



## Poems on Chernobyl

The following two poems are reprinted with the kind permission of the poet, from Mario Petrucci's *Heavy Water: a Poem for Chernobyl*, published by Enitharmon Press.

*Heavy Water* was inspired by the book *Voices from Chernobyl* by Svetlana Alexievich, (translated by Antonina Bouis, published by Aurum Press) which records interviews with the survivors of Chernobyl.

Copies of *Heavy Water* may be ordered from Enitharmon Press at <http://www.enitharmon.co.uk>, or direct from the poet at [www.mariopetrucci.com](http://www.mariopetrucci.com)

Some background material on the accident at Chernobyl may be advisable as an introduction to the poem.

Also helpful is the information that the slabs for the 'sarcophagus' around Ukritye were put up with the help of helicopters and robots - and the haste in constructing it is said to be a cause of the cracks which have developed in it (See '*Voices from Chernobyl*', p.2).

The following pages include questions, which have been discussed with the poet, and detailed notes on the material,

*Teachers are invited to send poems and other work by their classes arising from work on these poems, by email, to [scnd@banthebomb.org](mailto:scnd@banthebomb.org)*

## UKRITYE

*Ukritye ('The Shelter') is the fourth reactor of the Chernobyl complex.*

Even the robots refuse. Down tools. Jerk up  
their blocked heads, shiver in invisible hail. Helicopters  
spin feet from disaster, caught in that upwards cone  
of technicide - then ditch elsewhere, spill black running guts.  
Not the Firemen. In black rubber gloves and leather boots  
they walk upright, silent as brides. Uppers begin  
to melt. Soles grow too hot for blood. Still they shovel  
the graphite that is erasing marrow, spine, balls -  
that kick-starts their DNA to black and purple liquid life.  
Then the Soldiers. Nervous as children. They re-make it -  
erect slabs with the wide stare of the innocent, crosshatch  
the wreck roughly with steel, fill it in with that grey  
crayon of State Concrete. In soiled beds, in the dreams  
of their mothers, they liquefy. Yet Spring still chooses  
this forest, where no deer graze and roots strike upwards.  
Fissures open in the cement - rain finds them. They grow:  
puff spores of poison. Concrete and lead can only take  
so much. What remains must be done by flesh.

## FENCE

This side of the fence  
is clean. That side  
dirty. Understand?

You must forget  
that soil is like skin.  
Or interlocking scales

on a dragon. Dirty  
Clean - is all that matters  
here. Imagine a sheet

of glass coming down  
from the sky. It's easy  
no? On this side

you can breathe  
freely. Your cow can  
eat the grass. You can

have children. That side  
you must wear a mask  
and change the filter

every four hours.  
You ask - What if my cow  
leans over the fence?

Personally I say  
it depends which end. But  
we have no instructions

for that. It is up to you  
to make sure your cow  
is not so stupid.

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## Initial Discussion & Questions on the Poetry

### Initial discussion

The poet considers that responses to the poems will be most valuable if the students are first allowed to explore their feelings and thoughts about it before any close textual analysis is undertaken. A general question such as 'How do you react to this poem? What feelings does it arouse in you?' could start a class discussion.

### Questions

The following questions on each poem (which have been discussed with the poet) are divided into three sections: *Understanding*, *Form and Structure*, and *Follow up work*.

For information on the answers see the [notes](#) section

### Questions on 'Ukritye'

#### Understanding

1. '*Ukritye*' means '*shelter*'. Why do you think the author chose this as a title?
2. '*Even the robots refuse*'. How does this sentence relate to the last lines of the poem, '*Concrete and lead can only take/so much. What remains must be done by flesh*'?
3. Comment on '*invisible hail*'.
4. What is meant by '*that upwards cone/of technicide*'?
5. '*Black running guts*': what is being described here? Why is it a particularly appropriate image?
6. What does '*silent as brides*' suggest to you?
7. '*Still they shovel ... liquid life*': what is being described here?
8. Why do you think the soldiers are compared to children and described as having '*the wide stare of the innocent*'?
9. Why is the word '*crosshatch*' used in the sixth stanza? What word does it relate to in the following stanza? Why do you think the crayon image is chosen for concrete - something we think of as solid?
10. Comment on the effect of: '*liquefy*', '*no deer graze*', '*roots strike upwards*', '*puff spores*'.
11. '*Yet Spring still chooses/this forest*'. What does this mean?

## Form and Structure

12. What is the form of the poem? What is the overall effect of this form?
13. Pick out an example of alliteration, an example of assonance (similar vowel sounds), an example of consonance (similar consonant sounds at the ends of words rather than, like alliteration, at the beginning) from the poem and discuss their effect in the line/stanza in which they occur.
14. Why do you think the words *Firemen*, *Soldiers*, *State Concrete* and *Spring* all have capital letters in the poem?

