



2008

Community Media
Network

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[PRODUCING FOR COMMUNITY TELEVISION]

Community Media Network (CMN) collaborated over a two year period with Community Response Drama Group (CRDG) to support video production of CR's legislative participatory drama. This report concerns one particular action undertaken to produce a recording of CRDG's performance "Men At Work" with a good quality sound track for broadcast on DCTV. The kind of problems that we encountered while recording in a community venue with few resources are evident on the DVD, Disc A, that accompanies this pack. Disc B shows how the use of a sound studio provided some solutions in the post production stage. This written report also includes general guidelines on recording audio for video production compiled by the sound editor. We know in doing this that we are only approaching the issues raised by the need to meet broadcast standards with amateur resources, but we hope it will help open the door to address them. The intention is to help community producers deal with more complex issues around recording in community venues. As with all CMN resources this is a dialogue with community media producers, so responses, contributions, and criticisms are all gratefully received.

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Information on this Package

Title: Producing for Community Television:- Research Production supported by Community Media Network

Purpose of this pack: This pack is not for sale or distribution, it is an in-house production and the final recording has been produced for community television. The package is designed as documentation and is intended for training and development purposes only.

About this work: Community Media Network (CMN) collaborated over a two year period with Community Response Drama Group (CRDG) to support video production of CRDG's legislative participatory drama. In 2007-2008 we undertook an action in order to produce a recording of CR's performance "Men At Work" with a good quality sound track. This report is a close look at some of the issues that exist for community organisations wanting to make productions for community television from within the context of their own activities.

What this pack contains: DVDs

This pack contains 2 DVDs of the same event. The production on each DVD is exactly the same except that the audio track on DISC B has been put through a sound studio using a number of methods to improve voice quality, reduce noise, etc. Comparing the DVD's shows how sound studio facilities can support this type of community production.

Report:

The pack includes this written report on the issues and problems encountered in the production process. The report also includes general guidelines on recording audio for video production, compiled by the sound editor. While the use of a sound studio can address many issues, it is not always a viable option due to resource demands such as skilled labour, time, and cost of facilities.

We hope this example will help community producers deal with more complex issues around recording in community venues. As with all CMN resources this is a dialogue with community media producers, so responses, contributions, and criticisms are all gratefully received.

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About "Men At Work" performances, contact: Community Response, 14 Carman's Hall, Dublin 8, Ireland

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Producing for Community Television

Production in a community context - CMN and Community Response

A central concern for CMN is to explore how community organisations can engage in production and currently, how they can use community television. Community organisations need supports as they develop their capacity to use media and the kind of supports needed can only be identified in a process of engagement with organisations. Rather than the far too common experience of media as “the circus comes to town”, CMN wants to establish processes whereby organisations have an experience of production that allows them develop skills in controlling the media they use. CMN’s connection over many years with Community Response has been an effort to develop such a process.

The story of the connection between CMN and CR reaches back to CMN’s beginnings in the early 1990’s, CR has a long-standing involvement in media production as a part of its own activities and has worked with CMN on a range of actions over the years. This ongoing relationship was the basis for the placement of CMN’s technical resources including the CMN Technical Worker at CR’s premises over a two year period. This placement allowed CR to engage in video production that worked in tandem with their drama projects.

In this report we look at the issues that arose during an effort in 2007 - 2008 to prepare a production for Dublin Community Television whilst working within the constraints of a community context. Community television is seen to promise a wonderful resource for communities struggling to deal with their issues, but interlinked with those aspirations and promises is the strain and pressure of working in a resource-poor environment. While there was disappointment and anger at times, there was also a determination to see things through and to test this promise. As well as the issues of contexts and resources, ‘Life’ itself has a habit of getting in the way at just the wrong moment, and what is evident throughout is the part that trust and solidarity play in the face of real difficulties. This report aims to address some of the unfinished business and bring back to those who took part a sense of what they managed to do despite the problems. It is also an invitation for others to contribute their experience and evaluation.

This report exposes the weaknesses in the production support CMN was able to provide, and this directly relates to planning for and realising community television, yet it also shows the enormous possibilities, indicates what resources are necessary, and re-asserts the importance of tapping into those resources and networks that already exist in the community.

Community Response Drama Groups participatory approaches and use of media

The origins of CR are in the grassroots movement against the influx of drugs into Inner City Dublin during the 1970's and 1980's. The organisation is a voluntary agency in the South Inner City which was established in 1990 to work with individuals, families and the local Community to develop their own response to problem drug misuse, HIV and more recently, Hepatitis C.

“Dublin inner city communities are historically close knit and the bonds of family and extended family are extremely important . . . Communities in Inner Dublin now confront the reality of a third generation using heroin . . . The link between social exclusion and heroin use is well-established. The south inner city is one of the worst affected parts of Dublin. Here, more drug users live with their family of origin than in any other European city and therefore families carry the burden of care. . . Community Response has a community development philosophy that addresses the dynamic interaction of heroin, HIV, hepatitis and social exclusion . . .” (Annual Report 1999)

Using a drama and arts based strategy, Community Response works to develop “*culturally acceptable materials*” that serve to distribute important drug and health related information within the community.

