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Repurposing ‘com-provisation’

Abstract

As Anne Sauvagnargues suggests, in Gilles Deleuze thought “every-thing is defined as an assemblage of movements and affective vibrations.” Interestingly, Sauvagnargues’ proposition aligns neatly with Tim Ingold’s idea of correspondence, where things perdure, “carry on together, and answer to one another,” and where the additive ‘and...and...and’ of the assemblage changes to the attentional and contrapuntal ‘with...with...with’. Considering, therefore, the generative component of language, revealing concepts as concretely mixed assemblages, it may be that these imperceptible movements can be attended-in a concept’s “usership.” That is to say, concepts—with-users not only trace a concept’s “transformational component” by abstracting its content through acts of translation and repurposing, but also reveal the contrapuntal, affective correspondences—or else, the “with-ness” between the two multiplicities—that provide the diagrammatic context for effectuating forms of expression.

This paper will attempt to translate ‘com-provisation’ as σύν-schediasmos (GR: συν-σχεδιασμός) by proposing ‘composition’ (GR: σύνθεσις; σύνthesis) as a phenomenon enacted by all participants in an ecology of ‘com-ponents’ and by suggesting ‘im-provisation’ (GR: αυτοσχεδιασμός, autoschediasmos) as a performance practice that manifests a process of discovering akin to that of “wayfinding and drawing” (GR: σχεδιάζω; schediázo: “to draw”). The presentation will involve examples of the notational environments I have been developing during the last six years, also discussing the correspondences that enframed their development. Echoing Jonathan Impett’s proposition of notations as forms of soft-technology, the discussion will attempt to demonstrate that these environments act as (bracketed, perhaps) “abstract-machines” effectuating ‘com-provisation’ into a usership oriented practice. A short summary of the notational system can be found here: https://tinyurl.com/t2q9q8z

Book of abstracts: https://tinyurl.com/qm5e2d4

Part A

Slide 1: repurposing ‘com-provisation’

Good afternoon! Hello!

Before I start, I would like to thank Paulo de Assis for accepting my abstract and for inviting me to present in the DARE conference. I feel to say that I am honoured for the invitation to share my thoughts with all of you here today; a feeling that also brings with it a certain anxiety of responsibility, if I may say. I would also like to thank Paolo Giudici for dealing with the organisation details, and for being patient with my circumstances before my arrival, here, in Ghent.

With this presentation today I would like to sketch the scenography of my practice and to theorise my artistic research through unfolding and narrating a story. And I am sorry I will be doing this through reading from a script. English is not my first language and I feel more comfortable this way.

And perhaps the words script, narrative, and storytelling are a good way to begin this story, since they seem to be activating narratorship: the role of a narrator as situated upon a vessel traversing the seas. A journey which can also be observed in other words such as, craftsman-ship or friend-ship. But the verbs to narrate and to libate—with the latter traced within
Throughout the years I have found myself exploring the fields of composition, improvisation, and music technology while focusing upon what is increasingly being called electro-instrumental music. More specifically, over the last six years or so I have been enquiring into the notion of ‘comprovisation’, and this is the term I would like to move on and explore for a while.

[Part A: approx. 2min 30sec]

Part B
Slide 2: comprovisation | an elision between composition and improvisation

The term comprovisation can be traced back into the 1980s. The expression was possibly coined by the African-American improviser, composer, and conductor Lawrence “Butch” Morris, and was used by him to convey the meaning of “composed-improvisations,” and to identify his pioneering practice of Conduction®. Trombonist and improviser, Paul Rutherford, referred to comprovisation as a working technique he used with his band ISKRA (Barry Guy, bass; Derek Bailey, guitar) in which performers could substitute improvised ideas for the written parts. Musician, biochemist, and cognitive scientist, Roger Dean, suggests “referent-based” improvisations as comprovisations. Dean thinks of the “referent” as any system, pre-existent

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2 Gilles Deleuze, From A to Z with Claire Parnet (MIT Press, DVD, 2007), Letter A for Animal
4 “Deleuze calls ‘ideas’ complexes of sensation that are not reducible to discursive signification, but that stimulate thought. These images do not say anything; they give rise to thought.” Anne Sauvagnargues, Deleuze and Art (London: Bloomsbury, 2013), p.10
structure or material that acts as a “substrate” for improvisation. In the last 15 years, composer Sandeep Bhagwati has been approaching comprovisation through the notion of “notational-perspective”: An analytical tool employed to examine the inter-relations and functions of notational styles or approaches used in a particular context, in order to identify “compositional biases,” between those performance elements that are ‘context independent’ and ‘repeatable’, to those that can be considered ‘contingent’ to a particular performance and open to ‘interpretation’.