## Follow up work

'*Ukritye*' means '*The Shelter*'. Write a poem about something else that is supposed to offer shelter and perhaps doesn't.

## Questions on '*Fence*'

### Understanding

1. Who do you think is speaking in this poem? Who is he or she speaking to? What kind of a person do you think he or she is?
2. '*This side clean. That side dirty*'. What do 'clean' and 'dirty' mean here?
3. '*You must forget that soil is like skin*'. In what ways might soil be like skin where fallout is concerned?
4. '*Imagine a sheet of glass coming down from the sky*'. Why does the speaker suggest this?
5. What do you think of the way the speaker answers the question 'What if my cow leans over the fence?'

### Form and Structure

6. What is the effect of using short lines and three-line stanzas in this poem?
7. Look at where the words '*clean*' and '*dirty*' are placed in stanzas one and three. Why do you think this is?
8. Most of the lines run on in meaning to the next line, even when the next line begins a new stanza, e.g.  
*Or interlocking scales  
on a dragon.*

Look carefully at the lines where the sense runs on into the next line or stanza. Why do you think the author made the break in the line where he did?

9. Why do you think the last word in the poem is '*stupid*'?

### Follow-up work

Imagine a nuclear accident has taken place in a reactor in Scotland. Write a poem or short conversation/story from the point of view either of an official explaining what has happened to a member of the public or from the point of view a member of the public wanting to know what has happened from an official.

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### Notes on the Answers

#### 'Ukritye'

#### Understanding

1. '*Ukritye*' means '*shelter*'. Why do you think the author chose this as a title?

Answers could focus on the irony of the name for something which is now extremely dangerous. The idea of a 'shelter' as something that contains as well as protects could be explored, looking at the nuclear processes which it was designed to contain and protect and the harmful radiation which it now contains. The discussion could be widened to look at other things designed to protect which may in fact do the opposite.

2. '*Even the robots refuse*'. How does this sentence relate to the last lines of the poem, '*Concrete and lead can only take/so much. What remains must be done by flesh*'?

The inadequacies of technology to deal with 'technicide' link the first and last lines of the poem. Discussion here could point to the interweaving throughout the poem of images of man-made things (which have, after all, caused the disaster), and living organisms. In fact, the robots were damaged by the radiation and it was the soldiers who did the work of cleaning up (see '*Voices from Chernobyl*', p.65).

It is not accidental that 'robots' is the first noun in the poem and 'flesh' the last. The final emphasis on the word puts the responsibility (as well as the brunt of the

consequences) on human beings. The implications of the disaster for 'flesh' are at the heart of the poem and the double meaning of 'Concrete and lead can only take/So much', with the pun on 'take' = 'contain' and 'take' = 'bear' (the latter sense more appropriate to 'flesh'), underscores with terrible irony the limitations (technical and physical) of human beings themselves, who cannot 'take' the radiation dose they intend the concrete and lead to contain. The failure of the robots and the failure of the concrete and lead 'sarcophagus' make the point that manmade things can't completely deal with the consequences of human folly/incompetence - ultimately human beings (and all other 'flesh' ) must pay a price.

### 3. Comment on *'invisible hail'*.

Discussion of this image could focus on the insidious nature of radiation and why 'hail' is a more forceful and appropriate image than 'rain'.

### 4. What is meant by *'that upwards cone/of technicide'*?

The cone is the updraft from the fire in the reactor and/or the radiation streaming from the exposed/open core. Discussion of 'technicide' could focus on words of similar derivation - infanticide, genocide etc - which are deliberate echoes in this coinage. It might be useful to discuss the validity and effect of coining words in poetry. In this case is the harsh sound of the word important?

### 5. *'Black running guts'*: what is being described here? Why is it a particularly appropriate image?

Discussion of this image could be linked to the point made above about the interweaving of images of manmade things and living organisms. The 'black running guts' - the helicopter crew and soldiers - is an image that disquietingly leads in to the other images of physical malfunction in the poem. 'Black' (suggesting 'blackened' e.g. by fire) and 'running' (suggesting not only meltdown but also diarrhoea, loss of control of bodily functions) are both highly charged adjectives in this context. 'Running' also contrasts with the controlled demeanour of the firemen.

### 6. What does *'silent as brides'* suggest to you?

This is very much an open-ended image which may suggest a rich variety of associations. Discussion could focus on the feelings of anticipation/nervousness a bride might be expected to have, the sense in which the Firemen's entry into the radiation zone around the reactor and into the reactor itself may be compared to marriage (entry into the unknown, irrevocable change of ones life etc). In fact, skewed images of marriage and sexuality are recurring motifs in Heavy Water as a whole. Why would the author use such imagery at all?