“Family members working through creative, participative process developed a wide knowledge of drugs/HIV-related issues. In a group context they found individual ways to dis-engage from the dynamic that is created for themselves when there are heroin/HIV issues in the family. A cyclical process developed, enabling them to engage more in their own and the group’s creative work” (Community Response a case study, published by CAFÉ 1997)

CRs work has produced a range of media, booklets, radios programmes and video work as well as their powerful dramas produced by the Family Drama Group and performed around the country. The ‘legislative drama’ form, developed by Brazilian activist Augusto Boal, brings grassroots voices to the fore and builds solutions based on peoples lived experience. The aim is to expose policy makers to these solutions and to influence policy decisions in ways that will address the real issues facing communities. This process while empowering people to deal with their own situation, also reaches beyond the individual and the local and engages with other public spheres.

This places CR in a group of community organisations that use participative arts strategies to achieve their goals, and makes their use of media primarily a community use of media – as a tool – rather than an end in itself.

The Re-filming of Community Response (CR) “Men At Work” performance.

Why re-film the performance?

CRDG completed a DVD production of “Men At Work” in Winter 2006. The CMN worker who was placed with CR for the previous two years had filmed the various performances of this drama and the final DVD compiled the drama with a range of audience responses, and he also produced a series of video interviews with the members of the drama group. This is a very useful product for CRDG and they are extremely happy with the DVD, it has been used in group settings for discussion purposes and it also serves to showcase their project work and methodology.

However as a production to bring to community television, there were some problems in the recording and particularly with the sound quality. On discussing this further, CRDG and CMN decided to film another performance to see if we could get better quality in the sound track that would be suitable for broadcast. CMN’s technical worker had moved on to a full-time job in January 2007 and by February CMN had recruited a new worker. CMN was particularly hopeful about this since the new worker was already trained in audio recording, and we saw this as the weak spot in community video. His training in Final Cut Pro video editing was completed in March, and CMN intended that the CRDG performance was to provide follow-on experience with more training and mentoring for the CMN worker and for members of CRDG.

The Production:

While in time we did produce the DVD, and with a better sound quality, the problems we encountered echoed all the other problems we had experienced in undertaking production support work over the years. Which raises the question – will we ever be rid of them? I doubt it, so its important to look at what they are and find ways to deal with them.

Personal, structural, and underlying problems:

When we operate in a resource-poor environment a problem for one will have big consequences for the action. It was my responsibility to progress the work and my personal difficulties arising from two deaths in the family over the year proved in reality much more disruptive to the process than anything else. My energy and time was affected in all sorts of ways, including succumbing to a bad bout of flu that left me unable to operate effectively only two weeks before the event.

The other factors were

CMN’s own instability, lack of adequate funding, premises, and personnel. This meant no safety nets when things go wrong. CMN’s funding was on a three monthly basis throughout 2007.

The loss of the original CMN worker who had a deep knowledge of the work and a good connection with the CR members and the Drama Group;

CMN's central involvement with the formation of the new Dublin Community Television (DCTV) absorbed a lot of available time and resources and serious tensions were building throughout the time of this production.

In 2007 DCTV was preparing to launch, the new worker was of course keen to be involved in the community television channel and this took priority over the CR production. The development path of community television at this stage meant that the scenario changed continuously and very often the plans we made were frustrated.

Difficulties in the process:

Some difficulties aren't just difficulties, they are normal in the context of voluntary organisations that work in non-hierarchical ways -

Arranging times that could accommodate everybody.

Timeframes – time is needed to get through processes, e.g. to ensure people are informed, it takes time to have decisions made at various levels of organisations; the final edit is viewed by no less than eight different groupings and not all these can view it together, nor is it necessarily desirable that they view it together.

Levels of skill and experience available do not always match the need

Preparation - team formation, and pre-production:

Agreement:

The plan to undertake the production was reached in February and we wanted to ensure that the production was operated by a team made up from the community media organisations. CMN and Ballymun Communications agreed to collaborate on the production. A date for the performance was discussed with CRDG and since DCTV was planning to launch during this period, we planned the date with this in mind. It was eventually moved from May to June 6th.

Logistics:

The logistics of this production involved bringing a lot of people together for one event – the drama group and the people from CR, the audience who were invited, and the people who formed the video team from CMN and Ballymun Communications. All these had to work together to get everything happening on the one night, for the one performance. As it happened this grouping had to expand further to include even more people.

