Euthanasing animals—the human experience

Dr Erich von Dietze
Research Ethics, Murdoch University
and
Centre for Applied Ethics & Philosophy
Curtin University, Australia

Euthanasia of animals in research settings can be a sensitive and emotive topic. However, little is known about the experience of the person who euthanases the animals. This study interviewed 12 people about their experiences of animal euthanasia. Participants were mainly researchers, including some no longer working directly with animals and some who provide support services. The participants had a range of experience including laboratory, farm, and wildlife research, and veterinary practices or animal shelters. Some of the findings were predictable, others were more surprising. None of the participants expressed difficulty euthanasing a sick animal, especially where the prognosis is poor. An unexpected finding was that some participants are no longer prepared to euthanase animals at all. Participants commonly expressed reservations in at least some situations. The way the decision to euthanase is reached and the training or induction received made a significant difference to a person's attitudes and levels of comfort when euthanasing animals.

Introduction

I know that all animals we use will be euthanased and that we use euthanasia for different things. We terminate an animal's life: to end suffering; at the end of an experiment from which it never gains consciousness; at the end of a series of experiments where it may or may not be conscious; when it cannot be used for anything else or may have reached a certain age; when it may be at risk of getting secondary disease or infecting other animals. There are any number of reasons why we euthanase animals and they are all part of the research process. (R7)[1]

Euthanasia of animals can be a sensitive and often emotive topic. Two different kinds of question may be asked: what does it mean to give an animal a "gentle and easy death" and what are the impacts on the people who euthanase the animals? This paper seeks to explore the second of these questions. One recent article states "… euthanasia [of research animals] triggers feelings of guilt, remorse and grief in many carers but most suffer in silence because the subject is taboo, and they feel they have no way to unburden themselves. Few receive any formal training on how to cope with their feelings, or practical or emotional support …"[2] Is this point of view correct, or is it pathologising the human experience?

There is considerable literature on methods and processes of animal euthanasia and the implications or impact on the animals. Issues such as why and how pet owners reach a decision to allow their animal to be euthanased are well researched, and veterinary practices commonly have procedures that look after both the animal and the owner in these circumstances. However, relatively little is known about the overall experience of the person who euthanases the animals[3]. Almost nothing is known about the experiences of researchers who can at times euthanase large numbers of animals in the course of their research.

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[1] Each of the participants was given a number, so R7 refers to the 7th person interviewed. This retains their anonymity while allowing me to analyse the material.

[2] Coghlan, A. 2008: Animal carers suffer in silence *New Scientist* 29 March.

[3] One broad area where there is material available is in the arena of professional stress, e.g New Zealand Veterinary Association 2006: Vets & Stress.

I conducted a study, interviewing a number 12 people who work in research environments, about their experiences of and opinions about animal euthanasia. Participants were mainly researchers, including some who no longer work directly with animals and some who provide support services. They were invited through networks of people working in research with animals, and only those who responded to the invitation were interviewed. The participants often work with or care for substantial numbers of animals, and at times need to euthanase (sometimes large) numbers of animals and do so on repeated occasions. The participants interviewed have a wide range of experience including work in laboratories, on farms, and wildlife research. Many of the participants also have experience in veterinary practices or animal shelters, and some continue to provide services in these environments. While the interviews were focused primarily on the research context, participants chose to give examples relevant to the full range of experiences of animal euthanasia including animals in research and teaching environments as well as the more "usual" veterinary experiences of euthanasing sick, unwanted or untreatable animals, animals that people cannot afford to treat, animals in pounds and animal shelters, and animals that cannot be re-homed.

The interviews were limited to people who work with mammals, as these tend to present the more controversial cases in the public view. The study also excluded issues such as those specifically related to standard farming practices (although one participant raised the issue of having to euthanase a large number of farm animals during drought or following a bush fire). The study also excluded issues related specifically to the death of a pet, or people such as zoo staff who may euthanase an individual (often exotic) animal from time to time. Despite the exclusions, most of these issues were raised in one way or another by participants.

