The Birth of a Research Animal: Ibsen's *The Wild Duck* and the Origin of a New Animal Science

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ABSTRACT

What role does the wild duck play in Ibsen's famous drama? I argue that, besides mirroring the fate of the human cast members, the duck is acting as animal subject in a quasi-experiment, conducted in a private setting. Analysed from this perspective, the play allows us to discern the epistemological and ethical dimensions of the new scientific animal practice (systematic observation of animal behaviour under artificial conditions) emerging precesely at that time. Ibsen's play stages the clash between a scientific and a romantic understanding of animals that still constitutes the backdrop of most contemporary debates over animals in research. Whereas the scientific understanding reduces the animal's behaviour, as well as its environment, to discrete and modifiable elements, the romantic view regards animals as being at one with (or violently disconnected from) their natural surroundings.

KEYWORDS

History of animal research, Ibsen (*The Wild Duck*), animal ethics

INTRODUCTION

Ibsen's play *The Wild Duck* was written and published in 1884. The initial response to it was one of bewilderment. It left the audience baffled and perplexed. Subsequent generations of critics continued to regard it as obscure, undefined, unfathomable, ambiguous, evasive – not in the least because of the mysterious symbol that held it together: an untamed bird in its close and miserable garret, captive to circumstances and with no hope of escape (Meyer 1985).

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In this article, I intend to *re-read* the play in a particular manner, namely as a document that records a crucial event in the history of human-animal-interaction. *The Wild Duck* stages a new and unprecedented animal practice, destined to become one of the basic forms of human-animal-interaction of our time. If we read it in this manner, the play turns out to be remarkably coherent, and apparently futile details suddenly become important and meaningful. It is not my intention, however, to add yet another Ibsen interpretation to those already propounded. Rather, I will emphasise that what is happening to Ibsen's duck on the stage, is remarkably similar to what is happening to some of its contemporaries in a new type of animal research, emerging precisely at that time. Notably, I will call attention to the work of two pioneer biologists, contemporaries of Ibsen, who initiated this new animal practice: namely, Douglas Spalding and Conwy Lloyd Morgan. My purpose is to show that in all these documents, one and the same event is being recorded – the birth of a new type of research animal. The import of Ibsen's play for animal ethics resides in the fact that it stages the struggle between a romantic and a scientific perception of animals and allows us to discern crucial aspects of our present moral relationship with animals. For indeed, the struggle between the scientific and the romantic perception of animals, acted out in *The Wild Duck*, is still structuring the ethical debate on animals of the present (cf. Zwart 1997).

Before submitting *The Wild Duck* to a close reading, I will briefly discuss the Ibsen play that immediately preceded it and prepared the ground for it – *An Enemy of the People*. Subsequently, in my analysis of *The Wild Duck*, I will concentrate on the human-animal interaction that evolves in it, noticing how closely this interaction coincided with pioneer initiatives that (towards the end of the nineteenth century) succeeded in inaugurating a new type of animal research. Finally, I will indicate how Ibsen's play allows us to flesh out the moral dimension of this new practice – one that became a large-scale phenomenon in our own time.

PRELIMINARY REMARKS

Before publishing The *Wild Duck*, Ibsen had already staged the emergence of the modern scientific outlook (and its inevitable clash with both romanticism and common sense) in *An Enemy of the People*. Its principal character, Doctor Stockmann, who is repeatedly referred to as a *man of science*, had been working quietly a whole winter, analysing the water of the local bath and sending samples of it to a university laboratory, in order to assure himself that the local health facilities were petrified by millions of *animalculae* or *infusiora* – mysterious living beings that could only be detected with the help of scientific equipment. After a series of events, Stockmann publicly declares that the most dangerous

enemy of science (besides authoritarian politicians) is common sense, accepting only those truths that are generally acknowledged, but hopelessly outdated. Its stupidity and ignorance must be attributed to lack of oxygen in most houses. In a dramatic lecture-scene, Stockmann poses as a *free-thinker* who, in a rather Nietzschean tone of voice, compares the difference between the majority of mankind and the 'intellectually superior few' to that between mongrels and pedigree stock. The final act contains a number of Darwinisms – that is, quotes borrowed from popular Darwinism like *struggle for existence* and *survival of the fittest* – and it all ends with Stockmann deciding to become a teacher for human mongrels: 'Just bring me a few ... I'm going to try an experiment on some mongrels ... there may be some excellent material among them' (p. 218). Many of these elements (popular Darwinism, the emergence of the scientific perception and the idea of conducting an experiment, on animals as well as on human subjects) we find further elaborated in *The Wild Duck*.

The principal character is Hjalmar Ekdal, a photographer, lazy, self-centered and sentimental, dreaming about an 'invention' that will exalt photography to the level of a 'science' (p. 167). His studio (also functioning as living-room) is an attic opening into a loft – an artificial forest of chimneys and christmas trees -, in which he and his father keep hens, rabbits and pigeons. Hjalmar, bored by his profession, becomes 'active and purposive as soon as there is an excuse for tinkering in the loft' (Knight 1962: 56). Other important characters are his wife Gina, their daughter Hedvig and a former school friend (Gregers Werle) who pays an unexpected visit to the Ekdal family and decides to use Hjalmar as a research subject in a moral experiment, with the intention of 'opening his eyes' and of transforming him into a free-thinking, independent human being. The bleak, distressing plot seems to convey the moral message that people simply cannot be improved.