The team and resources:

The team as planned was made up of the two co-ordinators, and a technical worker from each organisation. The responsibilities were arranged as follows:

1. CMN Co-ordinator: production co-ordination, camera operation.

2. Ballymun Communications Co-ordinator: Responsibilities – production support, and camera operation
3. Ballymun Technical Support Worker: camera assistant
4. CMN Technical Support Worker: sound operation and editing assistant

Post-production was to be directed by the CMN co-ordinator consulting with the CRDG co-ordinator; the editing needed an experienced editor to work with the CMN Technical Support Worker as trainee editor.

The equipment: Equipment came from four sources – CMN, Ballymun Communications,

Cameras: 4 two from Ballymun Communications, one from CMN, and one from an independent producer member of DCTV

Tripods: 3 3 - one from CMN, 2 from Ballymun

Radio Mics: 5 one from CMN, one from the independent producer, three hired.

Cables: variety of sound and video cabling and extensions contributed by all.

Issues for the team:

Community venues are notoriously problematic, but this is where community events happen, and unless the community move to a studio, recording conditions are what exists at the time in the venue and that is what we have to deal with. It was clear that there would be some problems with both the venue and the production that we would have to either put up with or find our way around. It became clear that the CMN Worker wasn't happy about the conditions for recording in the venue. The CRDG co-ordinator, who had a deal of recording experience felt the sound in the venue would be 'hard, but ok' and at the point in time when concerns were voiced, he felt we could not change the venue. There were also considerations about the drama group and where they would be able to feel most comfortable for a performance. Given the technology we proposed it was important to avoid extra pressures on the actors. So the venue was set, despite some apprehensions. As it turned out, the venue was not the worst of our problems.

Production meetings: The original plan for the team to meet, view the original DVD and devise a production plan was derailed by my falling ill two weeks before the event. This meant that a full pre-production meeting wasn't held until the week before the performance. While there had been a preliminary meeting we hadn't gone through all the issues including the recording conditions, the camera operations, and particularly the sound recording. I had thought people were prepared to undertake the production work but I had not realized that team members had worries. Had we met as planned and viewed the DVD of previous performances together at an earlier date, these worries may have surfaced and made things somewhat easier. As a result the eventual meeting of the Team was fraught.

Three of the team met with the CRDG development worker in CR premises one week before the performance. We went across the road to the performance venue, a parish hall, to do an assessment and pre-plan camera positions etc.. The 1950's school hall had hard sound – plaster walls and plastic seating, the lighting posed some problems. Filming at 8-10pm summertime meant daylight would be insufficient, movie lights were inappropriate and the strip lighting would be only just enough. Such community venues are notoriously difficult for recording.

Unhappy team: My people were not happy. The team felt the production had not been given enough advance time and consideration, and the venue was unsuitable - it's fair to say that when we met, people were both grumpy and grouchy which was further exacerbated by the fact that save for two of the team members, none of these people had worked together before on a production. No-one was on familiar territory.

Suddenly I found I had to lead a team of people all of whom were nervous about the event and irritated by feeling ill-prepared. While I had expected that the CMN technical worker would work on the sound recording it became clear that he was unsure, and needed more support to take it on.

I was afraid that things were not going to gel at all, despite the fact that I felt we could get things in place and we needed to do the best we could to get it right on the night, there was serious dissension amongst the team. My CMN worker wanted to postpone the event but it was too late to cancel since the invitations had gone out specifying that the event was designed to create a recording to be broadcast on DCTV, the actors and invited audience had arranged their lives. It was on a roll and could not be stopped.

The CR drama co-ordinator was crucial to maintaining calm in this situation, he projected a certainty that it would all go well, and was clear that everything should go ahead. At this point his influence was really important and he gently pointed out that to call it off now would be worse than any sort of botch on the night.

So we went ahead, devised the approach to the production, the positions of the three cameras and how they would operate. We met the caretaker and checked the lighting controls, doors etc. It would be tight finishing and packing up as they lock up at 10pm, not a lot of time when you have gear and extensive cabling to look after. We made the arrangements to meet some hours before the performance to do the various checks and agreed the equipment checklist.

I realised my expectations of my CMN worker were too great and this was unfair. I thought he had more experience with sound recording than was the case, and it now seemed that he had not been able to communicate his worries to me. I didn't want to be unfair or to risk alienating him altogether. I still had a lot of trust in his interest and abilities though and suggested he meet and work with the sound recordist. It was unfortunate that this could not happen as DCTV needed him and could release him for only two days for this production. He took responsibility for operating a camera which left me free to co-ordinate activity on the night.

[Finding extra technical support:](#)

While we now knew we were going ahead, all of this still left the main issue unsolved – the sound recording. Taking on board that there were technical issues with recording sound for this production I now needed to look for specialist help. This was a blow, our intention was to produce this event with a team drawn from the community media organisations in the network.