As anticipated, none of the participants expressed any difficulty euthanasing a sick animal, especially where the prognosis is poor. Participants, as expected, also made clear distinctions between animals killed in research (where there are defined welfare considerations for the animal), animals killed in pounds or "shelters" (often out of necessity), animals killed in abattoirs (where welfare considerations can at times be minimal) and animals killed as part of a programme to control feral animals (which were described in various ways, in part reflecting the diverse ethical and personal values of participants). Despite these distinctions, at least one participant strongly underlined the view that "Animals have a right to live and that right should be more respected". (R3)

While some of the findings were predictable, others were more surprising. (What became really interesting to me was my later attempt to distil some of the ethical reasoning that participants had employed in their descriptions.)

An unexpected finding was that at least three of the participants have reached a point where they are no longer prepared to euthanase animals. They would euthanase an animal if only they absolutely had to, but if there were any possible alternative option (including getting someone else to euthanase the animal) they would take the alternative. Each had reached this point in different ways. Two participants expressed it as having reached a point of saturation, linked to the large numbers of healthy or relatively healthy animals they had previously euthanased in the context of research or teaching programmes. They did not report feeling traumatised, they had simply arrived at a point where they could no longer euthanase animals and had come to a view about euthanasia as a convenient way to avoid much harder questions. The third did express a sense of personal trauma and had addressed this as part of a life-values change which also led to a career shift away from direct "hands on" veterinary practice and animal research.

Participants commonly expressed reservations in at least some situations, especially where research appears to them to be poorly justified or where they felt that they were simply being asked to "fix someone else's mistakes". More than one participant, in reference to vets being asked to euthanase an animal when the vet is not fully convinced that this is the best course of action, said something along the lines of: "In many instances I know vets who just take them home and don't tell … I know it's illegal, but what can you do?" (R1). "I would do my utmost to get them re-homed, to the point of taking them home myself. … So, I ended up with animals that the owners thought were dead because they wanted them euthanased. I took them out the back, fixed them up and took them home" (R7).

Participants identified that the way the decision to euthanase is reached makes a great deal of difference to their attitude about it. Situations where the same person needs to both make the decision to euthanse and carry it out presented the most difficulties; which were expressed as both ethical and emotional issues. Where the process of decision-making is separated from carrying out the euthanasia, participants generally had the highest degree of comfort even if they had helped to design the criteria or even if they did not like or entirely agree with what they were doing. This separation was variously expressed as having a clear research protocol, having strong guiding criteria, having direction from an AEC or from the Code, or having a consultative or team-based decision-making process. Some even underlined this by emphasising that they do not just euthanase animals, they euthanase individual animals. "I don't make a decision (to euthanase) unless I feel comfortable with it. Every animal is dealt with individually. So, even when we kill 60 animals, they've all been dealt with on an individual basis to be at the point they're in". (R7).

Another finding was that the kind of training or level of induction received made a significant difference to a person's attitudes and levels of comfort euthanasing animals. This is strongly supported by Keith Davies' research. Davies[4] conducted a number of focus groups with animal house staff in the United Kingdom and found similar results to this study that participants with a veterinary degree and related experience seemed to find it easier to reach clear decisions about euthanasia, and to carry it out, than participants with less animal-based training[5]. While I did not interview any people working in a voluntary capacity, I did interview support professionals who suggested that the combination of heartfelt motivation for animal welfare together with a lack of induction often led volunteers to have considerable personal difficulties dealing with frequent euthanasia, especially of otherwise healthy animals. The view expressed was that professionally trained people are able to create emotional spaces and have developed a range of skills and strategies to deal with the issues raised by euthanasia, whereas less trained people or volunteers may lack these skills.

Death and grieving

Existing literature in the area of death, euthanasia and grieving does not provide models which assist us to understand the dynamics of animal euthanasia in a research environment. Participants interviewed for this study had experienced the death of pets and/or have assisted others by euthanasing pets. All explained that there is a discernible difference between this and euthanasia as part of research.

There is considerable, diverse, literature on death, bereavement and grieving. Within this context there is also an array of material on death and grief issues related to pets. The literature discusses death and grief largely as a process. Elisabeth Kübler-Ross, for instance, pioneered the now widely adopted idea of five emotional stages: denial and isolation; anger; bargaining; depression; and acceptance[6]. While these stages are not necessarily linear or sequential, she argues that grief is a process more than an event and that each of the stages needs to be addressed as part of the bereavement process. However, the literature is built on the assumption that death is essentially a one-off event, and that it is an individual person or loved pet which dies, rather than many deaths experienced by the same person.