Besides the species already mentioned, the loft is inhabited by a semi-domesticated duck. Some astonishing theories have been advanced as to what the bird is intended to stand for, Meyer tells us (p. 561). Apparently, she mirrors the fate of those who, in Ibsen's own words, have forgotten what it means to live wild, have grown plump and tame and content with their basket (p. 562). Yet, besides being merely a moral *image* reflecting the dismal conditions of the human individuals around her, there is another, more positive side to this 'strange creature of wild life, mysterious as life itself' (Knight 1962: 65), that not once appears on stage and never shows itself to the public. It must be regarded as *a phenomenon in its own right*, and my reading will concentrate on what goes on in the loft, where the animals dwell, rather than on what happens in the living-room (the human realm). Ignoring for a while the dispute between Romanticism (Gregers Werle) and Social Darwinism (his father) in Act One, I will now at once address the loft-scenes in Acts Two and Three.

THE WILD DUCK: CLOSE READING 1

Act Two is set in the studio/living-room, with professional apparatus, instruments and tools. A conversation between Gina and Hedvig is evolving when, suddenly, Old Ekdal appears on stage. He slides the door in the rear wall a little to one side, looks into the loft for a moment, closes the door carefully, then utters the following line:

> He, He! ... she's lain down in her basket. He, He!

As Hjalmar enters the attic, the following dialogue develops:

> *Hjalmar*. Have you looked in there this evening, father?
>
> *Ekdal*. Yes, of course I have, she's gone into the basket.
>
> *Hjalmar*. Gone into the basket, has she? She is beginning to get used to it, then?
>
> *Ekdal*. What did I tell you? Well, now, there are one or two little —
>
> *Hjalmar*. Little improvements, yes.

Before pointing out the significance of these apparently trivial lines, allow me to pursue this scene a little further. After a while an unexpected event occurs. Gregers Werle pays a visit to the Ekdal family, with the intention of initiating his moral experiment. He starts off by bluntly asking old Ekdal how he, a former hunter, manages to live under such depressing conditions, 'boxed between four walls'. What about the life in the forest, the wide open spaces? Ekdal smiles and says: 'Hjalmar, shall we show it to him?' The latter hesitates, Ekdal insists. Gregers finds the whole scene rather confusing. What are they talking about? The sliding doors are opened. A long and irregularly-shaped loft can be seen, full of dark nooks and crannies, with a couple of brick chimney pipes coming through the floor. Moonlight shines on to various parts of the loft, while the rest lies in shadow. 'What is it, exactly?' Gregers asks. He is shown some chickens. 'Why, you keep chickens!' he exclaims. There are pigeons too, and rabbits. Finally, Ekdal says: 'But now I'll show you! This is really something...' (p. 150). He shows him the wild duck. 'It's a wild duck ... that's what it is'. Gregers, perplexed, does not know what to make of it and asks: 'But can it live up here in this loft?'

What are *we* to make of it? What is happening here? Two important clues allow us to find at least the beginning of an answer. Francis Bull (1932) has suggested that Ibsen, in choosing the theme of his new play, may have been influenced by Darwin's account of how wild ducks degenerate in captivity. One of Darwin's works, *The Variation of Animals and Plants under Domestication* (1905), contains the following line: 'We have seen how soon the wild duck, when domesticated, looses its true character, from the effect of abundant food, or from taking little exercise' (p. 331). The fate of Ibsen's duck, then, seems a dramati-

sation of a quote borrowed from Darwin.[1] The importance of this clue is underlined when it is brought into contact with a second one. Among the draft material and notes, jotted down by Ibsen as he was designing his play, we come across an awkward line, apparently without any connection to the rest of the material. Nor can a trace of it be found in the final play text:

> It is illicit for scientists to torture animals to death. Let physicians experiment with politicians and journalists (Arpe 1972, p. 109).

The jeer directed at politicians and journalist is an item belonging the problem-domain of *An Enemy of the People*, the play he was still preoccupied with at that time, and should not distract us here. More important is the remark concerning scientists torturing animals to death – one that must be given some further thought.

The nineteenth century was 'the golden age of vivisection' (Ryder 1975). The public debate over this issue reached its climax during its second half (Breitschneider 1962). Famous physicians like Magendie, Bernard and others had been submitting large numbers of animals (notably dogs) to atrocious experiments, inciting a massive current of public protest, regarded by the scientists involved as mere sentimentalism. Before *The Wild Duck*, Ibsen had written a series of problem plays, dealing with publicly disputed issues like women liberation (A Doll's House), euthanasia (Ghosts) and freedom of speech (An Enemy of the People). Apparently, he was considering the possibility of using vivisection as an element in his new play about contemporary life. Eventually, he must have rejected the idea, since the issue of animal experimentation seems completely absent from its final version. Seems! The research animal is still present in the play, but instead of staging a debate *about* animal experimentation, Ibsen allows such an experiment to be actually conducted before our eyes – albeit a new and unfamiliar *type* of experiment, less atrocious than vivisection. Apparently, it must somehow have dawned on Ibsen that, besides the traditional form of experiments with animals (vivisection), a new animal practice was in the process of emerging, one no longer directed at dissecting animals alive, but at closely and systematically observing their behaviour under artificial and modified conditions.