With help from the independent producer whom I knew through his connection with DCTV, I had found a sound recordist by Saturday on a bank holiday weekend and only five days before the performance. This was very last minute but she was drawn by the nature of the project, agreed to do the job at a rate we could afford and brought her own equipment, including extra mics and an assistant to do the audience microphone. On the Tuesday we met in the CR premises, watched the DVD together and then went to the venue to do a sound check. Everything seemed now like it might happen.

[Production - the performance](#)

I arrived at CR in the afternoon and began bringing gear to the hall, setting up chairs etc. The rest of the team including the sound recordist arrived between 5 and 5.30pm. The various checks were underway. The drama group arrived between 6 and 6.30pm and the sound recordists began to set up radio mics and do sound checks. The performance began at 8pm.

We had three cameras, an independent producer lent a fourth camera and arrived himself on the night offering to be cameraperson – and he was very welcome, particularly when one camera jammed its tape! It was a lot of technology – there was a sound desk operated by the recordist, five actors were set up with radio mics, and we had four people operating cameras - three of which were on tripods, one was hand-held.

The performance went very well, the actors were well in charge of the performance - we didn't know until we were editing that they had got the sequence wrong in the middle of the performance and corrected it again – right under the audiences noses! The audience was small but ready to engage with the performers, their contributions of questions, issues, and

stories, were every bit as awe-inspiring as the performance itself. They really co-operated with the video team and showed no difficulty with the amount of technology we had to the right, left, front, and the back of them.

Post production:

Plans deferred again:

I had hoped we would begin the editing process straight away and expected we would finish in a few months, allowing for holidays and gaps. But it wasn't to be. The CMN worker was by this stage 100% involved in the technical launch of the community channel and so was totally unavailable for this project. A proposal to set up the CMN's edit facility in DCTV's premises so he could work on the production as well as DCTV matters didn't work out. This was also a disappointment since he had been trained to use the CMN edit suite. So the CMN technical support system and the plans for his involvement even on the level of this one project fell through. Tensions within DCTV itself meant that I was forced to withdraw in terms of my own involvement with the organisation at this time. I did not want to stress my worker unduly, there was pressure from DCTV for CMN to let him entirely at their disposal, and so I acquiesced in his interest. The summer took people away on holiday, and the autumn brought more difficulties on a range of fronts, including a second tragic death in my family in that year. It was a bone of contention that DCTV did not see this work as part of their brief, or indeed CMN's activities to build community capacity for community television as part of, or a contribution to DCTV. In the summer of 2007 the launch preparations took precedence, in the winter and through 2008 Sound and Vision productions took up the time of everyone in DCTV.

Getting the edit done - time and money

We had four cameras recording just under an hour and a half each; that meant almost six hours of footage to view, log, and transcribe to prepare a paper edit. Time. Time. Time. I found whilst logging that the script and the sequence had changed during the performance, added to this one tape had jammed and therefore the time log of the tapes were not synchronised. Over the Christmas period I did extensive transcripts of all eight tapes so that we could track all the material and have a decipherable log. Transcribing took about four hours per tape, I spent a whole week doing nothing but transcribing and preparing the logs.

By the time all this was done I was pretty familiar with the material and had rough work for a paper edit prepared. By the New Year I had negotiated that the Ballymun Communications editor would be released to do the editing. We now also had a budget to pay him which we didn't have the previous summer.

Problems - the sound track again!

The editing process exposed another layer of problems. Last minute technical help is always fraught with problems, and it takes a brave professional to engage with this type of event. While the sound recordist was very interested in the performance, really good-willed, helpful, and brought her own resources to support the production; despite using radio mics for the actors and doing two re-takes after the performance of sequences she felt were problematic; - there were still problems with the audio tracks.

In my view these problems reflected the overall difficulties and demands on our time and resources rather than solely due to problems with the venue or the technical people alone:

a damaged microphone – problem: no equipment checking had been done; without the technical worker there is no-one with the time to check that equipment is working properly, so faulty gear is the likelihood rather than the exception; this can also happen without anyone being aware as these microphones are delicate;

on one camera the levels were peaking badly so the audio track couldn't be used – problem: lack of time for sound checks with cameras and microphones; sharing equipment you are unfamiliar with;

two of the four camera's sound settings were not synchronized and so the audio track could not be used – problem: lack of time spent on synchronizing cameras in advance and lack of experience on the part of camera operators; It would have been useful to have had checklists for all cameras.

there were a number of difficulties with the panning and volume of the mics during the recording: problem – not enough rehearsal time for the recordist.

The facilitator for the audience q&a didn't have a radio mic, and the recordings of his voice were at a very low level : - problem here was no radio mic, not anticipated.

Ballymun Communications' editor has a background in sound engineering, and he tackled this conundrum with a dedication that was admirable, using his own sound studio to 'sweeten' the audio track. With his support, some months later we have a clean sound track on the edit. He is also a perfectionist and sees production as a skilled task that should be approached professionally, so he was critical of the work we had brought to him.