Participants identified several models to help understand euthansia in the research context. In particular parallels were drawn with human medicine (such as palliative care) and warfare, where people can be involved in the experience of multiple deaths.

Several participants used human medical analogies to explain animal euthanasia. For instance, nursing and medical practitioners in areas such as palliative care or intensive care can experience many deaths. The view put by these participants is that this environment provides insights on the effects of multiple grief experiences, and that the experience of nurses and medical staff provides valuable insights and resources.

This assumes that animal research is akin to working in environments such as palliative care; that there is an expectation that the patients (animals) will die, and that the process is to make this as comfortable and humane as possible. At least two participants underscored that this view is for them an element to their weighing up the benefits of using the animals in the first place. Another added into this discussion the wider risks verses benefits question where we might increase one type of pain or pain for a few animals with the longer-term purpose of diminishing pain for people or for other animals. In other words, in a research context careful and deliberate decisions are made which do not always lead to minimising the pain for each individual animal. However, there are some key differences to human medical situations, well summarised by the following participant:

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[4] cited in Coghlan A. (2008).

[5] In personal correspondence (21/5/2008), Davies emphasises "New recruits, not adequately inducted, would indeed suffer problems. There was a lack of consistency from my focus groups regarding recruitment and induction and this prompted, in some cases, thoughts of simply walking away from their chosen career as it proved to be far too traumatic".

[6] Kübler-Ross E. 1969: *On Death and Dying,* Macmillan Publishing. See also her subsequent work in this field. See also works such as Stroebe, M. S.; Stroebe, W.; Hansson R. O. *eds* 1993.

This is very different to nursing. There is no personal involvement. There is the distance of a different species. We respect animals, we kill (euthanase) for teaching (e.g., to use cadavers) but this does not necessarily violate that respect. We need to recognise our personal and professional responsibilities. We need to increase common sense communication about euthanasia. There is often too much of an emotional load and not enough careful rational discussion of the origins of a problem and how we should address those—too often we are trying to fix the results without dealing with the causes. (R2)

Warfare imagery was the other area raised by some participants to explain the repeated euthanasia of large numbers of animals. This is strongly echoed in one participant's comments about euthanasing a large number of animals at the end of a project: "It's a war of attrition and you need to have a pretty thick skin—it is a never ending stream … [it] is relentless; imagine, it feels like an abattoir or a war zone … When you have all these cages around you with animals ready to euthanase, it can feel a bit like working in the gas chambers." (R3). Three participants commented that one thing which mitigates this sense of a war zone, in an ironic way, is that they became very good at euthanasing animals, and that there is a sense in which they take pride in knowing that they can do it in a quick and pain-free way. Ironically, this accords with some of the wider literature on warfare.[7]

However, the warfare analogy is also significantly limited. There is no enemy, there is no sense of fighing, and we do not strive to kill but rather our Codes challenge us to avoid killing.

The research environment is unique. None of the wider areas of literature gives a sufficient model to understand the issues associated with euthanasing animals in research.

Killing animals

Killing of any kind is controversial. The reasons for killing are as much part of the controversy as the methods, hence the intense debates that continue about appropriate methods for killing animals[8]. Killing affects some of our most fundamental human sensibilities. Even so, there are times when we believe killing to be at least justifiable, if not rational. It is often assumed that euthanasing animals is a negative experience for people. However, in my interviews I found indications that this may not always be the case, for example, where people understand there to be a "higher" purpose for the animal's use, where the researcher benefits in some way (e.g., contributing to scientific understanding), or where euthanasia may be a way of ending the (unnecessary) suffering of an animal.

Even the language of killing is difficult to apply into the research arena. One participant discussed language issues, pointing out, for instance, a strong dislike of the term "sacrificed" on the grounds that euthanasia of animals in research is not some kind of psuedo-religious activity. The same participant also objected to the use of terms such as "putting to sleep" and "putting down" and prefered to talk about killing animals, except where an animal is "euthanased" specifically to take away its suffering. "The death of animals is one outcome of the research process. It needs to be explained in an open, transparent and honourable way. It is OK to make a decision to euthansase animals. We musn't hide from the realities. It is very emotional, not clinical, and must be done around careful reasoning and carefully thought through criteria" (R7). Euthansia, for these participants, is part of animal welfare.