Now, I do not wish to tire you by presenting a list of musicians and scholars who have explored in one way or another the term comprovisation. Nevertheless, what strikes me as important here is that, although most authors respond differently in regard to what comprovisation is for them, the expression—and I am echoing Deleuze and Guattari here—appears as a concept that refers and corresponds to a problem. Mainly that between composition and improvisation there is a typology of distinction, and that the comprovisation elision calls for a hybrid situated somewhere in-between. And from this point we can proceed through the lens of a genealogy of practices and scrutinise further this state of affairs. On the one hand, we can trace the “history of things,” and the ways in which 20th century music practices challenged fixed notions of composition and improvisation, and thus, ponder on whether indeed comprovisation corresponds to a problem. On the other hand, we may choose to critically examine the ways in which some authors’ narratives on comprovisation appear either as an

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14 Additional references and discussions on comprovisation among others:

• “comprovisation […] a music that is neither totally improvised nor composed.” Marcus Stockhausen, Album: Possible Worlds liner notes (1995)
• Trevor Coleman, Polycyclic Comprovisation (PhD thesis, University of Otago, 2016)
• …every concept refers to a problem […] concepts correspond to problems. If not, concepts are abstract…”: Gilles Deleuze, From A to Z with Claire Parnet (MIT Press, DVD, 2007), Letter H for History of Philosophy
16 “The idea of radical revolution is the only solution that the moderns have imagined to explain the emergence of the hybrids that their constitution simultaneously forbids and allows, and in order to avoid another monster: the notion that things themselves have a history.” Bruno Latour, We have never been Modern (Cambridge, Massachusetts: Harvard University Press, 1993), p.70
17 Important references on this discussion:

• Malcolm Goldstein, Sounding the full circle (Sheffield: Frog Peak,1988)
• Eddie Prévost, No Sound Is Innocent: AMM and the Practice of Self-invention (Essex: Copula, 1995)
‘imposition’ of linearities along boundaries,19 20 with composition colonising improvisation through notation, re-affirming the authority of the composer figure, or as a naturalisation of all music-making under the seemingly innocent inclusivity of the term.21 Likewise, we may choose to align with practitioners who examined comprovisation by emphasising processes of composing tools that can be improvised upon (see Richard Dudas for example),22 or with those who foreground comprovisation as collaborative music-making and as a social practice (see Lawrence “Butch” Morris for instance).23

However, I find myself thinking that although a genealogical analysis of practices may allow us to trace the forceful contradictions, consistencies and inconsistencies within practitioners’ interwoven narratives and stories on comprovisation, the unavoidable act of choosing sides will keep the notions of composition, improvisation, and comprovisation “at a certain distance.”24 And that perhaps in order to bring them closer to us we may want to open them up to ‘a logic of assemblage’ and think of them as relations of relations, as bodies of movement and affect, or else, as ‘images’. As Anne Sauvagnargues writes, the ‘image’ in Deleuze thought, is not a representation of a thing but quote “a system of actions and reactions [...] such that the ‘image’ has no need to be seen, but exists as trembling, vibration, and movement” unquote (movement-image). But an ‘image’ is also equipped with an inside dimension that endows subjectification as selecting, framing and acting, developing an affective zone between the image’s perceptible facet (subtraction; perception-image) and its motor facet (action; action-image). As Sauvagnargues suggests, critical evaluation consists of drawing up a cartography of affects; the maps that transform an ‘image’ into a concrete category.25

It seems, therefore, that if we are to think of composition, improvisation, or comprovisation not as static and fixed notions, but as ‘images’ and processes in constant becomings, then their imperceptible movements are to be traced in the hands of

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19 “The first part of the title of my talk comes from an exchange that I had with my composition teacher, the late James Tenney, when I was studying with him at York University between 1997 and the year 2000. During one of our composition seminar meetings, he commented on the fact that all of the work that I was doing at the time combined composition and improvisation. In response, I expressed my discomfort with both terms, and the fact that they are so often seen as binary opposites when, in fact, there is a whole range of musical practices that combine elements of both. I suggested to him that maybe we need to come up with a new theoretical framework for contemporary modes of music making and a new term that is more inclusive and more accurate. ‘What about comprovisation’ I said, coining a portmanteau term that I naively thought was original to me. Tenney replied with a smile: ‘Maybe. But it can also be an imposition’.”. Jesse Steward, “Comprovisation or Imposition?: An Improvised Composition on a Life of Improvisation,” Critical Studies in Improvisation / Études critiques en improvisation, Vol 9, No 2 (2013), p.1

