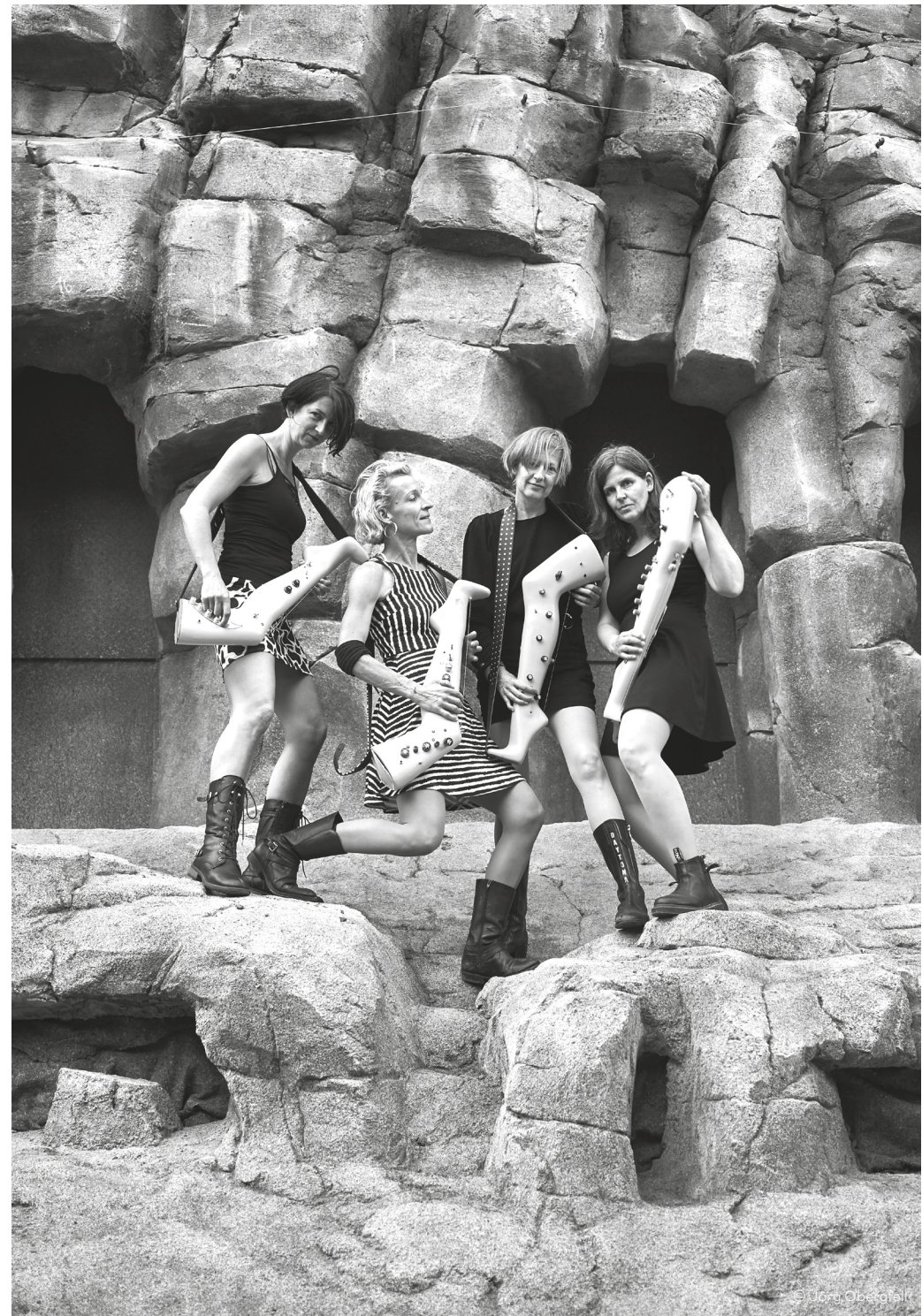


Instruments on Instruments or How to Train Your Third Leg hh

Musical instruments are not just tools, they are material and social constructions at the same time. As we interact with instruments, we create meaning for and through them and in return musical instruments as cultural objects form and transform our understanding of musicianship and music itself.