### 7. *'Still they shovel ... liquid life'*: what is being described here?

The firemen are shovelling graphite. The reactors at Chernobyl were graphite-moderated, graphite being used to slow down neutrons in reactors of this type. When the reactor exploded radioactive graphite was ejected from its core and burned for nine days. Acute radioactivity affects bone marrow, causing blood disorders like leukaemia ('erasing marrow'), genetic abnormalities etc ('kick-starts their DNA') in those who survive. The highest proportion of those affected by radiation sickness at Chernobyl was among the firemen. See <http://www.banthebomb.org/archives/educ/radioac.shtml> for information on the effects of short-term high-dose radiation exposure on the body.

8. Why do you think the soldiers are compared to children and described as having *'the wide stare of the innocent'*?

Discussion here could focus on the lack of preparedness for and understanding of the nature of the disaster and the way in which the image underlines the vulnerability of the soldiers.

9. Why is the word *'crosshatch'* used in the sixth stanza? What word does it relate to in the following stanza? Why do you think the crayon image is chosen for concrete - something we think of as solid?

Crosshatching refers to the network of steel beams erected around the reactor before encasing it in concrete. It is a word normally used for the technique of shading that gives depth to a drawing and it relates to 'crayon' in the next stanza. Discussion could focus on the associations with paper and 'soft' crayon - blurring, impermanence etc and how these images suggest the porous nature of the supposedly impermeable casing - an idea which the poet goes on to develop.

10. Comment on the effect of: *'liquefy'*, *'no deer graze'*, *'roots strike upwards'*, *'puff spores'*.

'Liquefy' suggests dissolution and links to the fourth and fifth stanzas - particularly 'black and purple liquid life'. 'No deer graze' suggests sterility, the poisoning of the land (there is a possible (possibly unintentional) echo of 'no birds sing' from Keats' 'La Belle Dame Sans Merci', perhaps worth pointing out if students have encountered this poem). 'Roots strike upwards' is an image of unnatural growth which can be linked to other deforming effects of radiation. 'Puff' is both a seemingly innocuous word (students could be invited to think of the kinds of context in which it is often used) and one with sinister associations 'puff adder', 'puffed-up' etc. The link with 'spores' may suggest 'puffballs' which, though not poisonous, have a sinister appearance (and behind both images lurks the idea of the mushroom cloud of an atomic explosion). The poet, who is also a physicist, has stated that one of the associations he had in mind for 'spores' was an atomistic image and the way reactors generate new atomic 'poisons' such as plutonium. He writes: 'however many safety loops are built into them, nuclear reactors must operate - by their very nature - on the brink of a massive Chain Reaction. They also generate plutonium, which can be used to make nuclear



weapons. It is therefore not entirely unfair to view them - sophisticated as they are - as unexploded, bomb-producing bombs.'

11. '*Yet Spring still chooses/this forest*'. What does this mean?

Discussion could cover both the seeming normality of the return of spring (leaves on trees etc) and the much more sinister spring suggested by the 'puff spores' released through the effects of spring rain (contrasted with the normal effects of spring rain).

There may also be a suggestion here that Nature, unlike us, remains unaware of what has happened - is, in fact, even more 'innocent' and vulnerable than the soldiers. Or does the image suggest strength and perseverance on the part of Nature, whether or not Nature is 'unaware' of what has been done?

### **Form and Structure**

12. What is the form of the poem? What is the overall effect of this form?

Two-line stanzas, loosely based on iambic pentameter and with frequent run-on lines. The very short stanzas heighten a deliberate jerkiness in the movement of the poem, signalled in the very first line, where the physical effect of the robots jerking up their heads is enacted in the jerk between the line break and the object of the verb 'jerk up/their blocked heads'.

Other examples could be discussed where the verb is at the end of one line (focussing on its sense and sound, as in 'shovel', 'crosshatch') and its object at the beginning of the next. It may be illuminating for the students to consider what would be lost if a different line length and/or stanza arrangement were used, particularly what would be lost or gained by having different line breaks.

13. Pick out an example of alliteration, an example of assonance (similar vowel sounds), an example of consonance (similar consonant sounds at the ends of words rather than, like alliteration, at the beginning) from the poem and discuss their effect in the line/stanza in which they occur.

Students could, e.g., consider the hissing 's' /'sh' alliterations in the fourth stanza, the consonance linking 'guts' and 'boots' in the second and third stanzas, the assonance of the long vowels in 'grey crayon of State' (compare the effect with the short 'i' sounds in the verbs in the second stanza which add to the effect of rapid movement).

14. Why do you think the words *Firemen*, *Soldiers*, *State Concrete* and *Spring* all have capital letters in the poem?

This could begin with a discussion of the usual uses of capital letters and then move to a discussion whether any of these words/phrases would normally have a capital letter. From this the idea of suggesting (false) importance by using capitals

could be introduced. All the capitalised words refer to people/things that normally are supposed to convey an idea of reassurance and (except for 'spring') authority. Spring conveys reassurance because of its normality and seeming inevitability. In a sense the use of capitals mocks the impotence of human strategies for dealing with disaster on this scale.