Now it suddenly becomes less obscure what father and son Ekdal are doing in that loft. Their apparently futile pastime actually constitutes a quasi-experimental activity. The line quoted above – *He, He! ... she's lain down in her basket. He, He!* – is an observation. Such observations (made by one observer and reported to the other) are made at regular intervals, in accordance with the new scientific protocol ('Have you looked in there this evening, father?', 'Of course I have'). The remark 'She is beginning to get used to it' is an interpretation, apparently regarded as confirmation of a hypothesis ('What did I tell you?). In this manner, they are conducting an experiment in adaptation. The process of domestication, of adjustment to artificial circumstances, is monitored meticu-

lously. Their remarks, their gestures are part of a behavioural pattern, a protocol, and become perfectly meaningful and reasonable, even typical. They are carrying out an experiment, whether they (or, for that matter, the author himself) are conscious of it or not. Now an experimental design or protocol is basically structured by a simple phrase – *What happens if...* What happens if a wild duck is confined within an artificial forest? Will she be able to live there? (Greger's question) Will she get used to it? (The Ekdals' question) The behaviour of father and son Ekdal is guided by questions of this sort. Their time-consuming and apparently futile activities amount to something – they are manipulating the environmental conditions (independent variables) and subsequently observe the behavioural effects (dependent variables).

Older animal practices (notably hunting and keeping) are still present in the play. The hens seem to be merely kept, and old Ekdal at times relapses in his former practice by shooting rabbits, instead of observing them. But amidst these reminiscences, a new phenomenon emerges, a new mode of being for animals: a new type of research animal is born.[2] And this is an important event, bound to incite the production of an exponentially increasing number of ethological, biological and psychological publications in the course of the next century. Father and son Ekdal witness the process of adjustment, the gradual erasure and extinction of natural behavioural patterns. When fiddling with and deliberating about a water-trough, for example, they are in fact manipulating independent variables (in this case the stimulus of water), accommodating the environment to the animal's needs, in order to further adaptation. In short, they are doing what a small number of contemporaries were already doing at that time.

In *The Variation of Animals and Plants under Domestication*, the book that perhaps inspired the Ibsen play as we have seen, Darwin had collected a considerable number of observations on animal behaviour. His 'successor', George Romanes, continued this work by collecting and systematising numerous data and stories about animal performances (Boakes 1984). From a methodological point of view, however, their research was still rather anecdotal and dubious. The first biologists to really submit animal behaviour to systematic observation and experimentation, were Douglas Spalding (1873) and Conwy Lloyd Morgan (1890, 1894). Their publications flanked as it were the Ibsen play. Before italicising more details of the play, therefore, allow me to point to some of the remarkable similarities contained in these scientific reports.

THE EMERGENCE OF A NEW SCIENCE: SPALDING AND MORGAN

Vivisection as a rule took place in university laboratories and was done by university professors and assistants, notably in France (Magendie, Bernard). The first initiatives towards commencing a new kind of animal research were taken

outside the university. Experiments with animals of this new type were done by amateurs, like the Ekdals, and took place within a private setting, within the confines of family life. The new science emerged when, in 1873, Douglas Spalding published the results of his pioneer research, conducted in a private setting: the house of the famous Maberley family,[3] where he was appointed as tutor and where children, observers, lovers and research animals mixed (Boakes 1984). His research set the model for the new paradigm to be, demonstrating that animal behaviour could be studied and manipulated by isolating and controlling a limited set of conditions. In doing so, he 'began an experimental science which was carried forward by ... innumerable later investigators' (Gray 1962: 303). In Spalding's time, the 'marvellous dexterity' displayed by animals was still generally regarded as an object of wonder (Spalding 1873/1993), but he sets out to subject some of these exceptional feats and 'marvellous stories' to 'careful experiment and observation'.[4] He performed a series of experiments with chicks and ducklings, depriving them of, and then exposing them to, for example, visual stimuli (the famous 'hooding' experiments). He writes:

> The conditions under which these little victims of human curiosity were first permitted to see the light were carefully prepared ... [E]very movement, with the date thereof, was put on record. Never in the columns of a Court Journal were the doings of the most royal personage noted with such faithful accuracy (p. 283).

Spalding thus invented a new science, but realised that 'to the many who love more to gaze and marvel than to question and reflect, all this will seem miserably inadequate as a clue to one of the mysteries of life' (p. 293) – already a hint to the struggle between the romantic and the scientific perception of animals that we find fleshed out in Ibsen's play.

