

Curatorial > INTERRUPTIONS

This section proposes a line of programmes devoted to exploring the complex map of sound art from different points of view organised in curatorial series.

With **INTERRUPTIONS** we make the most of the vast musical knowledge of the artists and curators involved in the **Ràdio Web MACBA** project, to create a series of 'breaks' or 'interruptions' in our Curatorial programming. In *à-la-carte-music* format, our regular curators have *carte blanche* to create a purely musical experience with only one guiding parameter: the thread that runs through each session must be original and surprising.

For this episode, **José Manuel Berenguer and Carlos Gómez** select fifteen moments from the 300 Gigabytes of acoustic information gathered in the expeditions carried out for **Sounds in Cause**, a project based on collecting field recordings from environments that are in the midst of irreversible change as a result of economic growth.

Curated by **José Manuel Berenguer and Carlos Gómez**

PDF Contents:

- 01. Summary
- 02. Field recordings diary
- 03. Credits
- 04. Acknowledgments
- 05. Copyright note

José Manuel Berenguer and Carlos Gómez are composers, sound artists and the driving force behind the **Orquestra del Caos** collective and the **Sonoscop** sound archive. **Sounds in Cause** is an **Orquestra del Caos** project, produced with the support of the Spanish Agency for International Development Cooperation (AECID).
www.sonoscop.net
www.sonoscop.net/sonoscop/sonidosencausa
www.sonoscop.net/sonoscop/orquestradelcaos.html

INTERRUPTIONS #8

Sounds in Cause

A selection of field recordings from environments that are currently in the midst of a process of irreversible change.

01. Summary

We have recorded the sound heritage of a series of cultural contexts in Latin America where, for good or ill, the environment is expected to experience irreversible changes in the short and medium term as a result of economic growth. The **Orquestra del Caos** began collecting samples in October 2009. At present, the archive includes 300 Gigabytes of samples of soundscapes from seven Latin American contexts. Specifically, the field recordings were made in the Amazonian Trapezium (Brazil, Colombia, Peru), Northern Pacific, Centre and Caribbean South (Costa Rica), Cerrado (Goiânia, Brasília, Brazil), Quilino-Salinas Grandes (Cordoba, Argentina), El Soberbio-Saltos del Moconá (Selva Misionera, Argentina), Yaracui (Venezuela), Chimalapas (Oaxaca, Mexico) and Rio Baker (Aysen, Chilean Patagonia).

The collection and dissemination of sound data for subsequent use in artistic and research projects fits perfectly within the *raison d'être* of **Caos->Sonoscop**. Through international sound-based artistic interventions, this project aims to raise awareness of these changes, firstly in the vicinity of the sites where the sound samples are recorded, and secondly in all the different cultural centres in which the artists involved in the international call for participation organised by **Orquestra del Caos** work. Furthermore, its essence is to try to introduce scientific methodologies into arts practice on one hand, and to encourage science to look outside of itself and use approaches borrowed from other contexts on the other.

José Manuel Berenguer and Carlos Gómez, December 2011

02. Field recordings diary

October 12, 2009, at 11:28 am. S 04.13.132 – W 069.56.701. Malecón de Leticia, Amazon, Colombia.

Directly in front of our third position, near the shore in a clearing some one hundred metres south of the second, and sixty metres away from the route that presumably leads to Tabatinga facing the Fantasy Island – that despite the famously rough currents of the river, manages to remain anchored on the other side of the shore – boats travel more quickly, which means their engines are much louder. As the banks of the river at this location are high, the sounds are amplified by echoes, providing a veritable auditory spectacle. It's simply awe-inspiring. Beautiful, yet awe-inspiring. To the extent that I can't help asking myself how it's possible that something like this can have such a positive affect on my sense of beauty. The noise of the boats is so loud it will distort the recording! Even though we're at least ten metres away from the one that came closest to us.

When things calm down, the lower notes of the music from the houses behind us on the other side of the path are audible. Of course, if I just move a few metres closer to them I'll also be able to hear the sound of motorbikes, the local population's preferred means of transport and whose engines, like those of the small river boats, are responsible for one of the most common sounds in this area. The whole city sounds like a combustion engine. When it's not the motorbikes and the boats obscuring all the natural sound, alongside the boom-boom of the music, you can hear other electric motors; perhaps fans. There is no such thing as quiet here: just different degrees of acoustic contamination.