Of particular interest is that in a context where I was seeking mainly (but not solely) comment about euthanasia in a research and teaching context, that so many other issues were raised and discusssed by participants, some at length. Let me outline some of the wider themes that participants raised concerning the euthanasia of animals.

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[7] See Grossman. The most extreme situation would be concentration campus See also Goldhagen (1996) Hitler's Willing Executioners. At one point Grossman extends his exploration into the area of atrocities and concentration camps. He discusses the kinds of behaviours that lead to these both from perpetrator and victim perspectives, referring to what Martin Seligman calls "learned helplessness".

[8] Gardner, D. 2006: "What causes stress for veterinarians?"

As part of veterinary care

Veterinarians often face very complex decisions about the appropriate level and type of care to provide an animal. The decision to euthanase an animal is ultimately based on considerations about the animal's welfare needs as much as the needs and interests of the owner.

Veterinarians need decision-making frameworks as well as moral and ethical guidance, particularly when it comes to life and death decision-making. Who should decide? How are decisions reached? What is best for the animal? How do we know what is best for the animals? Are there any welfare issues? Are there limits(ations) on decision making authority? What kinds of decisions are we prepared to make? How do we know what is the right decision to reach, especially when there are vastly differing or even competing views relating to a set of circumstances? In a research setting, sometimes veterinarians can experience conflicts of interest when providing services for their colleagues; how do we manage these situations?

In a research setting the economics for the decision whether or not to euthanase are different to the decisions a pet owner may make. While interview participants often digressed to discus general veterinary practice, it was acknowledged that many research projects hold or breed animals long term and it can be costly to the project as a whole to euthanase an individual animal. The decision to euthanase, for instance an animal held for antibody production, is complex. One participant, commenting specifically on veterinary practice, commented: "Euthanasia is big business. There are the costs of the practice and the drugs, and like it or not there's big money involved. The profit in the process is large. It is controversial, but needs to be addressed. ... Somebody comes in with an animal …, they get charged a consultation fee, if the decision is later made to euthanase the animal, and then there is a euthanasia fee, which reflects the level of skill involved in doing a professional job. Then there's the cost of disposing of the remains and the cost associated with burial or return of ashes. A significant proportion of practice income is derived from euthanasia." (R3). Other participants also discussed the possibility for subtle and unconscious motivations for a vet or researcher to treat an animal in such a way as to maximise the potential returns (R5, R6).

In animal shelters

Every participant raised this topic, and yet described pounds and animal shelters as being different. Many of the animals can be feral, at risk, a danger to other animals and to people. They often have no one to look after them; they are not fed and may be diseased. While euthanasia can be unpleasant, participants acknowledged that it is often the best (sometimes only) solution where the alternatives can be very concerning for the animal, for other animals, for people and for the environment. Two participants cited examples where non-intervention led to a concerning welfare situation for the animals.

Several participants described working in shelters, and some of the ironies implicit in this—a public face of sheltering animals but where much of the work is really about euthanasing animals. "A front end of welcoming, a back end of killing and in between a kind of productive space." (R6). The comment below seems to reflect the overall view of the participants.

> For a vet surgeon euthanasia is just as much part of the job as vaccinating puppies or giving cats castrations—it's part of the package. As a practising animal vet you cannot avoid being party to that procedure. You've got to do it. … part of working there is that you go to the back room, you go in, don't ask questions, just euthanase what has arrived there. You have very little say in the process. It can be hundreds of animals per week ... This part of the job is to 'clear out the back room'. You don't have great say in the process – the animals have arrived in that room by virtue of a process in which you have faith. (R3)

Understandably, participants used far more emotionally laden language when discussing the euthanasia process in animal shelters. Two described it as being akin to a jail or even a concentration camp. "… like a place they didn't want to exist. There was no living or consciousness in there, it was just a cell and functional." (R5). Participants were deeply aware of the internal conflicts faced by people who work or volunteer in animal shelters, and three of the participants talked about this at length. One went so far as to say "animal welfare organisation is like a convenient euthanasia service" (R2). Another talked about "Crates of dead animals are taken to the tip—concentration camp like. Instead of grief and bereavement it is more like a deadening post-traumatic stress, it is constant and there are days where that is all they [the workers and volunteers] see …" (R6). One suggested that at least for volunteers it is a kind of a rite of passage to have assisted in euthanasia and survived. Most of these emotionally laden comments were made about volunteers or less experienced workers. Veterinarians were felt to be more robust and trained (and thus able) to cope with the situation.