Organology, the science of musical instruments and their classifications, combines the study of the instrument's history, its technicality on how the sound is produced with the study of instruments as tangible objects, with identities and cultural capital of their own.¹ This shift in organology towards the study of musical instruments as archives (Rancier), commodities (Appadurai), agents (Latour, Gell) or noise (Attali) is a rather recent development in musicology. Susan DaVales's *Organized Instruments* (1990) and Margaret Kartomi's article *On Concepts of Classification of Musical Instruments* (1990) gave way to a new outlook on organology in the midst of the material turn, where the overall discourse around objects changed from the mere materiality, symbolism and subject-object binary towards a discourse on the interconnectedness of humans and things. For DeVale the ultimate purpose of organology should be to explain »society and culture«² as they themselves would contain the »essence of society and culture« and she proposes to approach organology by »thinking through instruments«³. In the following years, influenced by postcolonial and gender studies, organology focused on the study of power relations manifested by and working through musical instruments. In *Sounds of Power* Veronica Doubleday argues »to play or possess an instrument is to yield power«⁴ following the idea that »although

all performances may be regarded as locus of power, performance on musical instruments is often bound up with cultural notions of gender and control«.⁵ Gendered meanings can be applied to any artifact and therefore to any instrument and are constructed through the relationship of the player and her/his instrument.⁶ Doubleday claims if an instrument is played primarily by one gender, it is generally associated with the same (human male – instrument male; human female – instrument female), a cross-gender »heterosexual« relation between instrument and player is always connected to concepts of control and submission, where female musicians taking ownership and control over a male connotated instrument is unusual.⁷ This concept is not exclusive to gender relations as it can be adapted to other parameters of power like class, professionalism and even heredity, which are often intersected with each other, as well as with gendered meanings. These instrument – human relations do not happen by chance, as Doubleday argues. When any group wishes to maintain control over particular musical instruments, an exclusive human-instrument relation is developed.⁸ Therefore agency and gendered meaning of instruments are never static, but constantly changing in regards to their human – instrument relation, their value as a commodity, as well as their role within their musical network – they are constantly negotiated, either challenged or reinforced. Doubleday's theory is based on the idea, that the process of e.g. gendered ascription happens over a certain amount of time, here meaning and agency is not constructed through individual action but through patterns of behaviour and relations. But how can this concept be applied to newly (de-)constructed





instruments? Are individually built instruments free of attached norms, values, identities and even gendered meanings? In experimental music in particular, musical instruments themselves have become another parameter, which can be warped to intentionally obstruct, deform, unveil, encode or detect the social and cultural agency of musical instruments by means of association, quotation or alienation.

120 DEN – Performing the Instrument, Performing Gender

Tina Tonagel, sound artist and initiator of the newly founded improvised electronic music and heavy metal punk band 120 DEN from Cologne, recalls: »About one year ago I found a mannequin leg at a flea market and I knew right away I had to turn it into some sort of electric guitar and it had to be rock'n'roll.«.⁹ Together with her fellow leg-players Gesine Grundmann, Conny Crumbach and Britta Fehrmann, the band aims to, in their own words, provide »down-to-earth feminine performance moves on a large scale and giving Rosa Luxemburg a leg up.«.¹⁰ All dressed up in leather jackets and studs, preferably surrounded by smoke and bottles of beer, their performance crosses from delicate electronic

improvised passages to a death growl metal version of *Freude, schöner Götterfunken*. But from the staging to the musical material everything is focused on and in support of the performance of the instrument itself.

»The main idea was to break out of the men dominated electronic world«¹¹,

Tina said, and the absurdity of the mannequin leg turned into a guitar lent itself to it. Currently, they are all working on the second generation of electrified legs, adding more knobs and new gadgets as they are planning on training their third legs to perform the *Can Can*. The current model, each instrument designed and soldered by its player, is equipped with a self-built and modified arduino synthesizer, a guitar string and a pick-up, as well a contact microphone that picks up the sound when the player wants to caress the mannequin leg. While the overall concept might be hitting it on the nose, the instruments are built with such an attention to detail and the humor works as it unveils how gender codes and notions of

power are inscribed into the instrument and through the instrument onto the body of the performer. During the heyday of hard rock and heavy metal, as it is challenged in their performance, the electric guitar had its peak as the central instrument of staging masculinity and power. Here, technical gear was put on display and the status of the player was measured by the speed of *his* fingers.¹² Steve Waksman describes this time as the »most explicit enactment of the racialized nature of rock's favored mode of phallocentric display, with the electric guitar as a privileged signifier of white male power and potency.«¹³ 120 DEN's main slogan »how to train your third leg«¹⁴ can be connected to the idea of the electric guitar seen as an extension of the male body.¹⁵ This concept of male dominance over music production and representation manifested in the electric guitar in hard rock music still has its impact on musical practice and reception nowadays, while it already seems absurd and obsolete. It is this contrast between watching an absurd enactment of performing staged masculinity through instruments, that seems to belong to a different era, and the underlying feeling that it is still not over yet.