[S 04.13.848 – W 069.56.631. Puerto de Tabatinga, Amazon, Brasil]

October 12, 2009, at 5 pm. S 04.13.848 – W 069.56.631. Tabatinga Port, Amazon, Brazil.

This recording takes place on a small hill from which you can appreciate the whole soundscape of the Tabatinga riverside. We've set up the equipment on a kind of balcony and we've just become the objects of that crowd behaviour that anthropologists like to talk about: the local kids who were playing with their kites a little further away have now decided to occupy a space directly below us. They're both curious and showing off. Their kites are rudimentary. But, it's curious that their voices can hardly be heard.

That's the noise of the riverside, a few dozen metres below us. There are fireworks exploding behind us. We can't see them. However, we can see the boats and ferries at the port, although we can only hear the ones accelerating quickly in the distance. The kids disappear, but the music speakers stay in place and continue to bark. I remember what Carlos asked me in the bar a couple of hours ago: What would this place be like without music? A paradise. Not to mention without boats. The birds begin their twilight song, occasionally accompanied by the sound of fireworks. They're not scared by all the noise. Does anyone know what these poor birds are doing here?

Finally a small boat can be heard above the music, but as it moves away, its sound becomes lost in the clamour of the bars on the riverside. In the distance, the noise generated by a fast ferry becomes even louder than the music. But neither of these sounds can compete with the next one and soon they're both engulfed by those euro-country beats mixed with God-know's-what. I can even hear something that sounds like Celtic music from up here. A whistle or a sharp cry can be heard, but sounds keep overcoming others as night begins to fall. A motorbike arrives, and luckily its driver decides to turn off the engine. About a minute later, leaving us with the regular and ponderous beat its four-gear engine, it drives off into the distance. I wonder what it was doing here?

October 17, 2009, at 11 pm. S 04.04.960 – W 069.58.036. Maloca Moruy, Amazon, Colombia.

This must be the day that the animals have decided to make their entrances and exits. Or is it me that who's altering things by the way I'm looking? I decide that it doesn't matter who is doing the altering. The interesting thing is being able to perceive that change. Even more important is that that change occurs, even if no one is there to see it. Now I can hear another aeroplane: a military twin-engine perhaps? With all the stories that I heard today, it's hard to concentrate on the listening.

Cayetano and Elvis spoke for a long time, telling stories about enemies and conflicts. Almost always, the adversaries were wise men, that is, those possessed with a powerful knowledge. Or they were mythical beings, like the Curupira, the headless monster with a single eye in its abdomen, an eater of human flesh. They also spoke of the Sónida, that indigenous dimension that exists between the world of dreams and the ecstasy of those inaccessible forests in the interior of the jungle.

October 20, 2009, at 5:04 pm. S 04.00.134 – W 069.53.701. Biological studies station El Zafire, Amazon, Colombia.

'Zafire' means white sand in the Huitoto language. And it's true that the ground is made of white earth, especially in the Varillar forest. According to our guide Ever, the most common species in the area are, in his own tongue, *eveas nítidas*, *paquiras* and *disimbes*. When he arrives, as exhausted and hot as we are, he tells us that around these parts you can hear the song of a creature four metres long and half a palm wide. It's a terrifying snake that some people say they have seen, and others say that no one has ever seen. It's a fun story, another legend of the jungle. What is heard turns out to be something seen, after imagining it so much. When someone tells you in the jungle that they have seen something, you can't actually be sure they've seen it. Maybe they've just heard it.

It stopped raining a while ago, but the water is still falling from the trees. The usual insects are there, making a lot more noise than before, because of the hour.



[N 10.24.895 – W 084.07.143. La Tirimbina . nature reserve, Costa Rica]

Their noise is omnipresent, in all of the recordings. I wonder what acoustic result we'd get if all the bacteria, or even all the microorganisms that surround us, generated vibrations of audible mass? Birds don't sound very dense.

When we've been quiet for a while, some new protagonists make an entrance, with their own periodicities, which occupy slightly different bandwidths. Nearby, we can hear a grasshopper whose usual sound is definitely rhythmical, but which now sounds distinctly random for some reason. The sound of randomness usually occurs in conditions of perceptive dissonance. If time slows, you can no longer tell if the pattern is rhythmical and predictable or random and unpredictable, but that doesn't mean that temporal distances aren't almost identical. While I'm considering this phenomenon, the crickets begin their circular emissions. Suddenly they are quiet again, right at the moment when a branch heavy with rainwater, almost falls on top of me. After a while a deep sound can be heard coming from Zafire. Was it a clap of thunder? If hope so, because if it wasn't, it must have been an earthquake or a flying saucer.