The criticism, recommendations, and the up-side

Criticism - from all sides

"But this is not how it should be done" – the professionals moan; on the other hand the people who made up the crew are hardly talking to me, they are critical - *"where were the pre-production meetings, the rehearsals, the equipment checks?"* Many of the people involved in the drama group had their own difficulties that night and weren't aware of what

was happening on the recording side of things, they may have had their own criticism to add, and likewise members of the audience. And maybe the critics are right, maybe it should not be done like this. But how **do** we do it? Not all the alternatives proffered are suitable – doing it in a studio for example.

The process that evolved was far from what anybody wanted or would like to see happen. The loss of the CMN worker who had worked with the group over a two year period meant that far from people being able to deal with the issues as they knew them and as part of an evolving process and a learning experience, what happened was a totally new experience for everyone in the drama group with new technical people in new circumstances. Despite the strangeness of it all, on the evening of the performance everyone pulled together.

It wasn't so much that it was a very difficult shoot for everyone involved, it was more that it only just about happened. It **has** been a successful action in that there is a final recording; while the recording of the event was a once-off, 'fly in the crew' event, the drama group and the participants had enough experience of performances being recorded to deal with the presence of technology and crew.

What can we recommend?

1. **Focus on process:** Keep working to establish ongoing processes with community organisations that allow their members to experience production and develop a range of skills in relation to the media. This can be from familiarity with the production process to learning technical skills and building production capacity. This worked well over the two year period when CMN's technical worker was with CR, and was the main reason why CMN could organize the re-filming of the performance as a once-off event – the familiarity was already there within the group.
2. **Expect problems and seek strategies to deal with them.** We cannot change the nature of the community activity, but we can look at ways to deal with the difficulties. The capacity to 'sweeten sound' proved to be a crucial facility for this production, and may well be something we should develop for events that are going to happen in awkward places that are not purpose built studios.
3. **Training of community technical support workers:** training for people who are going to operate in community television should take place in those places and conditions where the recordings happen. There are a whole range of different types of programmes that will demand different strategies, the participatory drama production demanded a certain approach, but a community sports day will demand another. Our community media workers need to have experience in all these settings.
4. **Induction of professionals to community media contexts:** there are times when we need professional expertise, we need to know how to bring professionals to an understanding of the contexts we work in, this may require developing an approach to professionals. All community organisations describe a learning curve that professionals have to go through when they engage with communities.

5. **Commit to the project:** to quote a CRDG member “Whatever you do don’t compound the sense of disappointment that people already have” – this is about committing to the project – seeing it through and as well as celebrating the achievements, also facing the mistakes with the people who have been involved..

Up-side:

The up side is that we *did* get a lot of voluntary support right through the action –

an extra camera person who arrived with his camera on the night and provided extremely useful footage;

the sound person worked at an affordable rate and was available at short notice out of her own interest;

the editor worked many extra hours on the sound track;

and even the person in the DVD copy centre who took the work for duplication offered technical support if we were doing work with groups – a promise for the future, but just as much an outcome of the work.

If CMN had the resources we could maintain our equipment, pay our workers enough so they might not leave, provide all the support we want to the formation of community television as well as to building the capacity of community organisations. I would be very happy if we had all this and communities surely deserve it. But this is not our reality, if it were we would have no struggle, and we would have no need of activists to make things happen, just the amateurs who love it. At the end of the day we would still face the problems with sound recording that we had in this production and which demand more technical expertise.

What makes us community media activists is that we will work outside of the media professions codes and within community development ethos, we will also take risks, and bring the camera to where RTE won’t go – and where they may not be wanted.

All the people who participated demonstrated a huge commitment to this work – and the fact that they can’t help but get involved is what makes them community media activists. With this report CMN wants to register the value of their contribution.

The voluntary aspect of this work proved to be as important as the funded resources we had available; it is also true to say that a lot of the work would not be done without the ground we had laid before the event and the kind of supports we had in place.

Indeed many of CMN’s projects would not have been tackled and completed without the voluntary hours of committed people who took special interest in the productions and who expected to encounter and deal with problems.

Professional advice and community reality

The following section titled **“Come on feel the Noize!”** dealing with recording audio for video has been contributed by Dave Bourke, the editor who not only donated the use of his sound studio but also much more of his time than he was paid for. He gets huge thanks from everybody for helping to complete this work.

But Dave says that *“it shouldn’t and needn’t be like this”*, and I say - not for the first time - *“but it always is like this – or something like this”* Will we ever have community production that fits the professional’s expectations? All the way through the editing process, Dave and I saw things differently:

Dave: “that ruffle on the mic is a problem and I don’t know if I can get rid of it!”

Margaret: “But I don’t think anyone is going to hear that, they’ll be too involved in what he’s saying”

Dave: “you’re going to get buses going by in a venue like that! You need a studio”

Margaret: “this is the venue – the community come here – not to a studio. We have to record in these conditions!”