Sources and Further Reading

Kartomi, Margaret: *On Metaphor and Analogy in the Concepts and Classification of Musical Instruments in Aceh*. In: Yearbook for Traditional Music, Vol. 37, 2005, p. 25 – 57.

Rancier, Megan: *The Musical Instrument as National Archive, a Case Study of the Kazakh Qyl-qobyz*. In: *Ethnomusicology Forum* Vol. 58, 3 Fall 2014, p. 379 – 404.

1, 4) Doubleday, Veronica: *Sound of Power, an Overview of Musical Instruments and Gender*. In: *Ethnomusicology Forum*, Vol. 17, Nr 1, June 2008, p. 3 – 39.

2–3) DaVale, Susan: *Organized Organology*. In: *Issues in Organology, Selected Reports in Ethnomusicology*, Vol. 8, 1990, p. 1 – 34.

5) Koskoff, Ellen: *When Women Play: Musical Instruments and Gender Ideology*. In: Qureshi, R. (ed.): *Voices of Women*. University of Alabama Press, 1996, p. 97.

6–8) Doubleday: *Sound of Power*: 2008, p. 6, p. 4–5, p. 14–16, p. 5.



By combining this ›habitus‹ of the electric guitar with the materiality of a mannequin leg, the instrument built by 120 DEN becomes a commentator on its own ever changing human-instrument relationship and its own agency as a instrument of power. The focus lies on the performance not with, but through musical instruments, that themselves function not just as tools designed for the purpose of creating sounds but to communicate and commentate on their inherent meaning as material and social constructions.

9, 11) Tina Tonagel in an interview held by Helene Heuser, 26.05.2020.

10, 14) 120 DEN, artist website. URL: www.120den.de/ [28.06.2020].

12, 15) cf. Bayton: *Women and the Electric Guitar*, 1997; Dawe: *Guitarists and Gear*. In: Dawe, Kevin: *The New Guitarscape in Critical Theory, Cultural Practice and Musical Performance*. Burlington: Ashgate, 2010, p. 79 – 82.

13) Waksman, Steve: *Instruments of Desire – The Electric Guitar and the Shaping of Musical Experience*. Cambridge: Harvard University Press, 1999.

Photos
120 DEN im Tigergehege by Jörg Obergfell / Kölner Zoo – Tigergehege / sculptorscoop.
120 DEN by 120 DEN.
Twelve Legs by 120 DEN.

Tina Tonagel – who is already presented with her project »120 DEN« in this issue's introduction on instruments – is a sound and media artist living in Cologne. Her work ranges from sound installations, visual arts and performances pieces with self-built instruments. She managed to make a name for herself while constantly working in collaboration with different artists and empowering others to be independent sound creators through her workshops.

»I cannot play any instrument really. As a child I used to play the flute, later I learned to play piano and guitar, but nothing serious really. I just never had the training like other musicians, I never focused at least 10 years on one instrument«¹

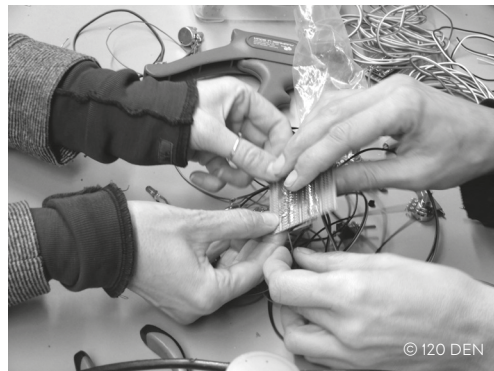
Instead Tina Tonagel builds her own electromechanical instruments, made up of self-constructed and/or everyday objects, equipped with small engines. In her performances, she combines improvisation and electromechanics, creating tangible objects, where the material and visual appeal are just as important as the sound they produce while simultaneously visualizing the production of sound.