Conwry Lloyd Morgan, friend and collaborator of Romanes, was sceptical and critical about the latter's handling of anecdotal evidence and decided (like Spalding) to rely solely on experimentation and observation. He carefully distinguished between actual behaviour and human interpretation and introduced the famous 'canon' of animal research, directed against our natural tendency to attribute mysterious faculties to animals.[5] His favourite research subjects were chicks and ducklings. In one of his experiments, he constructed a small pen with newspaper walls, insecurely propped against various objects, and placed a week-old duckling in it, to study its efforts to escape (1890). In a series of experiments he tested the responses of research animals to various stimuli – notably the 'stimulus of water' ((1894/1993: 175). Nonetheless, 'romantic marvel' is not completely absent in his work.[6]

Spalding and Morgan showed a predilection for chicks and ducks. One of the characteristics of the scientific literature that started to emerge at the close of the nineteenth century was that the bulk of it was inhabited by a limited number of favourite species, notably hens, pigeons, rabbits, and dogs. It is no coincidence

I guess that these species are the very inhabitants of the Ekdal loft.[7] Indeed, more and more details of the play become recognisable all of a sudden as soon as we read it against the backdrop of the emergence of this new animal practice.

THE WILD DUCK: CLOSE READING 2

Like Spalding and Morgan, the Ekdals conduct their experiment not in an academical, but in a private setting. Their small-scaled, time-consuming experiment (N=1) focusses on domestication and adaptation, while a more or less romantic comment on their doings is provided by other characters, notably Hedvig and Gregers, the former being an imaginative girl dwelling in a world of phantasies while the latter, having accused his father of social Darwinism, is characterised by him as being 'over-sensitive' and 'romantic'.

With regard to the birth of the new animal practice, meticulously recorded in *The Wild Duck*, some basic aspects can be distinguished (although they are closely related to one another). Besides the emergence of a new scientific *practice*, the play conveys the emergence of a new scientific *gaze*. Notably, I will point out that the new science not only transforms the *object* (the animal) into a particular type of research animal, but also calls for a drastic transformation on the part of the *subject* (the scientist) himself, affecting both his repertoire of behaviour and his mode of perception. Moreover, the animal's *world* is being reduced to an experimental *environment* (that is, a setting composed of a limited number of stimuli or conditions). Finally, the Ibsen play stages an important cultural struggle, the one between the scientific and the romantic understanding of animals.

A new scientific practice

Father and son Ekdal have entered a new and unfamiliar scientific practice. From the point of view of common sense, likely to interpret their behaviour in traditional terms, they simply seem to indulge in 'keeping' animals. Comparison with the writings of Spalding, Morgan and others, however, allows us to recognise that their pattern of action contains typical gestures and techniques that are already part of a coherent protocol. As we already noticed, the fact that the duck has 'gone into the basket' is *observed* by Ekdal, *reported* to his son and *interpreted* in terms of adaptation – that is, regarded as a confirmation of a hypothesis. The many improvements made by them, notably the ones concerning the water-trough, can be regarded as introducing, modifying and manipulating certain stimuli (such as the stimulus of water) or controlling environmental factors (independent variables). Thus, the mysterious loft is actually transformed into an artificial *Umwelt*, an impoverished world, reduced to a limited number

of basic constituents that can be isolated and controlled independently from one another – notably water, lighting[8], time[9] and a number of spatial conditions (such as high versus low[10]). Thus, with the help of a series of 'contraptions', 'contrivances', 'gadgets' and 'improvements', an experimental set-up is created that allows the research animal to develop certain behavioural patterns, and the observer to observe the animal's responses to his interventions. In short, a new scientific practice is staged *in statu nascendi*. Hjalmar has initiated a new science, but without realising it, because when Ekdal shows the loft to Gregers, Hjalmar is rather embarrassed about it and emphasises that it belongs to his father. The new and time-consuming behavioural pattern has not yet established itself as a *legitimate* practice in its own right. We may say that, in the Ekdal loft, *praxis* precedes *consciousness*.

The duck is subjected to a particular kind of experiment, namely an experiment of deprivation. She is deprived of her natural surroundings, in order to observe whether she will adapt herself to these unfamiliar circumstances or not, whether she will produce her usual behavioural repertoire, or a reduced and simplified version of it, etcetera. Thus we find it reported that the research animal is doing 'extraordinarily well', that she is nestling, growing fat, etcetera. In this manner, the Ekdal experiment, a kind of follow-up of observations reported by Darwin, anticipates the extensive research on domestication done by Lorenz and others (Lorenz 1940, Eibl-Eibesfeldt 1975).