20 “Colonialism, then, is not the imposition of linearity upon a non-linear world, but the imposition of one kind of line on another. It proceeds first by converting the paths along which life is lived into boundaries in which it is contained, and then by joining up these now enclosed communities, each confined to one spot, into vertically integrated assemblies. Living along is one thing; joining up is quite another.” Tim Ingold, Lines, A Brief History (New York: Routledge, 2007), p.2

21 Colonialism, power and “exonomiation” of improvisation:


23 See footnotes 5, 6, and 7.

24 “The appeal to signification [...] is a way of holding the world at a distance. To find what things mean, you only have to work with them. But in a world of signs we never touch anything directly; feeling is interrupted. Signification breaks the link of direct perception, just as articulation breaks the link between hand and word. If meaning is hands-on; signification is hands-off.” Tim Ingold, Knowing From the Inside: Correspondences (Aberdeen: University of Aberdeen, 2017), p.77

25 Anne Sauvagnargues, Deleuze and Art (London: Bloomsbury, 2013), pp.46–53
those who use them; those who experience these ‘images’ from the inside. As Tim Ingold writes, to use something should not be confused with utilisation, but it should rather be seen as quote “drawing something into your habitual or usual pattern of activity. And conversely, to be used to something is to accept it in your life as part of your custom”; unquote a ‘recursivity’ that implies correspondence, and I think we need to write the word correspondence in italics so as to activate penmanship... so as to deactivate ‘symbolic correspondence’ and activate penmanship instead. That is to say, instead of a dynamic joining up, a contrapuntal joining with, instead of an “othering,” a “togethering,” where things “carry on together and answer to one another” as Ingold writes. In the same way that users—with—pens trace in calligraphy the modulation of letter lines, users—with—composition, users—with—improvisation, users—with—comprovisation function “not as agents of contact [but] as recurrent component parts,” attending to the vibration of ‘images’ and tracing the modulation of the very ‘with-ness’ in the processes of thinking and making.

For me, that I encountered Deleuze and Guattari writings as a non-expert reader, this way of thinking allowed me to approach with more ‘confidence’, I would DARE say, the four components of their pragmatics: ...and although I might be over-simplifying and over-appropriating here, it might be that they are also offering us a concrete methodology for artistic research. Users studying from the inside eco-logies of concepts and ‘images’ whose mixture and vibration fuel interpretation, and abstracting content through acts of translation, through subtracting and acting, tracing the ‘with-ness’ in-between. Users diagrammatising eco-nomies of practices and effectuating cartographies as concretely mixed assemblages that in turn in-form eco-logies of expression. And there is indeed a feedback loop here between nòmos (νόμος) and λόγος (λόγος); a recursivity which I think can be seen throughout ‘A Thousand Plateaus’: the “smooth” nòmoi (νόμοι), techniques, customs, and habits of bodies, corresponding with the λόγος, the law, and the statements that striate and grid.

27 Anne Sauvagnargues, Deleuze and Art (London: Bloomsbury, 2013), p.48
28 “...a subject is an image that is ‘experienced’ from inside.” Ibid., p.51
29 Tim Ingold, Knowing from the Inside: Correspondences (Aberdeen: University of Aberdeen, 2017)
30 Ibid., pp. 13–41
31 “…the words of handwriting or calligraphy are specific modulations and inflections of the letter-line, as it is traced by the dextrous hand of the writer.” Tim Ingold, Making; Anthropology, Archaeology, Art and Architecture (London & New York: Routledge, 2013), p. 130
33 Gilles Deleuze & Felix Guattari, A Thousand Plateaus; Capitalism and Schizophrenia (London: Bloomsbury, 2013), Plateau 5; On Several regimes of signs: pp. 111–148
35 “The space of nomad thought is qualitatively different from State space. Air against earth. State space is "striped," or gridded. Movement in it is confined as by gravity to a horizontal plane and limited by the order of that plane to pre-set paths between fixed and identifiable points. Nomad space is "smooth," or open-ended. One can rise up at any point and move to any other. Its mode of distribution is the nomos: arraying oneself in an open space (hold the street), as opposed to the logos of entrenching oneself in a closed space (hold the fort).” Brian Massumi, Translator’s Foreword to A Thousand Plateaus; Capitalism and Schizophrenia (London: Bloomsbury, 2013), p. xiii
36 “In striated space, one closes off a surface and ‘allocates’ it according to determinate intervals, assigned breaks; in the smooth, one ‘distributes’ oneself in an open space, according to frequencies and in the course of one’s crossings (logos and nomos)” Gilles Deleuze & Felix Guattari, A Thousand Plateaus; Capitalism and Schizophrenia (London: Bloomsbury, 2013), p. 481
It is in this state of affairs—or better affects—that I find myself translating and repurposing ‘com-provisation’ as ‘sūn-schediásmos’ (sūn-schediásmos). But as Steven Wright suggests, the word repurposing is a rather peculiar one since it captures both a transformative dynamic, and a paradoxical idleness, in the sense that there is no need to add anything new...  