Performance Pieces

In her early works she performed with overhead projectors for *Ray Vibration* (since 2007) in collaboration with Christian Faubel and Ralf Schreiber, as well as in her solo work *Himalaya Variationen* (since 2011). Here the instruments/objects are either played or even build on the projectors simultaneously, creating their own visuals. More recently Tina Tonagel has been inventing and building one of a kind instruments: In *120 DEN* (2020), she electrified mannequin legs challenging the ›habitus‹ of the electric guitar and in *Sustainer* (2016) she build tall stringed instruments producing long lasting overtones through electromagnetic vibration. For *Analog Laptop Instrument/Sound Case* (2015) she turned the for the audience mostly hidden process of computer music into analog and mechanical sound creations, that make the generation of sound visible.

Sound Installations

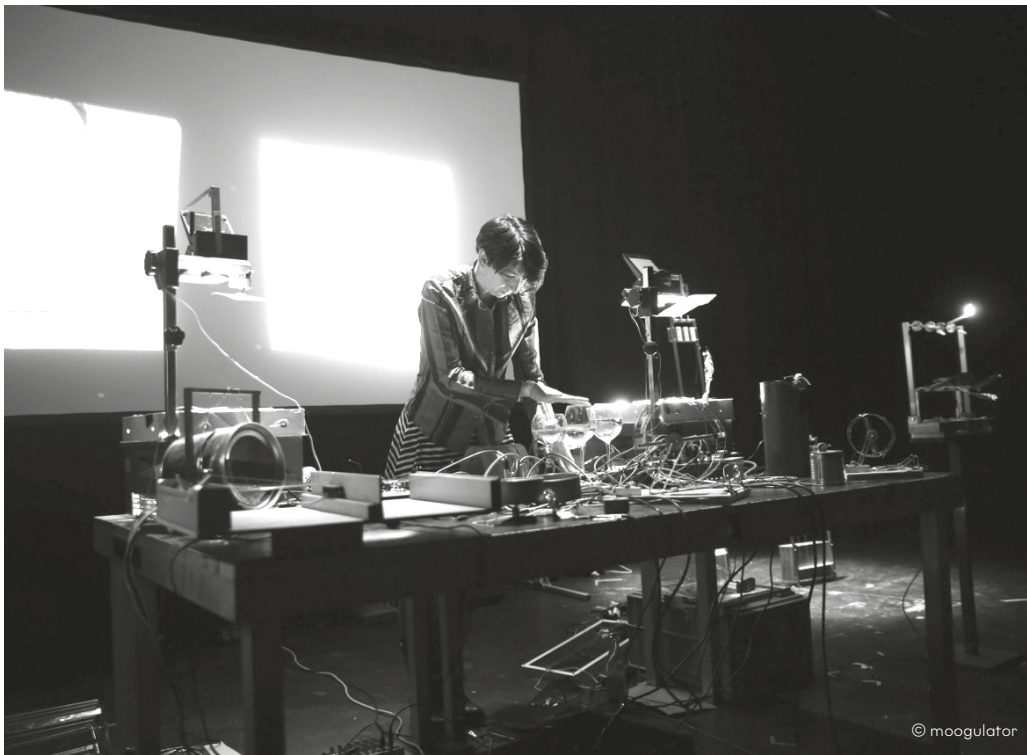
At first glance her performance work stands in contrast to her installation pieces, which come across more abstract and minimalist with a restraint palette and a concentration on the specific materiality and technology used, always based in the white cube,



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either working with the room itself, or using the blank walls to intensify the concentrated feel to her objects. In her most recent installation *Lithophon* (2020)² she arranged 240 slate slabs on a twelve meter wall into a moving 15 minutes sound wall composition, where each individual plate is automatically struck with a small hammer that is attached to an engine.

Workshops

In her workshops, both for children and adults, Tina Tonagel is guiding others to build their own instruments or interactive art objects using small engines and electronics, from roboters to sound installation to hacking toys – always motivated by the empowerment she felt and how it enabled her to build own electromechanical musical instruments.

Sources and Further Reading

Tina Tonagel, artist website.
URL: <http://tinatonagel.de/> [28.06.2020].

- 1) Tina Tonagel in an interview held by Helene Heuser, 26.05.2020.
- 2) Shown at NKR Düsseldorf during May and June 2020. URL: <https://www.nkr-duesseldorf.de/de/1586378505> [28.06.2020].

Photos

Hände an Kabel by 120 DEN.

Tina Tonagel by 120 DEN.

Tina Tonagel at *Shiny Toys Festival* by moogulator.

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