And so it goes on.

But Dave makes low indistinct voices ring clear and work well with the rest of the voices on the video; the sound carries well all through the production, and we certainly don’t miss the jumpy mics and the roaring bus. We need this expertise.

Perception and noise

As humans we are selective, we internally edit, our eyes and ears are discerning, and we can ignore things that distract from what we want to concentrate on. When we are listening to electronically produced sound, it seems that we lose some of that capacity and extraneous noise that we would normally ignore can become intrusive and distracting.

This does not happen so much with pictures, experiments have shown that people do not ‘see’ or notice many things that are on the screen in front of our eyes. The famous example is the gorilla walking across the football pitch, the people watching with their eyes on the ball don’t see the gorilla; in one experiment, I was watching a card trick and didn’t notice all the changes that took place in the background including changes in the colour of the tablecloth on which the trick was played, changes in the hair and clothes of the people doing it, and changes to items in the background. Now there is also the element of direction in these experiments - people were *told* to watch the ball, and *told* about the card trick, but this doesn’t translate into how we discriminate with sounds. Even if I *tell* you to listen to the person who is talking quietly and then there is a lot of rustling paper sound going on at the same time, you may have trouble hearing that soft, low voice. Sound is different.

When noise interferes with what we are listening to, it can be a very distressing experience, because we cannot make sense of what is being communicated to us. Of course it depends on the kind of noise it is, and I will never be as worried about some noises - or absence of noise - as Dave will. But I also know that on television, while you can get away with a bad picture, you can't get away with bad sound.

Good sound quality is crucial to community television, and for that reason alone most of us will want to listen to Dave's words. But it will also be a struggle because we will always need to make television in very imperfect, problematic, community contexts.

[Standards, professionals, amateurs and activists](#)

A core problem in developing community television is the gap between necessary broadcast standards and the reality of community production. We must bridge this gap if we want to broadcast. Alongside that is the relationship between the amateurs and activists (who move things forward and expect to meet problems) and professionals (who want to help but want to avoid problems).

The words 'amateur' and 'activist' are important here— 'amateur' literally means someone does a thing 'for the love of it' rather than as a profession – anyone familiar with the GAA knows the issue, it is also a word that echoes throughout the history of media and the story of all human effort; 'activists' meaning people who act to make things happen, again for no professional status, employment or monetary reward, also seem to crop up all the time in society. (Can't seem to get rid of them, is there something that causes this?)

Nothing can replace these words or the people they describe. It is activists and amateurs who make community projects and develop community media, but is there a line between the amateurs & activists, and the professionals? What happens when someone crosses that line? What do they bring with them? What happens with that? This is also part of what we explore in our involvement with community media.

Dave's professional expertise, time and words are given generously and they will help us develop better quality production. But many people who want to pay heed to his words because they want good quality sound will have to adapt them, some will want help to understand them, and we know that in many circumstances the advice will be inapplicable. Dave will probably always wonder why we don't do it right, and I'll always wonder why he wonders.

The value of this dialogue with Dave is that we will, in the course of exploring the issue, discover or devise more strategies that will improve the quality of our productions so that the voice we want to project is heard.

“Come On Feel The Noize!”

Recording Audio for Video

Written for CMN

by

Dave Bourke

“Come On Feel The Noize!”

Recording Audio for Video

Noise is virtually everywhere. No matter where you go on the planet, you will find noise of some description. Whether natural or man-made, unwanted noise is the enemy of every TV and radio programme maker, especially when working on location.

It is an enemy that can rarely be vanquished entirely. However, with careful planning and preparation, its destructive effects on the quality of the finished product can be reduced. This short document suggests strategies that may help achieve this goal.

Note: although noise can, to a limited extent, be reduced by audio post-processing techniques, these can introduce their own unwanted artefacts and even damage the audio.

The single best way to deal with unwanted noise is not to record it in the first place.

Noise sources:

For our purposes, unwanted noise can broadly be divided into two types:

Real-world noise: this again can be split into two types – natural and man-made.

Induced noise: this is noise that does not occur in the real world but in the electronic domain.

Real-world noise:

1 Natural noise

Some examples of natural noise are wind, thunder, rainfall, water in motion, and animal noises.

What can be done?

There's not a lot you can do about this unless you have godlike powers. If it is weather- or animal-related, grin and bear it. It will pass. If it is sea or river, correct microphone choice and placement techniques can help to reduce it, as can moving the set-up to an alternative, more suitable spot.

2. Man-made noise

Man-made noise encompasses traffic, machinery, door slams, street noises, audience coughs and sneezes, etc.

What can be done?