April 6, 2010, at 6:33 pm. N 09.59.570 – W 083.01.820. Car park outside the main church in Limón, Caribbean coast, Costa Rica.

I think this is the first time I've seen a church with a car park. It's built in a futuristic style and looks like a flying saucer adorned with a white, luminous cross. I'd say it looks like it was built in the fifties or sixties, due to its resemblance to a Le Corbusier. It has a bell tower without bells and is right in the centre of the Limón. On the right, through the gate, there's a fast-food restaurant. In front, on the other side of the street, a street stall selling fruit and a bit further left, some shops. There's quite a lot of movement in the streets. The church's doors are wide open and a range of pious melodies can be heard from inside. A few moments ago it was a Spanish version of 'When the Saints Go Marching In'. And, as usual, everything is amplified. It's not worth going inside: it's more fun listening to the plaintive melodies mixed with the bass of the techno coming from the cars driving by.

It's Tuesday afternoon. This must be a religious place if there's a mass now. Otto told me this afternoon that the church has more power here than in Spain. Whatever. I doubt the priests here are bigger liars and demagogues than the ones in Spain. From my point of view, the only difference between them is a question of taste. The most obvious public manifestation of the church today could be summarised with one slogan: 'Secular power through spiritual power'. The church's representatives should concentrate their public interventions in a purely spiritual terrain, without getting involved in non-religious affairs.

There's a TV inside the fruit stall. It's showing sports, of course. Sports and religious music. A good combination, like gospel and techno. You don't hear much Caribbean music around here. The inquisitorial tones of the preacher can be heard through the open door, distracting me from my thoughts. Then some music at last: gospel mixed with a classically salsa electronic arrangement.

April 9, 2010, at 5:43 pm. N 10.24.895 – W 084.07.143. Fifty metres above the ground. La Tirimbina nature reserve, Costa Rica.

We couldn't resist the temptation of recording what looks like a nest of insects inhabiting a tree. We're standing a quarter of a way along a bridge, listening to a very interesting noise coming from the giant tree. You can't see the ground from up here. I bet we're more than fifty metres up in the air. It must be a colony of insects. Every now and then, the emission changes its basic frequency. Amazing. If they come out of the tree they'll eat us alive, because we're right in front of them. One of the most striking things about this noise is the way it keeps suddenly changing frequency. As this is probably a colony, this behaviour could only happen through synchronicity. Or is it that all the individuals in the colony are sensitive to the oscillations of some atmospheric variable, like the temperature or the concentration of some kind of substance?

This is the beginning of the most beautiful time in the jungle. During the day, things like this don't happen. This could be the most amazing sound I've ever heard in the jungle. It's a noise like a machine, an impression which situates machines and insects at contiguous levels of complexity. Thinking of it like this takes both of them closer and intuitively justifies the extension of the concept of



[S27.08.281 – W 054.05.037. Selva Misionera, Argentina]

the machine into a domain that many people are reluctant to accept as forming part of their inherent nature. What's more, it suggests a hierarchy of complexity for machines in which absolutely any element of this universe would be able to fit.

The sonic activity of the colony stops suddenly, allowing us to hear the other sounds sources that were hidden, thanks to the strength and proximity of the colony. In the distance, leaves are falling. Even further away we can hear the terrifying cry of a monkey, which possesses a mighty voice that must have saved its life on more than one occasion. I lean over the rail of the bridge, but still can't make out the ground. This is the real jungle. Night is falling and the concert is only just beginning.

April 12, 2010, at 5:53 pm. N 10.50.191 – W 085.36.960. Santa Rosa National Park, passing by the Hacienda Santa Rosa. Pacific Coast, Costa Rica.

We were intending to record in a more humid zone to finish off the day's work, but as we drove off the asphalt road the engine sounded strange to me. We can hear a strange sound with a variable intensity. At first we thought it was frogs, but then decide they must be insects singing in the trees, perhaps cicadas. When one close by stops chirping, you begin to hear its friends far way chirping in the same frequency. But these aren't the only animal noises with a variable dynamic. There are other insects around as well. The thing is that the dynamic margins are so big that sometimes I'm worried that they'll saturate the recording. It's spectacular.