As Michel Serres have put it: “From history told, you can tell everything. All narratives have value, all theories as well. [...] What concerns scenographies is always, and banally so, well observed.”

[Part B: approx. 7min]

Part C
Slide 3: com-provisation as συν-σχεδιασμός (sūn-schediásmos)

**Composition as Improvisation**

If we were to contemplate the term composition, we would observe that the notion of eco-logy (Gr: oikos + lógos), in the sense of an environment (oikos) and a field of possibilities (lógos), is already encapsulated in the word’s origins. The words composition and compose originate from the Latin compositio and compono (verb: con- + pono) and are semantically parallel to the Greek synthesis (sūn- + thésis) and syntheto (verb: sūn- + théto). Interestingly, both verbs pono and théto denote actions of placing, positioning, and arranging, while both prefixes con- and sūn- convey the double meaning of collectiveness in the action as well as the conjoint involvement of more than one.

Such an understanding already brings about the idea that there is some kind of coupling that takes place, with composition becoming an activity that reflects a structure and a setting among ‘com-ponents’: an assemblage (agencement) of humans with humans, humans with technology. And this ‘with-ness’ here implies that there is a correspondence of companion-ship among ‘com-ponents’. There is indeed a journey that can be traced in composition as companionship, but it seems to me that it is more of a collective endeavour than a solitary action and that it rather proceeds through a moment-to-moment improvisation. And if we are to substitute the term technology with Gilbert Simondon’s ‘technical objects’ then our instruments, our machinic assemblages such as computers, and our notations not only in-form but also affect the journey and modulation of this ecology in very concrete terms. I think that this last point is crucial, especially in regard to the dialectics between composition and notation and the ways in which this dialectic concretises the [European] image of composition. Unfolding this a bit further in regard to notations, Jonathan Impett suggests to think of notations as “forms of soft-technology,” that quote “gain a certain autonomy [and] have a life of their own [...] generating the conceptual models by which we might understand...

37 Steven Wright, Toward a Lexicon of Usership (Eindhoven: Van Abbesmuseum, 2013), p. 56
42 David Scott, Gilbert Simondon’s Psychic and Collective Individuation (Edinburgh: Edinburgh University Press, 2014)
Improvisation as Composition

In a similar fashion, I find quite interesting the connotations that can be articulated when considering the Latin and Greek parallels of the word improvisation. Although the Latin origin of the word denotes ‘the un-foreseen’ and the ‘un-provided for’—as in a problem that has unexpectedly emerged and requires our attention—the root of the Greek autoschediasmos (αὐτοσχεδιασμός) carries a similar, albeit, concealed meaning. On the one hand, it relates to the words schein (σχέιν) and schediázo (σχεδίαζω)—that is, to hold, to do something offhand, and to draw—and on the other, to the word schedía (σχεδία)—a wooden raft used to travel over water. It seems then that both improvisation (as in problem solving) and autoschediasmos (as in journey and drawing) correspond with what Ingold calls wayfinding, quote “a ‘feeling one’s way’ through [...] continually adjusting [their] movements in response to an ongoing perceptual monitoring of [their] surroundings [...] apprehending a region from within.”45 unquote As Deleuze and Guattari have put it, “to improvise is to join with the World, to meld with it.”46 A commingling of mind, body and world, where perception is indissociable from action, involving a mapping of ‘regions’ as experienced from the inside, and corresponding with the practice of drawing: a “direct coupling between the movement of [one’s] perception, and the gestural movement of the hand.”47 48

It seems, then, that in improvisation too, there is a certain kind of ‘with-ness’ among ‘com-ponents’ that takes place. Humans with humans inflecting improvisation as a social practice in itself,49 and humans with instruments or other ‘technical-objects’ as integrated systems probing and mapping environments in processes of wayfinding and drawing, with the sounding-figure emerging through direct experience and attentive listening: another way of composing and putting together music, as Evan Parker suggests.50