The scientific gaze

The transition from a photographer's studio, with its apparatus and instruments, to a scientist's laboratory does not seem a difficult one to make. Moreover, Hjalmar, is already obsessed with the idea of turning his work into a science and making a 'grand invention'. Yet, although his *actions* are already those of a scientist, his *mind* still seems that of a romantic. More precisely, his image of what is involved in making scientific discoveries is of a rather romantic type. The projected invention is described as a heroic feat, as the outcome of a sudden 'intuition' or 'inspiration', and in order to bring it about, Hjalmar relies on introspection and contemplation. This prevents him from short-circuiting the invention he is dreaming about with the simple, but nonetheless effective contraptions and contrivances he is already introducing into the loft. His romanticism prevents him from apprehending that a real scientific practice might be something less spectacular. At a certain point, for instance, he exclaims: 'good heavens, you can't expect me to work to a schedule. An invention is something that even the inventor himself isn't completely master of' (p. 168). Apparently it escapes him that working to a schedule and mastering one's conditions are crucial constituents of the *organon* of modern empirical science, a science that is Apollonean rather than Dionysian, and requires working

methodically and punctually rather than intuitively. A science that involves active manipulation, rather than peaceful meditation.

Hjalmar's romantic vision of science is subscribed to by Nietzsche who, in *Beyond Good and Evil*, distinguishes between truths that are best recognised by 'mediocre spirits' from those that appeal to 'spirits of a higher type' who do things in a grand style and have more to do than merely to gain knowledge. Indeed, 'for scientific discoveries of the type of Darwin's a certain narrowness, aridity and industrious diligence ... may not be a bad disposition' (Nietzsche 1966, § 253). Neither Hjalmar nor Nietzsche appreciate the fact that the new protocols of science emerging in the nineteenth century not only transform the animal into a research animal, but have important consequences for the researchers themselves as well. The researcher has to become self-disciplined, has to become a certain type of human being. Not only the animal, also the human being has to change, both poles are affected by this transformation. Without being aware of it, Father and son Ekdal are collaborators, inaugurating a new type of science. The experiment not only affects the behavioural repertoire of the animal subject, but that of its conductors as well. A typical form of communication arises (a rather awkward one at first), belonging to this type of research. To give just one example: When Gregers says that he can hear the wild duck *crying* (interpretation), Hjalmar immediately corrects him by saying that she is *quacking* (observation), thus restricting himself to reporting what is audible. By behaving thus, the animal is bound to emerge in a certain manner, namely as a research animal, producing behavioural sequences rather than meaningful messages.

Hjalmar's phantasy of becoming an inventor is less ludicious than it might seem if we closely watch what he is actually doing. Indeed, 'the loft ... is the only thing that can extract any kind of constructive activity from the fundamentally lazy Hjalmar. Here, rather than in the world of photography, he is the inventor he images himself to be' (Støvegrud, p. 111). Had he submitted a report of his contrivances and findings to a scientific magazine, his name might have been recorded in the annals of the science to be.[11] Yet, from a romantic point of view, the new scientific practice is far too 'mediocre', too laborious, too practical and down-to-earth to be recognised as such. His inability to grasp that he, by entering this new scientific practice, already made his grand invention, constitutes his 'fatal flaw' so to speak. In *Act Four* he announces that 'Tomorrow I intend to start working in real earnest ... From now on I shall never set foot in that loft again'. Apparently he fails to realise that his activities in the loft, not his 'meditations' on the sofa, might count as scientific work. For the first time in world literature, father and son Ekdal allow an animal to emerge as a research animal of this kind, but nobody really *sees* it. The research animal remains *unseen*. Instead of discerning the research animal, Hjalmar allows himself to be subjected to someone else's experiment.

The romantic and the scientific gaze

The importance of the problem of perception in Ibsen's play is generally recognised. Images of sight and blindness occur throughout the text (Reinert, p. 458) and Gregers Werle explicitly states that he sees it as his mission 'to open Hjalmar Ekdal's eyes'. What is staged in *The Wild Duck*, however, is basically the struggle between the scientific and the romantic perception of (animal as well as human) behaviour.

The reduction of the animal's *Umwelt* to a limited set of controllable factors clears the ground for the emergence of the gaze of science. The scientific gaze in turn reduces the animal's world to a limited number of stimuli (for example, 'water'), and the animal's behaviour to a limited number of behavioural units (for example, 'swimming'). That is, a marvellous and fascinating world becomes disenchanted, neutralised. The enigmatic is reduced to the controllable, a natural world is decomposed and transformed into a scientific 'environment'. Moreover, while the animal's world is reduced to a limited number of environmental constituents (allowing for a limited number of behavioural options), the *human world* (i.e. the modest but cosy Ekdal family home) gradually becomes transformed into an observatory where experimental protocols may be relentlessly implemented. Thus, the far-from-perfect, but nevertheless livable and familiar life-world is progressively destroyed. Indeed, the duck mirrors the fate of the human inhabitants. In the end, Hedvig herself becomes the 'little victim' (as Spalding names it) of Greger's effort to change the world into an experimental setting. In more than one respect, the wild duck mirrors and anticipates the ultimate effort of modern science to transform a limited but valued *world* into a manageable, predictable and computable *environment*.