Wildlife and feral animals

Two participants in particular talked about the impact of activities such as land clearing, global warming, and other influences which can have a profound impact on wildlife, with uncertain long term consequences.

One participant talked specifically about the wider issues related to the control of feral animals—rats and mice, cats, pigs, foxes, camels, cane toads and other species. Control of feral animals by trapping, shooting, poisoning, releasing diseases, and other methods raises issues specific to each species and to each method, as well as often issues related to the location of the animal (for instance in Australia foxes are a feral species whereas in Europe they are a valued natural animal). This participant raised detailed issues about the need to weigh up the impact a species is having on the environment and on native wildlife as part of the decision-making.[9] Having once been involved in culling feral animals, this participant would no longer choose to euthanase any animal, but nevertheless continues to strongly support the principle that this needs to be done.

Several participants felt troubled by what they seem to regard as the necessary cruelty involved in controlling feral animals, and at least one had spent time researching possible alternatives which diminish or avoid the cruelty. One participant discussed the issues associated with turning feral animals into a valued commodity, e.g., the export of feral goats and goat meat from Australia. However, this participant was also troubled by the irony of the increasing impact on other wildlife and on the environment more broadly made by shifting views about a once feral animal into a valued exportable commodity.

Research

Research was the primary focus for the interviews and, as expected, participants had diverse experiences. Novel research commonly requires living, working complex biological systems, and as one participant stated "… worms just won't do." (R3)

In research the inherent purpose for every animal needs to be justified, and the euthanasia of those animals is often a necessary consequence. Participants expressed a strong belief in the value of the animal to the research. That this has been justified in a transparent way makes it easier to euthanase the animal at the end. However, those who had not been involved in the process of justification (e.g. animal house managers who had not participated either in writing the ethics application or in the AEC decision-making process) were not always as comfortable with the process or with the decisions.

Researchers tended to view euthanasia as a necessary function of working with animals; a pre-defined outcome. "I don't differentiate euthanasia from working on animals in research … when doing research on animals euthanasia is part of that, it is not a separate procedure. I don't differentiate it from my research" (R7). A common sentiment was expressed along the lines that euthanasia is a necessary part of research because all research will come to a completion and much of it will lead to the death of the animals concerned. "If the animal is not euthanased at the end of our research then it will be at the end of someone else's, they are not re-homeable, they aren't pets, they are bred for research and that's what we use them for" (R7)[10]. Even if large animals are returned to a farm following the research project, most are ultimately destined to go to market and their death is still a consequence (even if indirect) of the research.

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[9] The example was given of the camel population in Australia—currently around 800,000 and expected to double in the next 7 years. These animals have a devastating impact on natural environment, they use up water sources and many native animals die unnecessarily. However, controlling them is very difficult – it is usually achieved by shooting from a helicopter, which requires pilots experienced at low level flying and expert marksmen. But there are major perception issues– the camel is the ship of desert and has links with deep religious connotations (e.g., the Wise Men and biblical stories) and cultural significance which have become embedded even into some indigenous psyche. This creates a 'cultural' reticence towards killing these animals. Yet, species such as cane toads which are commonly regarded as ugly and unwanted seem to raise far less concerns for people.

[10] This participant made an extended distinction between pets and research animals, giving examples of having had animals of the same species as pets and understanding that there are significant differences in the breeding of the animals as well as in the emotional components.

One participant talked about an instance where euthanasing the animals from a particular research project was so difficult that they almost could not do it. This researcher had developed a considerable relationship bond with the animals, having reared and trained them as part of the project as well as providing them with daily care over a prolonged period. For this researcher it was only when reminded of the requirement that the animals be euthanased at the conclusion of the project that it was done, and then reluctantly. The research by Davies (2008) shows that these bonds are often not just with the so called "higher 'emotive species'", people can become very attached even to rodents[11].