45 (1) “To know one’s whereabouts is thus to be able to connect one’s latest movements to narratives of journeys previously made, by oneself and others. In wayfinding, people do not traverse the surface of a world whose layout is fixed in advance—as represented on the cartographic map. Rather, they ‘feel their way’ through a world that is itself in motion, continually coming into being through the combined action of human and non-human agencies.”; (2) “Bound together by the itineraries of their inhabitants, places exist not in space but as nodes in a matrix of movement. I shall call this matrix a ‘region’. It is the knowledge of the region, and with it the ability to situate one’s current position within the historical context of journeys previously made—journeys to, from and around places—that distinguishes the countryman from the stranger. Ordinary wayfinding, then, more closely resembles storytelling than map-reading. To use a map is to navigate by means of it: that is, to plot a course from one location to another in space. Wayfinding, by contrast, is a matter of moving from one place to another in a region.”; (3) “Wayfinding is understood as a skilled performance in which the traveller, whose powers of perception and action have been fine-tuned through previous experience, ‘feels his way’ towards his goal, continually adjusting his movements in response to an ongoing perceptual monitoring of his surroundings.”; (4) In [...] wayfinding [...] whether on land or at sea, the world is apprehended from within.” Tim Ingold, The Perception of the Environment; Essays on livelihood, dwelling and skill (London & New York: Routledge, 2000), (1) p.155; (2) p.219; (3) p.220; (4) p.241
48 Tim Ingold, “Anthropology is Not Ethnography,” in Proceedings of the British Academy (The British Academy, 2008)
49 “…improvisation, regardless of its medium, has often been conceived by both its practitioners and its theorists as being intimately inflected by the social formations in which it is created and as being, in aesthetically relevant ways, a social practice in itself.” Georgina Born, Eric Lewis, Will Straw, “Introduction; What is Social Aesthetics?”, in improvisation and Social Aesthetics (Durham & London: Duke University Press, 2017), p.9
50 Evan Parker, “Introduction,” in Soundweaving; Writings on Improvisation ed. by Franziska Schroeder and Micheál Ó hAodha (Newcastle upon Thyne: Cambridge Scholars publishing, 2014), p.1
Following on from the above, and echoing Georgina Born, it might be that composition “...does not require a physical artefact, a visual object or a symbol at the centre of the analysis of its materiality.”\textsuperscript{51} It may rather be seen as a conceptual technolog

improvisation may be seen as a process where perception and action are indissociably coupled: a ‘com-positional’, ‘com-

Outside this, the expression ‘com-provisation’ as ‘συν-σχεδιασμός’ (sún-schediasmos)

It is in the intersection of the aforementioned thoughts that the translation of ‘com-provisation’ as ‘sún-schediasmos’ comes about. But ‘sún-schediasmos’ is neither an axiom, nor a purified hybrid situated in-between composition and improvisation, and crucially, it is not an all-inclusive term that attempts to heteronormalize a genealogy of practices. Sún-schediasmos does not aim to signify or represent something, and thus, it ‘resembles’ (for lack of a better word) to an ‘abstract-machine’.\textsuperscript{52} A machine which although may allow us to diagrammatise settings of relations and eco-logies among ‘com-ponents’, it does not attempt to represent relata between them as a pre-existent thing.\textsuperscript{53} Its only “local condition of possibility,” to echo Thomas Nail,\textsuperscript{54} is the prefix συν-, or as Michel Serres have put it, “the ordinary lot of situations [...] our common object.”\textsuperscript{55}

In this sense, συν-schediasmos is an invitation to think of ‘com-provisation’ as an ensemble of words: correspondence, companionship, collaboration, co-creating, co-problem solving, co-wayfinding, co-drawing, co-providing for, co-authorship, co-ownership (etc.) and at the same time, it brings attention to the question mark at the end of the sentence: How do these words become locally determined (?) How does the ‘com-provisional’ fact come about (?) How can we trace the with-ness in co-drawing and co-wayfinding (?) How can we map eco-nomies of knowledge as experienced from the inside (?)

But if the above aim in shedding some light into the eco-logy of a practice, this striated space has been recursively corresponding with its eco-nomy: the customary and the habitual which distributed that space. And this is the territory I would like to move on and share with you before bringing this story to an end.