The romantic mode of perception constitutes the antipode of the scientific one. In Ibsen's play the romantic perception is most apparent in the speech acts of Gregers and Hedvig. In this perception, water is not a stimulus, but a grand and mysterious force of life, referred to as 'the sea', 'the vasty deep', etc. The christmas tree is not a stimulus, allowing the animal to display certain patterns of behaviour (such as nestling or looking for shelter), but a miserable substitute for a grand and mysterious force of life referred to as 'the forest', 'the wide open spaces', etc. The loft itself is a strange, mysterious, altogether different world, and the wild duck its *most eminent* inhabitant.[12] Indeed, the romantic gaze allows the animal to emerge as enigmatic and awe-inspiring, because of its silence, its wisdom, its intimacy with the basic forces of life. By far the most important reason for the wild duck to be the 'most eminent' inhabitant is the fact that she is still wild. 'There's so much that's strange about the wild duck. No one knows her', Hedvig tells us. And elsewhere she says that 'If I suddenly – without thinking – remember what's in there, I always think of it as being … the vasty deep' (Ibsen 1980, p. 163).

This struggle between the scientific and the romantic gaze, acted out in Ibsen's play, is not altogether absent in the pioneer documents of contemporary science mentioned above. Spalding for instance concedes that, from a romantic perspective, the scientific account must seem miserably inadequate. Moreover, he stresses that a 'most royal personage' is not observed so meticiously as is the modern research animal, thus suggesting that the gaze of science adorns the animal with a new kind of splendour, rather than erasing it altogether.

On having seen the duck, Gregers makes the following comment: 'Just make sure she never gets a glimpse of the sky or the sea' (p. 152). Experimentally speaking, Gregers seems to hint at introducing a new variable: full exposure to the stimuli of light and water. His remark could thus easily be transcribed in accordance with the basic formula of science, *What happens if*.... What happens if a semi-domesticated bird suddenly finds herself exposed to her natural state of life? Will it immediately release its original repertoire of natural responses? From a romantic perspective, however, the sky and the sea are not mere stimuli, but basic forces of life bound to reveal the superficial nature of domestication. Rather that exposing the research animal to an additional condition, Greger's intervention would entail the abolishment of all limitations, of all 'conditions'. It would constitute something like an experiment indeed, but of a romantic type, an anti-experiment so to speak, introducing the one 'condition' (i.e. 'nature', 'the elementary forces of life', etc.) that puts an end to the very logic, the very practice of scientific conditioning. Romantic experimentation goes beyond the confines of the scientific approach. Whereas scientific experimentation is basically directed at introducing limitations and disruptions, or at replacing natural conditions by artificial ones, romantic experimentation is basically directed on transcending all artificial limits, and on replacing an impoverished environment by a natural world. In an entry entitled *Anti-Darwin*, dating from 1888, Nietzsche articulates such a romantic-experimental point of view by contending that, at least in the case of human beings, domestication is bound to remain superficial – one cannot *dénaturer la nature* (1980, p. 315) – and history is like a series of experiments that verify this claim. Indeed, the research on an animal, conducted by the Ekdals, is parallelled by an experiment with a human subject conducted by Gregers. What happens if a human being suddenly finds himself deprived of his illusions and exposed to the truth? Gregers is convinced of the fact that the person involved will become free and happy (much like the duck would be happy if she would somehow manage to escape). Sadly enough, however, he will find his romantic hypothesis refuted.[13]

ETHICAL DIMENSION

Thus, *The Wild Duck* stages the struggle between two modes of perception, two important speech genres of Ibsen's epoch (and ours), the scientific and the romantic. The new science, however, did not yet manage to establish itself as a legitimate practice. The basic import of Ibsen's play resides in the fact that it allows us to discern important aspects of the ethical dimension of this science *in statu nascendi*, this animal science to be. Three aspects can be distinguished, namely: the well-being of the research animal, the integrity of the research animal and the death of the research animal.

Well-being of the research animal

When Gregers asks Hedvig what her father and grandfather are doing with the duck, she answers that they care for it and build things for it. Apparently, the new science, emerging at the close of the nineteenth century, *cares* for its animals. In this respect, it constitutes a rupture with the traditional scientific practice of dissecting animal – an atrocious practice marked by an astonishing disregard for the animal's well-being. A large number of studies have been published ever since on how the well-being of laboratory animals can be maintained and further improved, how animal suffering and the side-effects of 'laboratorification' can be reduced, etc. (Fox 1986). A much more 'humane' animal science, continuously on the alert as to whether the animal subject is doing well, came to replace the brutal and sinister practices of nineteenth century vivisection. On the other hand it must be noticed that, whereas vivisection was performed by a limited number of university professors, affecting only the ultimate hours of the deplorable animal's life, the 'humanisation' of animal research allowed it to become a large-scale phenomenon, affecting almost the research animal's complete life span. As the 'acute' method of Bernard was replaced by the 'chronic' method of Pavlov, Long-term monitoring of animals replaced the brutal but temporary techniques of former times.[14]