The main source of sound is clearly that of the insects. They start with a slow periodicity, a perceptible rhythm. As they get quicker, this sensation is substituted by a higher frequency. The different phases between the emitters placed here and there, literally, everywhere, generate a notable acoustic sensation of space. Despite the high density of the vegetation, the dry forest demonstrates all of its spatial depth.

A large bird drops a fruit about two metres away. He takes off heavily into the air and silently perches on a nearby tree. He looks like a grouse. We can hear some unseen insects making an unusual noise, but then that slowly fades away to leave us with the sound of the common crickets.

April 16, 2010, at 4:04 pm. N 10.18.156 – W 084.47.447. Monte Verde, Costa Rica.

We've moved closer to a songbird that makes a fascinating crystalline sound. Its song is extremely metallic, like a ring modulator. While I'm concentrating on this, a new sound emerges in the acoustic field: I'm not sure if it comes from another source or if it's one of those toads that sounds like a siren. Suddenly, all the animals start making noise in the distance. It's as if they have seen us. In fact, I'm sure they've seen us. Usually, it takes a long time to re-establish the sonic levels when we stop to record somewhere. Then the noise changes suddenly: is it our objective getting closer? It's still unclear. It's difficult to talk about perspectives when the main source is as subtle as a colony of insects. It's definitely the hour when the birds take over, but they are curiously quiet right now. The sound of the toads is also intermittent.

It's a beautiful place. An old *ceiba* presides over the scene, inhabited by lots of other plants. Probably hundreds. Every now and then I can hear something that sounds like a piece of wooden furniture scraping along a floor, also made of wood. It's a sound that seems familiar to me. The quantity of sources is amazing this afternoon, but our objective, the crystalline songbird is further away at the back of the valley, leaving us alone with the rhythmic cantus firmus of another persistent bird. Intermittent noises are the most frequent thing right now. Noises, like the wind, which just like yesterday, agitates only the tops of the trees. The only constant sound is the toad from earlier. You begin to notice him when the others let you. Then the bird approaches and the others shut up. Is from fear or respect?

It's neither, because they're suddenly making noise again, ignoring the bird's presence. The wooden squeal comes back and a second later, a storm growls in the distance and the wind comes back yet again. Thus the electronic colour at the beginning of the recording returns: a songbird that I'd reproduce with a



[S 15.47.941 – W 047.52.003. Brasil's National Congress in Brasília, Brasil]

frequency modulation above the cut-off frequency of a resonant filter. The storm continues. A slight movement of the trees, a breeze and a distant storm that, if it manifested itself at a more constant rate, would sound like an aeroplane. But no: it's a simple storm and a night insect that makes a noise that the modular resonant filter can occasionally pick up.

22 June, 2010, at 2:43 pm. S 16.39.813 – W 049.20.617. 902 metres altitude. Microphone pointing northeast. Morro do Mendanha, Goiânia, Goiás, Brazil.

These hills are actually mountains. Today we're visiting the ones that provide a panoramic view of the city. A motorbike descends a dirt road full of holes passing by the Tenda dos Milagros. The driver honks his high-pitched horn without reply. The only other sound comes from the ventilators at the installations next to a communications antenna. On this hill, the biggest geographical accident in Goiânia, there are a few antennae, and they're all tall. They belong to the TV stations.

On the hill are *barbatimões* and other types of trees. The landscape looks very dry, but can't be as there's so much vegetation. The antennae and the divine join together on this hill. There are churches with bells, with benches covered in a canvas sheet and other buildings probably related to the business of religion. I wonder if a miracle occurred here? What was it? The fact that so much greenery inhabits this dry land is doubtless a miracle in itself. Divinity and communications: an interesting subject, not only for schizophrenics and paranoids. This place, like the other hill, must be sacred. It's full of pious posters. "Senhor Jesus, a vossa presença nos alegra", says one at the front of a tent. But they don't all say the same things. 'L-i-x-o', says another on a tree to which a hammock is tied. 'Lixo' means rubbish. God and rubbish are also interesting subjects for some people.

22 June, 2010, at 6:22 pm. S 16.36.267 – W 049.15.708. 788 metres altitude. Microphone facing north. Universidad de Goiânia forest, Goiás, Brazil.