\textbf{[Part C: approx. 5min]}


\textsuperscript{52} We can think of ‘ουσ-σχεδιασμός’ (sún-schediasmos) as a distinction within a distinction following G. Spencer Brown’s calculus of distinctions and the ‘Law of Cancellation’ (or else ‘Law of Crossing’). Given the initial “mark” representing a distinction (i.e. inside vs outside), the law of cancellation suggests that by crossing with an additional distinction the ‘marked’ inside we transit to the ‘unmarked’ outside, hence the disappearance to void indicated by nothing at all. In this sense, ‘sún-schediasmos’ can be understood as a crossing from the domain (i.e. concrete ‘image’) of composition to the domain (i.e. concrete ‘image’) of improvisation (or vice versa) that are marked with a distinction and ‘seem’ opposite to each other (i.e. inside vs outside): A crossing that leads to nothingness. G Spencer Brown, \textit{Laws of Form} (New York: The Julian Press, 1969)

\textsuperscript{53} Echoing Karen Bard, “relata do not pre-exist relations [...] rather [...] emerge through specific intra-actions” with the notion of intra-action suggesting that “agency […] does not precede, but rather emerges through [...] mutual entanglement” Karen Barad, \textit{Meeting the Universe Halfway}, (Durham & London: Duke University Press, 2007), p.33

\textsuperscript{54} “The abstract machine functions as a kind of local condition of possibility—a set of relations in which elements appear to be meaningfully related.” Thomas Nail, “What is an Assemblage?”, \textit{SubStance}, Volume 46, No. 1 (2017), p.25

\textsuperscript{55} “The multiple as such, unshewn and little unified, is not an epistemological monster, but on the contrary the ordinary lot of situations [...] our common object.” Michel Serres, \textit{Genesis}, trans. Genevieve James and James Nielson (University of Michigan Press, 1995), p.5
It is particularly interesting for me to see the ways in which my solo violin improvisations have been transformed during the past 15 years or so into, what Derek Bailey calls, ‘non-idiomatic’ free improvisation. This transformation was the result of a process that involved a wrangling with the sound-historicity of the instrument, practicing and listening, as well as an interaction with different communities of musicians that influenced and reflected back into this process. For the sake of argument, I can perhaps describe my improvisational practice as a performance-generated ‘melodic’ line on the violin, involving an open-ended materiality, ranging from pitched sounds to unconventional playing, guided by the gestures and by musical actions and reactions taken in real-time. What fascinates me with free improvisation is that the ‘recursive correspondences’ between myself and my violin take an additional flavour; a flavour that perhaps relates to what Derek Bailey theorised as ‘instrumental impulse’. That is, a certain attitude to the tactile element and the physical experience of playing with the instrument, tracing its resistances, listening and opening up to alterity while following the instrument’s will.56

Playback ‘lines’ solo violin improv excerpt: approx. 1min: [2m08s–3m17s]
https://soundcloud.com/dimitris_papageorgiou/lines

At the first stages of my research, I was exploring ways in which I could diagrammatise and align the τρόπος (trópos)—as in way, mode, manner—of my improvisational practice with a sing-system so as to generate notational environments for exploration and experimentation. Soon enough, I realised that in order to do so I had—and I am following Gregory Bateson’s words here—to quote “draw a delimiting line across the pathway of communication” unquote between my body and my violin, and to construct an interface.57 Echoing Iannis Xenakis, I had to discover the outside-time architecture of the open-ended character of my improvised sounding-gestures; to transduce these into the symbolic level; and, to communicate their temporal organisation and in-time trópos.58 Given that the character of my practice involves a quasi-melodic unfolding that traces the ‘instrumental impulse’, I also felt I had to re-examine the outside-time architecture of a modal system. Middle Eastern makam music appeared like the ideal field for investigation not only for reasons of familiarity and closeness, but also because its theory is documented, and its praxis is still alive today. The methodology I followed, while also drawing on the