As one would expect, the researchers interviewed differentiated between different kinds of research, different methodologies and different animal species. One participant outlined a scale of animals ranging from insects to mammals and discussed the impact of euthanasia at different points along the scale. This came about because the participant has become increasingly concerned about a number of issues (e.g., by-catch and wider species, including fish) based on new evidence about the animals. This participant pointed out in the discussion that their changing views about animals had led to changes in the research focus they were currently undertaking.

At least one researcher discussed making conscious decisions about the kinds of research they were willing to do, based on the kinds of animals they are willing to work with and euthanase. This participant articulated personal values, emotions and feelings which underlie these decisions. In other words, making a conscious thoughtful decision. More than one participant described making adjustments to their research process to enable them to work with a lesser species where possible, so long as the research outcomes are not compromised. However, each of the participants who gave examples of this also expressed some frustration that these efforts were not always acknowledged since they generally precede the Animal Ethics application process.

Participants who work in laboratories discussed the various routines and mechanisms which enable them to make collaborative decisions which can support other researchers. For instance, providing advice and sometimes assistance with euthanasia techniques, working towards mutually beneficial and practical outcomes, sharing tissue samples post euthanasia or reducing the overall use of animals by the laboratory. In most cases this was achieved through strategies such as mentoring or regular group or team meetings (at which announcements such as planned euthanasias were made so that others could ask for tissue samples that would become available).

The emotional component is part of the euthanasia process for researchers, for some more strongly than others but all of the participants discussed levels of emotional effect and strategies they use to address this. Some reported that they look at, pat or talk to an animal before euthanasing it, others preferred to be more distant or clinical about the process. Both of these seem to be viable strategies. Participants appeared to be expressing not just a mechanism for coping, but ways of recognising and honouring the life of the animal in the research process. Some even had spiritual strategies ranging from thinking thoughts about the animals to attending annual commemorations or performing a simple personal ritual. All of the researchers expressed value in the emotional component and would not want to lose it, but recognise that it needs to be largely set aside (while remaining clearly recognised) as part of the euthanasia process. "It is not a thing, it is an animal that you've just killed and I would hope never to lose that emotional component" (R7). They had thought about the animal welfare issues and had a strong sense of the processes they had gone through before reaching a decision to euthanase an animal. "I try to make sure that my staff see my emotional responses. They are aware that it is not a thing I enjoy doing but that I do because I have to. They see that it's OK to feel. I think that their overall care for the animals is going to be greater if they can see that I care for the animal." (R7).

Conclusion

Care must be taken not to pathologise the experiences of researchers. They have, after all, chosen to work in their respective fields and most of them continue to work comfortably in these fields. Participants interviewed for this study identified that relevant training or appropriate induction makes the biggest difference to their attitude about euthanasia. However, attitudes about euthanasia are not static; they change in different research contexts and with different kinds of research as well as developing throughout a person's career. It is thus important to recognise that:

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[11] Keith Davies, personal correspondence (21 May 2008).

1) People respond differently to different situations and experiences, and these experiences can develop and change throughout a person's career. For instance, some of those interviewed had reached a stage where they are no longer prepared to euthanase animals. Research environments need to recognise and be able to accommodate this.

2) There will always be situations where some researchers have reservations about euthanasing animals. It is important that these reservations are addressed both through dialogue (personal and public) as well as extended support strategies. In this context the expertise and concerns of the researcher can lead to asking questions in new ways and to reducing the numbers of, or impact on, animals.

3) If the way the decision to euthanase is reached makes a difference to a person's attitude about it, and if training or induction makes a significant difference, then education is key. Not just education for its own sake, but active mutual education where researchers, AECs and the wider public learn with and from each other. It is important that education be provided not just concerning technical aspects such as methods of euthanasia, but also about the ranges of people's experiences and emotions, coping strategies and available resources. This kind of education does not stop with formal learning. Institutional strategies can also assist the process, examples include awards for animal welfare, recognition for reducing or even eliminating animals from research, annual recognition events (e.g., an animal commemoration event) and even the criteria for grants can all add to a researcher's learning and ability to address issues concerning animal euthanasia.

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