There are monkeys in this forest, but they aren't making much noise right now. The loudest noise is very distinct. It must be a bird. The melodic range of its song is impressive. It was close by us for a while. Its song uses ascendant and descendent scales. Now it's gone a bit further away, towards an avenue that borders the forest. You can see movements in the thickness of the forest, perhaps it's the monkeys we noticed earlier when we came in, and the constant sound of the crickets, consisting clearly of two frequencies: one high, the other, mid-bass. The city can be heard in the distance and a disco car drives around spilling high notes around the campus.

Amidst all this macroscopic nature, the insects make a sound closest to our machines; that's why they're easier to predict than the other animals. This contrasts with the monkeys who never stop moving: their comings and goings are the most unpredictable aspect of this environment. Their squeals can be heard at any moment of the night, staying around for an indefinite period and then coming back, or not coming back at all. If we analysed the sounds of their gestures as a language, in which Chomsky hierarchy should we place them?

25 June 2010, at 5:58 pm. S 15.47.941 – W 047.52.003. Microphone facing east. 1,067 metres altitude. Between the National Congress and the protesting Indians, Brasília, Brazil.

It's chilly up on the esplanade in front of the National Congress. A police car is parked at a small transversal avenue free of traffic. We're lucky: a procession of motorbikes and official cars is passing in front of us, from east to west, as if they had just come out of the Congress. They don't make much noise. The spaces are so big, that the pressure is low despite the heavy traffic. Apart from the traffic and the passers by, there's nothing else.

The building is monumental! It reminds me of Bourges cathedral: enormous and situated on top of a hill surrounded by little houses. In the Middle Ages, this difference in size was a sign of divine power. In Brasília it's a symbol of state power. Power changes hands, but still needs symbols to manifest itself. Perhaps the use of symbols is the only way to do it without exercising it directly. Also, if it is exercised directly, it could reveal itself as inefficient according to the ends that



[S 30.11.810 – 0 064.36.234. Plaza de Villa Quilino, Córdoba, Argentina]

it seeks. The level of noise can also be a sign of power. But also the magnificence of the space. Power is transmitted through the eyes and, of course, even though it's not obvious to everyone, through the ears.

The ministers, moving in formation at each side of the esplanade, contrast with the tents that have been planted on the adjacent lawns as a protest. Black, dark, lightless, they belong to a group of protesting Indians uprising against the robbery of their lands. A familiar issue that always seems to come back. For millennia.

24 July 2010, at 7.49 am. S 30.19.086 – W 64.55.500. Microphone facing southeast. 252 metres altitude. South of the Campo Comunitario, Quilino, Córdoba, Argentina.

Early in the morning, before anything else stirs, the *rondanita* starts singing. The people around here call it that because it sounds like a ball bearing when one of its balls gets stuck.

The sound of the cock crowing, which has accompanied us since three in the morning, is still audible but it's now a long way off. It is suddenly replaced by the noise of a wild species. The *rondanita*, which was the only thing here when we arrived, has also gone quiet. But there are other animals making noises. From the rhythm, it sounds like one of them is a turtledove. It's a bit more hoarse than the sound I remember of this bird, which I first heard it in the middle of France. The sound of the turtledoves appears all around us and then falls quiet when the more emphatic and agile cries of others take over. It's as if they were trying to emulate the cantus firmus of the rest of them, a kind of sonic texture upon which the others settle.

But that texture doesn't exist in isolation. Like space, that takes a form and curves with matter, the sonic texture is generated by the existence of the sound itself. Sound doesn't exist unless someone or something makes it, rhythmically or not. That's something which musicians should comprehend. If the turtledoves weren't here, the textures would consist of sudden and isolated flutterings, of distant quacks, gurgles and bubbling warbles; none of them too present. The sonic space expands and contracts in the mind of the person listening. Therefore, the warble that sounds in the north can be experienced like an expansion followed by the contraction of a descending whistle, almost a tweet, timid and in a higher syntax, but repeated with insistence towards the southwest.

26 July 2010, at 10.50 am. S 30.12.547 – W 64.28.110. 435 metres altitude. Microphone facing west. Plaza de Villa Quilino, Córdoba, Argentina.

'You are just like us: you're searching for your freedom.' That's what Horacio Britos said to us as we said farewell. He's right. We are alike.