On the face of it, man-made noise would appear be much more controllable. However, this is not always true, and success depends on two factors:

- 1 *Location choice*: if your venue is, say, a community hall situated in the heart of the city, or beside a busy main road or shopping centre, then you are going to be

recording an awful lot of traffic noise whether you like it or not. This is why audio and TV recording studios are soundproofed. A hall in the suburbs, or one set back sufficiently from the roadway, is a better proposition.

2

3 If it is not possible to change the venue, a very rudimentary form of noise-reduction can be provided by hanging blankets along the wall and over the windows that face the noise source(s).

4 *Location control:* the most basic essential is control over the actual space in which the recording is to take place – once the event has started and tape is rolling, entry should be prohibited through door control from the outside.

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6 However, even this may not be enough if the venue has other facilities/rooms (games rooms, music rooms, play rooms etc.) that are also in use because noise from these other activities **will** leak through doors, walls, floors, and ceilings. If possible, exclusive use of and control over the entire venue should be sought for the duration of the event being recorded and for at least one hour beforehand.

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8 Audience members should also be requested to turn off their mobile phones once inside the venue.

Electronic noise

This can be introduced by poor recording techniques, the incorrect choice and use of equipment, and by substandard and/or poorly maintained gear.

1. Recording techniques (camera operators)

Using built-in camera microphones exclusively to record events is to be discouraged except for certain types of shots like B-roll, wild track, or atmospherics.

This is because built-in microphones do a very poor job of picking up sound from more than about 10 feet away. At 15 feet away from the performer, a built-in microphone will pick up more room echo, audience rustling, creaking chairs, and passing traffic than it will speech. At 30 feet, it may not pick up anything intelligible from the performer.

As the distance between a sound source and a microphone increases, the sound source becomes a smaller part of the recorded soundscape.

It's like a camera with a fixed focal length lens – when you move it back from the subject, the subject gets smaller relative to the surroundings. If you want a clear audio recording, you have to get up close with the built-in microphone, thus limiting your visual options with the camera to which the microphone is attached.

What can be done?

Where professional quality is desired, audio should be recorded separately and synced to picture using a clapper-board. With today's computer and audio technology, a sound mixing desk is no longer an absolute necessity, and compact and powerful Apple MacBook/Powerbook based solutions are available that can handle input from eight or more microphones simultaneously.

If there is no choice but to use on-board microphones, it should at least be ensured that all cameras are set to record audio to the DV standard: 16-bit 48.00 kHz. While lower sampling rates

and bit depths can be up-converted later in audio post-production, the lower resolution of the original recording means that audio quality is sub-optimal.

2. Recording techniques (professional recordists)

Where a third-party sound recordist is to be engaged for a project, ideally, that person will have verifiable experience in recording events for broadcast. It is normal in this field for a prospective recordist to be asked to provide a DVD show-reel or portfolio of relevant material before any contract is awarded.

What can be done?

The recordist should be provided with a hardcopy script or running order to become familiar with the material before the day of recording.

The recordist should seek to visit the venue before the day of recording to check out its acoustic characteristics, ambient noise levels, layout, and power outlet placements. If any problems are found, the producer should be informed at this stage.

He/she should arrive well before the time of the engagement to set up and test the recording equipment.

To prevent electrical mains hum being recorded, all recording equipment should be connected to the same ground. This is easily accomplished by plugging everything into the same power strip.

The use of fluorescent lighting near recording equipment or microphone cables should be avoided if possible since fluorescents often generate significant amounts of high-frequency noise which will be picked up. Depending on ceiling height, fluorescents on the ceiling may be OK, but if used in groups of four or more, they can introduce buzzing into the power line which can affect other equipment on the same circuit.

All speaking participants should be given instructions in the correct use of their microphones.

A sound check should take place before recording starts. During this, the recordist should:

Ask each speaker, one at a time, to speak *ex tempore* into the microphones they have been assigned. For drama, each actor should perform his or her loudest lines.

Set all channel pans to their centred position, set all channel equalisation controls to flat or neutral, and set a ballpark volume level. Once the channels have been set satisfactorily, the only controls that should be changed during the recording are the volume levels (where necessary).

Off-centre pans should only be used in consultation with the director or producer, and once set, they should not be changed once the recording is under way. In particular, panning a performer or sweeping equalisation controls while he or she is speaking should never be done.

Clearly identify each speaker's assigned mixing desk channel by writing his or her name on its scribble-strip.

During the recording, all performers' microphones should be left open while onstage to minimise inconsistencies in room ambience. The audience boom microphone, however, should be kept closed until audience reactions are seen to be imminent.

If the recordist needs to speak with the boom operator during the recording, he or she should ensure that the boom channel is closed first.

The recordist should monitor the output at all times using pro quality headphones.

Of course, some recordists will have ways of working that differ from the one described above, usually developed from years of working with older media like stereo or multitrack tape. These days, if the audio is going to be post-processed, panning and equalisation decisions are more properly the responsibility of the sound editor rather than the recordist. The recordist's job should be simply to deliver the cleanest and most intelligible sound possible on the day.