Integrity of the research animal

Even if physical well-being is secured, the animal may still be harmed in its integrity. From the scientific point of view, this must seem incomprehensible. How can integrity be something else than well-being? The romantic position, however, insists. Even if the animal (such as the wild duck) is reported to be doing 'extraordinarily well', the separation from its natural environment, from 'all her family' as Hedvig phrases it, poses a violent intrusion upon the animal's way-of-being. The romantic view stresses that the animal suffers from loss of dignity and grace, as mystery gives way to docility. By impoverishing the

animal's environment, by drastically reducing its behavioural repertoire to a limited set of basic constituents, the new science reveals that it is still a *violent* practice, although brute and physical violence has indeed been replaced by other, more refined forms of violence, such as separation, deprivation, domestication, etc. – that is, by a violence more humane, but more far-reaching and subtle as well. The animal subjects are still 'victims' (Spalding). Whereas the scientific gaze aims at transforming the animal into a research animal, the romantic gaze tries to restore and recover its status as an awe-inspiring, mysterious being, at one with its natural world.

The death of the research animal

In *The Wild Duck*, the inevitable death of the research animal is alluded to at several occasions. Sacrificing the animal constitutes the final act of the standard protocol of animal research, an indispensable element of its inherent logic. From a romantic point of view, the inevitability of death has a more tragic import. 'I'd like to wring the neck of that damned wild duck', Hjalmar tells us in Act five, for this would put an end to the experiment. From the scientific point of view, it is something which defies further explanation.[15] As soon as the experiment is concluded, the animal has to be 'euthanised' – by way of cerebral dislocation, as an animal ethics committees nowadays would call it.

FROM AWE-INSPIRING NATURE TO MANAGED ENVIRONMENT

Rather than merely affecting the research animal *as such*, the experimental gaze affects its way-of-being-in-the-world. Out there, in the wild, the duck had been at one with nature. But now the duck's life is reduced to a limited number of typical, predictable behaviours, while the natural world *at large* is being reduced to a limited number of manageable conditions or stimuli, all of them replaceable by artificial set-ups and contrivances (such as Ekdal's water-trough, replacing the original lake). The well-being of the animal itself does not seem to be affected by these procedures. The romantic view, however, will never accept such a conclusion. Nature is more than simply an enumeration of chemico-physical conditions, and the wild duck in captivity is bound to degenerate, whatever researchers do or devise in order to prevent it. On the other hand, notwithstanding the sultry atmosphere inside the loft, the radiance of life, the 'eminence' of being the wildest inhabitant of the loft, the aura of having once been at-one-with-nature never leaves the duck completely. Rather, it remains sensible throughout the play, reminding visitors of the fact that the inconspicuous animal really belongs to another world, to a more natural environment. The sense that something is disturbed or disrupted is never extinguished completely.

FINAL COMMENTS

This article is a re-reading of an important chapter in the history of animal research. The research animal whose birth was recorded almost simultaneously in the writings of Spalding, Ibsen and Morgan is still present in our world, while the struggle between the romantic and the scientific understanding of animals still constitutes the backdrop of contemporary moral debates on animal research. Whereas the scientific perception stresses the importance of the research animal's well-being, the romantic view will point to the 'ontological' violence at work in this all-too-humane practice, affecting the research animal's integrity rather than its well-being.

Using Ibsen's play as point of departure concurs with Heidegger's maxim that works of art, rather than the minutes and protocols of science, constitute the place where instances of *aletheia* – such as the emergence of a new human-animal-relationship – are likely to occur. The work of art announces, discerns and stages for the first time an important event, about to realise itself in practice. If scientific documents are analysed with equal care, however, it becomes clear that similar instances of *aletheia* reveal themselves in the records of science as well. Indeed, some scientific documents (such as, for example, Spalding's original account) read like novels. While certain works of arts may well function as delicate seismographs of unprecedented truths, similar instances of openness and revelation present themselves within the discourses of science as well. And whereas forms of disclosure and discovery may emerge within the realm of science, literary documents may be obscuring and concealing. It would be a prejudice to regard the literary work as privileged *per se*.

The Wild Duck records the beginnings a new form of human-animal interaction, a new scientific animal practice, that has grown into a large-scale, animal-consuming phenomenon ever since. Meanwhile, the nineteenth century practice of vivisection has change dramatically, as anaesthetics were introduced, long-term relationships with researchers and their animals evolved and research proposals came to be examined and scrutinised by animal ethics committees. In recent years, the genetic (rather than surgical or toxicological) modification of animals emerged as a new paradigm for research, producing once again a new type of research animal: the genetically modified animal. For these and other chapters in the history of animal research, together with their literary counterparts, similar studies could be written. At times, the romantic understanding of animals found itself in fierce opposition to the scientific approach, while on other occasions it succeeded in initiating important research programmes, such as the practice of closely observing animals in the wild (where they are able to display the full potential of their behavioural repertoire) rather than in prefabricated surroundings. Indeed, the scientific and the romantic perspective do not completely exclude one another. The experimental attitude is not completely foreign

to a romantic position, although a romantic experiment amounts to something like unconditional exposure to truth, to the wild or the unknown, rather than to the controlled variables of science. And the romantic view is never completely absent in scientific discourse. The following quote, borrowed from Lorenz, may stand as an example: 'No man ... could physically bring himself to stare at fishes, birds or mammals as persistently as is necessary in order to take stock of the behavioural patterns of a species unless his eyes were bound to the object of his observation in that spell-bound gaze which is not motivated by any conscious effort to gain knowledge but by that mysterious charm that the beauty of living creatures works on some of us' (Cited in Ewer 1968, p. 2).