56 “It is the attitude of the player to this tactile element, to the physical experience of playing an instrument, to the ‘instrumental impulse’ which establishes much of the way [s]he plays. One of the basic characteristics of his improvising, detectable in everything [s]he plays, will be how he harnesses the instrumental impulse. Or how he reacts against it. And this makes the stimulus and the recipient of this impulse, the instrument, the most important of his musical resources.” Derek Bailey, Improvisation: Its Nature and Practice in Music (London: British Library National Sound Archive, 1992), p.97
57 (1) “It is not communicationally meaningful to ask whether the blind man’s stick or the scientist’s microscope are "parts" of the man who uses them. Both stick and microscope are important pathways of communication and, as such, are parts of the network in which we are interested; but no boundary line—e.g., halfway up the stick— can be relevant in a description of the topology of this net.”; (2) “If you ask anybody about the localization and boundaries of the self, these confusions are immediately displayed. Or consider a blind man with a stick. Where does the blind man’s self begin? At the tip of the stick? At the handle of the stick? Or at some point halfway up the stick? These questions are nonsense, because the stick is a pathway along which differences are transmitted under transformation, so that to draw a delimiting line across this pathway is to cut off a part of the systemic circuit which determines the blind man’s locomotion.” Gregory Bateson, Steps to an Ecology of Mind (San Francisco: Chandler Pub, 1972), (1) p.256; (2) p.324
58 Iannis Xenakis, Formalized Music: Thought and Mathematics in Composition. (New York: Pendragon, 1992)
notational work of Klaus Hübler, Helmut Lachenmann, John Cage, and Aaron Cassidy,\(^{59}\) involved the de-accumulating of gestural mechanisms, the de-coupling of various activities of sound production, and the creation of dissociated gestural structures comprising events of variable temporal durations.\(^{60}\)

**Slide 5: notational scheme**

The notational scheme involves a tablature stave-structure that dissociates the right from the left hand. Gestural shapes are notated on the tablatures using graphic notation, involving either specific areas (i.e. points); articulation events and actions denoting a family of permutations; or transitions (i.e. lines) between areas of the respective canvases given by the clefs. The metrical structure of these shapes is given either as fixed temporal structures comprising events of variable temporal durations.

**Slide 6: symbolic-configuration | snapshot in-time**

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The scheme I just showed you provides a space for notating evolutionary constraints for each, independent and dissociated sound-production activity, structurally coupled and re-assembled as “packages of lines” into ‘symbolic-configurations’. In this way, each ‘symbolic-configuration’ functions both as a ‘tomography’ of a “virtual” space of possibilities, and as a ‘backdrop’ and a “diagram” that interfaces the instrument with the body of the performer. On the left here you can see an example of such a configuration, and on the right its snapshot in-time if you like: a possible way its virtual dimension can be actualised.

Slide 7: sound-configurations | temporal structure

The in-time manifestation of a ‘symbolic-configuration’ into a ‘sound-configuration’, lies in the interplay between three main levels of temporal structure: (1) The min/max time-frames of individual changes, transitions, and sequencing of events/actions that comprise each ‘packaged’ gestural shape; (2) The temporal geometry of the aggregated gestures that yield a sound-configuration; (3) The open duration and the dynamics of the emergent ‘sounding-figure’ as this is inscribed onto the “blank blackboard of time” (to echo Xenakis).

And perhaps it is the very physical process of coupling through interference that may allow us to see these ‘symbolic-configurations’ as “diagrams” and as “virtual” spaces of possible outcomes. Or else, as ‘images’ which although ‘look’ as if they are bound by spatial and temporal statistical constraints, they are agnostic to their contingency, and thus, they actualise as ‘sounding-figures’ from the inside: through the physical experience of playing with the instrument, tracing the ‘instrumental impulse’ and through attentive listening.

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61 “a multiplicity [can] be understood as a package of lines [...] a line of differentiation (molecular particles); a line of organisation (molar units), and a line of escape (the interstices between content and expression).” Paulo De Assis, Logic of Experimentation (Ghent, Leuven University Press, 2018), p. 81

62 “[the symbol] is the general name or description which signifies its object by means of an association of ideas or habitual connection between the name and the character signified.” Charles Sanders Peirce, Collected papers of Charles Sanders, ed. by Charles Hartshorne, Paul Weiss, and Arthur Burks (Belknap Press, 1994), Peirce: CP 1.369

63 Deleuze’s virtual is “a diagrammatic reservoir of effectively potential actualisations [...] that exist in a topological space of possibilities [but] not a priori to the intensive processes that generate it.” Paulo De Assis, Logic of Experimentation (Ghent, Leuven University Press, 2018), p. 54

64 “…the ‘diagram’, which in Peirce is ‘a special case of the icon’, is given a more specific function in A Thousand Plateaus [...] Diagrams, according to Deleuze and Guattari, produce relations rather than represent them.” Edward Campbell, Music After Deleuze (London & New York: Bloomsbury Publishing, 2013), p.134

65 “Form is a composite of force relations; rigorously speaking, there are only forces, and forms are a becoming of forces [...] The Figure [in Francis Bacon] is a form that becomes an event [...] rendering forces that were imperceptible beforehand perceptible.” Anne Sauvagnargues, Deleuze and Art (London: Bloomsbury, 2013), p.45
This explorative process resulted in a library of more than thirty symbolic-configurations, each with its own ‘virtual sonic flavour’, if you like, notated for any instrument of the violin family including the double-bass. Here you can see six of them.

