photograph taken at 2:07pm provides some clues about what the composer had first envisioned (Figure 10). Upward pitch motion should reach the F and was followed by a rest with fermata. “This shows that I almost wanted to finish the piece there”, Gervasoni suggests in retrospect. He tilted toward a conclusive gesture—an ascension that suddenly resolves into silence.

Yet that was nothing more than a provisory option, since the exploration of the “interesting musical situation” of pp. 4-7 had not yet been fully achieved. To complete other parts up to the same bar (m. 14-15) would lead the composer to obtain a more global view of his piece. As soon as he has written the flute, clarinet, cimbalom (both hands), violin and viola parts, he stops working (Figure 11) and takes a short lunch break outside.



Figure 11. Manuscript of *Gramigna nIV*, p. 7, photocopied at 3:30pm during lunch break. Courtesy of Stefano Gervasoni.

After the break, he writes the cello part (from m. 7 until the end) and introduces noise-like sounds at a hitherto unprecedented dynamic level (*pppp*), tempo (*Larghissimo*, 40 MM), and instrumental combination (vibraphone, cimbalom playing glissando harmonics, flautando viola, violoncello playing *sul ponticello*) (see Figure 12). How did he arrive at this result?

Three main steps in his reasoning may be delineated:

1) It is better to discard past processes than to draw logical consequences from them:

“I like the inflexible way it moves forward [in pp. 4-7], for me it is something that has an expressive value, it isn’t just an automatic reflex. But what I don’t like is a consequence

drawn from a regular process: I don’t want this process of accumulation to have a logical consequence. So/OK, the simplest thing to do is to say: stop, I will insert a rest, I will make you forget what we’ve had up until now, and start over [in another way]. Or else (...) something happens in the silence that causes what follows to not be logically connected to what came before”.

More than true silence, what will come next is a hollowing out of the form, a sudden emptiness that is able to disturb the listener’s understanding of the ongoing musical development.

2) Stopping everything right now, in the middle of m. 14, fits perfectly with the inner logic of the cimbalom/oboe process (cf. subsection III.D), yet it arbitrarily interrupts the flute/clarinet process in which triplets create continuous waves of acceleration/deceleration: “here [points to the flute and clarinet parts, m. 14] I don’t continue with my *rallentando*: [according to my rule] I should have added a quintuplet before placing a rest”. Gervasoni hence distinguishes this “silence which interrupts” from the other rests casually determined by his former set of rules: the latter have predictable, countable durations, whereas the former consists above all of a fermata-like suspension of time.

3) Since the cello part consists of sudden glissando gestures marking the end of each up-and-down phrase by the violin-violita pair, there will necessarily be at least one sound event at the beginning of m. 14’s “silence”. This paves the way towards filling in the ‘silence’ with more and more noise-like sounds.



Figure 12. Manuscript of *Gramigna nIV*, p. 7, photocopied at 5:30pm. Courtesy of Stefano Gervasoni.

As we took a photograph of bars 14-16 then just completed, Gervasoni mentioned that he was considering ending the piece here. Less than one hour remained before he had to end this composition session. At some point, he even added a conclusive double-bar line, and then erased it. As he would notice retrospectively, the very small dimensions of m. 16 within the page corresponded to his thinking “OK, I’ve arrived at the end of the page and it’s finished”. Otherwise, he would have written viola and cello parts on a new page.

Reflecting on the piece as a whole, Gervasoni finally changes his mind and decides that the noise-like mm. 14-16 should not serve as the conclusion, but rather as a way to clear the past and somehow restart the game:

“I said to myself (...): no, it’s too banal, it’s too normal, you just developed an element [from m. 7 to m. 14], it’s as if you dilated the first piece [i.e., the three pages of *Gramigna* I reprises at the beginning of piece no. IV], but it’s still it”.

A new compositional problem is thus posed: how to escape from the unexpected “silence” and construct a new section that brings the form to its final stage? But this is another story.

## V. CONCLUSION

Delving into composers’ cognition is a challenging task since it asks the researcher to reduce the existing gap between issues of “creativity,” as studied in a lab, and real-life creative activity. Psychological research has long limited its goal to measuring creativity among “ordinary” subjects, whereas specialized fields in the humanities (literary criticism, art history, musicology) would focus only on the life and work of (history’s) most noteworthy creators. Cognition is then addressed, one the one hand, based on induced and presumably replicable tasks, on the other hand, based on traces left by exceptional individuals independently of any research process. Crossing the gap implies an epistemological as well as methodological hybridization between at least two separate domains of knowledge: cognitive science and musicology.

Indeed, a third domain must be added: anthropology as a science of human cognition and culture “in the wild”, where the researcher has to find appropriate ways of interacting with his subjects and then extracting objective assumptions out of his fieldwork. Although not so complex than in classical anthropology (where researcher and subject belong to radically different worlds and cultures), our interaction with Stefano Gervasoni had to take this epistemological background into account along the two already mentioned.

Once these unusual issues have been raised and assessed, it is possible to proceed and produce empirical studies, which are relevant simultaneously to cognitive psychology and musicology (including music analysis and theory)—as our study of Gervasoni’s cognition during the creative process of *Gramigna* aims to demonstrate.

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