NOTES

[1] Although *The Origin of Species* contains a few remarks on ducks (notably the one concerning a comparison of the weight of bones of wild and domesticated ducks, 1859/1985, p. 74), the focus is on the domestic keeping of pigeons, a wide-spread hobby among the members of Darwin's social class at that time. It is important to stress, however, that the issue of any direct influence of quotes from Darwin on the genesis of Ibsen's play, as well as the issue of whether Ibsen was in the habit of reading Darwin himself or rather relied on secondary (notably newspaper) sources, is not so relevant to my argument. Darwin was 'in the air' in those days, and Darwin-like ideas and phrases were collective cultural property, inciting intellectual discussion and comments in many different circles throughout Europe. An important aspect of Ibsen's talent was indeed his almost seismographic sensitivity for the major intellectual discussions of his era. For more details on Darwin's influence on Ibsen see: Shideler (1997).

[2] When in 1854 Darwin started to collect pigeons and ducks out of scientific interest, Desmond and Moore (1991) tell us, 'it was hard to realize the novelty of his move. Most naturalists disdained pigeons and poultry. Science was not done in the farmyard. The gentry might have kept ornamental ducks on shooting estates ... but such gamekeeping was a world removed from contemplative philosophy' (p. 426).

[3] The house of the Maberley family was the parental residence of the philosopher Bertrand Russell. His mother actually assisted Spalding in some of his research.

[4] Notably the 'marvellous', 'wonderful' and avidly mystified phenomena of instinct. J.H. van den Berg (1961) points out that modern science basically consists in an 'exercise in seeing', an effort at resisting the marvellous – a *lutte contre le merveilleux*.

[5] 'In no case may we interpret an action as the outcome of the exercise of a higher psychological faculty, if it can be interpreted as the outcome of the exercise of one which stand lower on the psychological scale' (1894/1993, p. 53).

[6] 'Nothing is more admirable than the skill of animals. One may watch by the hour with ever renewed delight the marvellously delicate adjustments involved in the sailing flight of sea-gulls' (p. 161).

[7] Only the dog seems absent in the play – *seems*, because, as a matter of fact, an anecdote about a dog is present, and even of considerable importance to the plot. It was a 'clever dog' that hunted down the duck, after she had been hit by a hunter's bullet and before she was handed over to the Ekdal family. In a famous experiment, Morgan demonstrated that

the cleverness attributed to dogs by common sense seems overrated as soon as the animal's behaviour is observed carefully and systematically.

[8] In his casting instructions, Ibsen placed particular emphasis on lighting and it is different in every act. The aspect of lighting is 'far more subtly worked out than in any of the earlier Ibsen dramas' (Beyer 1978, p. 138). The light is brilliant (Act 1), dimmed (Act 2), bright (Act 3), declining (Act 4) and grey (Act 5).

[9] 'Time has stopped in there with the wild duck', Gregers notices (p. 162), a fact that can be interpreted both in romantic terms (adding to the mystic stillness of the loft) and in scientific terms (ordinary time is suspended, congealed, controlled, etc.).

[10] One of the observations made by Ekdal is that pigeons nestle in high and chickens in low places. The presence of both conditions allows them to display their natural pattern of behaviour.

[11] Perhaps he could even have short-circuited his dreams about 'revolutionising photography' and his daily fiddlings in the loft rather directly. Morgan used a sequence of stills from the pioneering work on high-speed photography by Muybridge: an innovative series of photographs that proved that the transmission of nervous impulse takes time (Morgan 1894/1993, Boakes 1984).

[12] The phrase *for vildanden er vel den aller fornemste derinde* (Ibsen 1908, p. 268) is translated by Meyer as *The wild duck's the most important thing in there, isn't it?* (p. 163); but 'eminent' seems a better translation of *fornemste*.

[13] Gregers' objective is to restore frank relations between Hjalmar and his wife 'by simply blurting out the truth, and then asking them ... whether they do not feel much the better for it' (Shaw 1891, p. 99).

[14] In fact, this transition from the horrible practice of vivisection to the more humane one of systematic observation can be compared to the transition, described by Foucault, from the gruesome penal practices of the early modern regime to the more humane penal practices of the modern one, with its elaborate techniques for closely observing and monitoring human subjects. Yet, whereas the spectacular executions of the grotesque era were performed in public (preferably on the market square), nineteenth century vivisection would normally take place in the basement of some academic fortress. And its historical correlate would be the secret atrocities of the gothic novel rather than the Rabelais-styled punishment of the Renaissance.

[15] Among the strange, unusual objects in the loft there is a book containing the picture of death with an hour-glass – perhaps an allusion to the inevitable death of the research animal.

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