By adhering to the method described above, the recordist makes life easier for the video editor and, if the audio is destined for post, the sound editor.

3. The right tools (camera operators)

Please see "What can be done?" under the section "Recording techniques (camera operators)" above.

4. The right tools (professional recordists)

Recording the human voice well starts with using the correct microphone. Each type of microphone is designed to do a particular job and may be completely unsuitable for recording applications for which it was never intended.

Varieties include condenser, capacitor, electrostatic, electret, dynamic, ribbon, carbon, piezoelectric, laser, liquid, and MEMS microphones. There are also microphones for specific applications such as lavaliers, contacts, noise-cancelling, parabolic, and throat microphones.

Moreover, microphones have different sound capture patterns which dictate their usage, such as omnidirectional, unidirectional, bi-directional, cardioid, and shotgun (or rifle).

Microphones may be connected directly to the mixing desk or preamplifier by cables, or they may use either FM radio transmission or infrared (line-of-sight required) to broadcast to an antenna.

The microphones used will also depend on the nature of the event to be recorded. For instance, a discussion, debate, or address does not require microphones to be hidden from the audience, whereas a drama or dramatic monologue usually does.

There are two schools of thought about recording dramas. The first advocates the use of fixed overhead arrays or booms together with stage boundary microphones. This is the traditional method. Its main disadvantage is that it can require all performers to always know where they need to be on stage, and to hit their marks every time. Thus, technical rehearsals and run-throughs may be required before the performance.

The second school of thought advocates using wireless lavalier (or clip-on) microphones to give greater freedom of movement to the performers. However, there are a number of significant disadvantages to using a) lavalier microphones, and b) wireless transmission.

a) *Lavalier microphone disadvantages:*

1. Lavalier microphones are either omnidirectional or unidirectional, but will typically pick up sound coming from multiple sources.
2. These microphones and their cables are always in direct contact with the person being miked. This means that any movement of clothing will cause loud and obtrusive rustling from both contact noise and acoustic noise to be recorded. In addition, static electricity generated by clothing movement can cause loud discharge clicks to be picked up.
3. The positioning of lavaliers on the body complicates dealing with speech plosives like Ps, Bs, Ks, and Ts. Even indoors, windscreening can be required.
4. Bad lavalier placement can lead to chin shadowing, muffling the consonants which give recorded speech clarity and crispness. Lavaliers also pick up far more bassy chest sounds

than they do sounds from the oral and nasal cavities where consonants are formed, leading to additional loss of clarity.

5. Bad lavalier placement can also cause left/right performer volume and perspective shifts when the performer turns his or her head which can be disorienting for the listener.
6. Lavaliers can typically pick up more ambient sound than direct sound. This may be corrected by using a unidirectional lavalier, but the ambience being picked up off-axis sounds hollow and unreal. Multiply that by four or eight lavaliers and your entire soundtrack can sound very unnatural indeed.
7. High quality lavalier microphones can cost thousands of euro. Less expensive models tend to have lower build quality, and their transmitter packs, which receive quite a lot of punishment, are not as robust.
8. Finally, their complex signal path makes connection troubleshooting more difficult.

b) Wireless microphone disadvantages:

1. Today, the entire planet is cloaked in man-made electromagnetic radiation. Radio signals are ubiquitous, used not just by radio stations but by special interest groups ranging from emergency and security services to banks, taxis, and haulage companies,
- 2.
3. In our own homes, radio waves may be used for telephones, burglar alarm systems, internet connectivity, AV/multimedia systems, and computer networks. Even in the depths of the oceans, sonar signals are transmitted without cease.
- 4.
5. There is so much electronic noise permeating our everyday surroundings that any signal sent through a wireless transmitter will always have more noise, more distortion, and more interference than a wired connection.
6. A wireless connection will also have more chance of a catastrophic failure at any time.
7. Dropouts, or losses of signal, can occur depending on equipment placement, antenna type, and performer movement and orientation on stage.

What can be done?

While it is tempting to use wireless lavalier microphones for ease of use and performer freedom, if quality, dependability, and low noise is vital then it may be better to use an overhead fixed array together with boundary microphones, all connected by cable.

Every event is different, of course, and for some, the trade-off involved in using wireless lavaliers can sometimes be worthwhile as long as expectations are realistic.

5. Professional gear, well maintained

Today's TV audience possess television receivers whose audio capabilities range from a single (mono) 1-inch speaker to near cinema-quality surround sound speaker arrays costing thousands of euro. Producing for this market demands professional quality equipment. So-called "prosumer" gear won't cut it. Buy cheap – buy twice!

The nature of the job means that recording equipment, particularly hired-in gear, can get rough handling. If hiring, always insist on testing before taking. If owned, treat it gently. Test all gear and cables well before the gig so that if anything needs repairing, it can be fixed or replaced in plenty of time.