My engagement with Middle Eastern *makam* music has significantly informed the development of these notations. Although there is not enough time to go into much detail, it is worth mentioning that what gives a *makam* modal entity its ‘character’ is the so-called *seyir* of a mode, or else, its melodic development within a *makam* scale. The word *seyir* originates from the Arab verb *sara* which means ‘to move, to set out, to travel’ and as a musical term it can be understood to be a path of melodic phases—or else, an *outside-time* structure of melodic stages—denoting a melody as a particular *makam* mode. Based on this, I started conceptualising my improvisations as maps of possible *in-time* paths between sound-configurations, and I began working on the notational devices you can see here (slide 9), aiming to communicate, types of *modulation* and *transition* between sound-configurations.  

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I like to think of the typologies I just showed you as maps within maps; as descriptors of trajectories in-between sound-configurations, lines of determination between states of a ‘melodic’ un-folding that probes and maps an environment in a process of wayfinding and drawing. It seems to me, then, that these notations are neither descriptive nor prescriptive, but rather inscriptive: bringing attention to the bodies that inscribe, map, and trace melodic un-foldings through improvisation.

Here, you can see the score of the first of a series of improvisation pieces I did exploring this notational approach. The score, which was finished during 2014-15, has the title, circuit structures I, and it is for any instrument of the violin family.

Most crucially, this notational approach has been in-formed through encounters and collaborations with other musicians. It is their comments, suggestions, and reflections that have concretised further the practice. At the top here you can see a picture of a more recent score exploring this notational approach. Its title is, deti, for violectra (e-violin) and electronics. It was commissioned by violinist Mieko Kanno and premiered by her at the Helsinki Music Centre in Finland, as part of the Music Technology Festival 2017 of the Sibelius Academy. In my most recent collaboration with saxophonist Francisco Sánchez Diaz we proceeded first by de-coupling gestural mechanisms pertinent to the specificities of the saxophone, and later by constructing a conceptual, three-dimensional space (which you can see at the bottom of the image here) as a diagrammatic map of all sound-configurations we have developed and an environment for different improvisational paths that can be explored within.

[Part D: approx. 10min]

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68 ‘Inscriptive’ notation: Performers create the music (i.e. the ‘sounding-figure’ as event) not through interpreting a descriptive or prescriptive sign which is ‘out there’, signifying a composer’s language or bias towards measurable or parametrizable-through-notiation fields of contingency, but through improvisation. Crucially, then, the word improvisation here, is not to be understood as “a wide variety of a score’s interpretation [or] re-presentation”—see Bruce Ellis Benson, The Improvisation of Musical Dialogue (New York: Cambridge University Press, 2003)—but as “creativity in performance”: a ‘performance’ that follows the forces and materials, and thus, individuates and in-forms the sounding-figure from the inside. (Eric Clarke, “Creativity in Performance,” in Musical Imaginations: Multidisciplinary Perspective on Creativity, Performance, and Perception (Oxford: Oxford University Press, 2012).
I would like to end this story with a final comment: Machine, from the Greek μήχος (mékhos) and μάγος (mágos), μαχανάς (makhanás) and μηχανή (mekhané); that is, both remedy and trópos (μήχος, mékhos) as well as wizard and sorcerer (μάγος, mágos). And if we are to think of these notational environments as diagrams of abstract machines and “virtual” spaces, then—and echoing Sauvagnargues’ writings—these notations succeed exactly at the point that they break down. A failure which can perhaps be observed in comments such as: ‘Your notation is missing the operators of subtraction and addition that move a composition forward’. | ‘It is not clear what is your musical language’. | ‘You need to tell us who has the ownership here’. | ‘Are you an improviser or a composer? How do you identify yourself?’ And although these question and comments can be very productive indeed, or cause anxiety, or at times be really painful, they also appear, to a certain extent, as enunciations of affect, reflecting the forces of a social-machine that opposes usership: the eco-nomies of knowledge and the magical powers of the τρόποι (trópoi) that come about from using things and from experiencing ‘images’ from the inside.

69 Anne Sauvagnargues, Artmachines; Deleuze, Guattari, Simondon, trans. by Suzanne Verderber with Eugene W. Holland (Edinburgh: Edinburgh University Press, 2016)