We park the car next to a centenarian *aguaribay* covered with small pink balls of pepper, and set up our equipment in the middle of the square. It's especially notable that there are birds still singing so late in the morning.

Protected by some brick walls, stand three coniferous trees with long leaves. Julio Catalano tells me they're called *pinos elliotis*. The trunk is identical to the ones in the Mediterranean. The parrots who have built their enormous nests begin to squawk at each other. They are giving us a magnificent concert. Their song is more than a simple squawk. It's extremely complex, in line with their cognitive capacities, their song moves from a squawk to an articulated sentence. The most common thing on this recording is the conversations between various individuals, consisting of sounds of a varying duration, dynamic structure and changing frequency, with the consequent rhythmical highlights, which are particularly rich. Even the repetitions of tone, identifiable as the only formal element, are different among themselves. You could spend hours listening to them without picking up the repetitions. In reality, there are never any exact recurrences. There is no periodicity in the communal song of the parrots and that points to its obvious condition as a chaotic phenomenon. The fact that they live in a community influences the complexity of the object you are listening to. Really, there's no point in trying to analyse the song of a single parrot if it isn't in relation to the others.



[S 27.13.270 – W 054.05.037. Selva Misionera, Argentina]

30 July 2010, at 6.34 pm. S 27.05.305 – W 53.58.822. 513 metres altitude. Microphone pointing south. Mesa Redonda, Misiones, Cordoba, Argentina.

In Mesa Redonda there are no houses. It's only a crossroads with a name, although it appears as a village on maps. The sun set half an hour ago, so the loudest noise is coming from the grasshoppers. It's a rhythmic timbre structure upon which our perception, so fond of establishing dichotomies between form and content, identifies as a high-pitched whistle. What is perception, if not the ability to identify a sign above the rest? But it isn't only the whistling bird. Among the signs that my perception decides to identify as a form without the contradictory intervention of my consciousness, is a very interesting croak that has just been picked up near the microphone. Also, some sounds that could be cracking wood can be appreciated. Because they are not regular, I'm almost sure it's the sound of an animal among the branches. All this is form, of course, but if I ignore it and concentrate on what I decide is the content, the crickets, I can also see that they are form as well. And inside, more forms. I have the paranoid impression that I could shred all the sounds to infinity and continue to listen to only the forms. Of course not. Human experience has its limits.

The stars have come out and, who knows, it might rain tomorrow.

24 July, 2010, at 8.39 am. S 30.19.033 – W 64.56.809. 251. Microphone facing southwest Metres altitude. Campo Comunitario, Quilino, Cordoba, Argentina.

North west of Ischilín, next to Salinas Grandes, the coldest hour in is between 8 and 9 in the morning. As the level of sound is so low, we've turned the microphone up to maximum. Everything is audible, even the smallest rubbing of clothes. Also, our coughs, which we're unable to control. That's why we have to move away from the microphone.

There's a lot happening at this time, but everything is quiet: clicks, snores, chirps, tweets, moos and squawks. We can even pick up the sound of something falling in a distant house.

As the sun comes out, begins to rise and starts to heat up, it seems like the sound levels are intensifying. The turtledoves are a long way off now. They are easy to miss when surrounded by wings flapping from different sources or something that sounds like a snore. It must be a mammal chewing on something. It's a deep and hard sound, difficult to locate. It contrasts with a high tweeting, well defined and coming from the branch of a *mistol*, that sounds like the rhythm of a Basque *zortzico* in counterpoint with a pattering that can be heard from the trunk of a white *quebracho* tree from which a group of parrots had recently emerged. The sun starts to warm my face. I hope it begins to warm the hand I'm writing with soon as well. The bird that sounds like a *zortzico* is very distinctive. But now it's gone quiet and in the distance you can only hear the turtledoves, who never stop making their presence felt. There's so much life here.

03. Credits

Sounds in Cause is an Orquestra del Caos project, produced with the support of the Spanish Agency for International Development Cooperation (AECID). Concept and field recordings selection by José Manuel Berenguer and Carlos Gómez. Images by Orquestra del Caos.

04. Acknowledgments

Thanks to all the participants.

05. Copyright note

2012. This podcast is published under a Creative Commons license Attribution-NonCommercial-NoDerivs 3.0 Unported (CC BY-NC-ND 3.0).