## **'Fence'**

### **Understanding**

1. Who do you think is speaking in this poem? Who is he or she speaking to? What kind of a person do you think he or she is?

Class might suggest an official or someone in an official position - e.g. a soldier - speaking to a local peasant-farmer. Evidence of this could be the tone of the speaker 'Understand?', 'It's easy/no?' suggest someone imagining they have superior understanding and intelligence; 'we have no instructions/for that' indicates someone who is in a fairly lowly position and who is 'only obeying orders'. The question 'What if my cow/leans over the fence?' is the question a peasant-farmer might ask.

The class could go on to discuss whether this official is wholly stupid, or just deliberately ignoring the realities of the situation, or fully aware of the realities and helplessly conforming with his orders, with a kind of grim humour. You could also discuss the character of the peasant being spoken to. It might be interesting to discuss whether, and why, the official is likely to be a man and the person spoken to a woman.

2. '*This side clean. That side dirty*'. What do 'clean' and 'dirty' mean here?

'Clean' = non-contaminated by radiation (or not contaminated to a dangerous level) and 'dirty' = the opposite. Villages around Chernobyl were designated 'clean' and 'dirty' (see 'Voices from Chernobyl'). This could lead to a discussion of the emotional connotations of 'clean' and 'dirty' as well as the pointlessness of the designations in this context.

3. '*You must forget that soil is like skin*'. In what ways might soil be like skin where fallout is concerned?

Discussion here could be linked to the alternative image 'like interlocking scales on a dragon'. Both point to the impossibility of separating one atomic particle from another and of drawing a dividing line between radioactive and non-radioactive soil in the same area.

The image of a 'dragon' is interesting and the class could be encouraged to explore its associations (with fire, monsters etc but also perhaps with the Chinese dragons of nature which also brought good things).

4. *'Imagine a sheet of glass coming down from the sky'*. Why does the speaker suggest this?

To try to convey the idea of an invisible barrier between the contaminated and the non-contaminated land. It could be pointed out that this attempt to imagine an invisible, and in fact non-existent barrier, only draws attention to the fact that radiation is invisible (but only too present).

5. What do you think of the way the speaker answers the question 'What if my cow leans over the fence?'

Discussion here could link to question 1 and the kind of person the speaker is. Points that could be covered: does the question 'What if my cow ...' suggest a 'softening' or humour; or is it the peasant interrupting or testing the extent of the speaker's authority? Was the question ever actually asked by the peasant? Is the speaker mocking the peasant, being sarcastic, or is he/she permitting a little humanity to enter the situation? The answer is plainly ludicrous - but it may be that the only possible response in a situation like this which is almost beyond comprehension is a ludicrous one. Do you think the author wants you - the reader - to be certain or unsure of what the question means? Why?

### **Form and Structure**

6. What is the effect of using short lines and three-line stanzas in this poem?

The short lines and stanzas allow emphasis to be given to key words at the end/beginning of lines (see question 7 below) and also often require sentences to run on from one line to the next or one stanza to the next: this creates an effect of suspense (see question 8 below) and demonstrates in the form of the poem the 'interlocking' nature of things.

7. Look at where the words '*clean*' and '*dirty*' are placed in stanzas one and three. Why do you think this is?

Class could discuss the pattern of the words on the page (in stanza one 'dirty' is immediately beneath 'clean' and in stanza three they are diagonally opposite) and the pattern of the words when the poem is read aloud: the first stressed word at the beginning of a line is usually emphasized more than the following words, while the word at the end will be emphasized by the very slight, but audible, pause caused by the line-break. They might also consider why the author uses capitals for Dirty and Clean the second time they are used. Is it to suggest something larger or more ominous than mere cleanliness or dirt?

8. Most of the lines run on in meaning to the next line, even when the next line begins a new stanza, e.g.

*Or interlocking scales  
on a dragon.*

Look carefully at the lines where the sense runs on into the next line or stanza. Why do you think the author made the break in the line where he did?

Discussion could be linked back to the exploration of the form of the poem (question 6). Class could be encouraged to find examples where the word at the end of the line raises expectations which the following line may or may not fulfil (e.g. scales - one might expect the scales of justice or the scales of fish but the image is of scales on a dragon, see question 3 above). They should also look at emphasis and why particular words are emphasised.

9. Why do you think the last word in the poem is '*stupid*'?

This could be a wide-ranging discussion starting from the stupidity of the assumptions behind the poem and what or who in the poem is really being called 'stupid' but going beyond the confines of the poem to link up with discussion of 'Ukritye' - the question of human competence, blind faith in technology, refusal to accept reality, etc.

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