

Excerpts from the murder mystery novel *The Poison Oracle*, by Peter Dickinson (1974).

On linguistic fieldwork and the 'marsh language'

"Translator's Note"

The language of the marsh-people cannot be translated directly into an English word-for-word equivalent. All the sentences that appear here are paraphrases. I have used archaic word-orders to do this, because the language is somewhat of that nature; colloquialisms do exist, but are used only when speaking to children, or occasionally when wishing to imply that an adult is behaving in a childish manner. For those who are interested, here is a specimen of how the language actually works: The formal greeting on page 52 "Thy buffaloes may rest in my wallow" consists of the single word-accretion Kt!urocharha'ygharlocht!in. This accretion has three roots of relationship: -och- comes twice and implies the relationship of property rights, linking in the first case Kt!u which is the locative of K!tu, a wallow, with -ar- which is the first person root unmodified by any clan stop; the -r- in this section is meaningless, a euphony insert. The second -och- links -gharal- (the plural form of garal, a buffalo) with -t!in which is the second-person-singular suffix tinh, modified with a ninth-clan stop and closure. The central relationship of permission is expressed by -ha'y- where the y is a breathed uvular semivowel modifying the normal permissive root -ha//- to show that the permission is not to be taken for granted as this is merely a formal greeting.

The linguist Morris describes the marsh language to a friend

"Well, there are about a dozen languages left in the world which are not dialects of other languages and are spoken exclusively by a coherent group of people. By 'exclusively' I mean they are monoglots. They don't speak any other language. There's a few in New Guinea, a few in Brazil, and a remarkable tribe in the Andaman Islands called the Jarawa. There may be something still in Central Asia, but I doubt it. But the Q'Kuti marshmen are easily the largest and most uncontaminated of such groups, apart perhaps from the Jarawa. From a psycholinguist's point of view, Q'Kut is the most exciting place in the world."

"It doesn't look it."

"No, but the marsh language . . ."

"Can you speak it? How the hell many languages can you speak? You hissed away in Japanese, didn't you, that day I came? Can you speak Chinese? Have you read Chairman Mao in the original?"

"I've only read his thoughts," said Morris, rather bowled over by this sudden spate of eager questions.

"That's great," she breathed.

“I don’t know. I mean, you can understand a language without understanding what somebody is saying. That’s one of the things psycholinguistics is about.”

“Please go on about that,” she said.

“Oh, well, the marshmen have a very interesting language. It contains a number of unique elements, but it lacks a number of other things which we would regard as normal, if not essential. For instance, there are no words and no grammatical structures with which to formulate notions of cause and effect. It can be done, but you have to go a long way round, using very clumsy expressions to achieve it. There are almost no general nouns, either. You see, the marshes are a closed world, in which almost everything is known, and has its own name. They have a few general nouns for things that seem to them mysterious, such as foreigners and particularly witchcraft. But you can’t say ‘plant’, for instance. You can’t even say ‘reed’. You have to name the particular type of reed.”

“That must make life difficult.”

“They get along. Then there’s another aspect of the linguistic-cultural nexus that particularly interests me. You speak the language in sentences, but the sentences are made up not of words but of word-accretions . . .”

“Like those long words in German?”

“A bit like that. But all the word-accretions are constructed round roots of relationship . . .”

“Cousins and things?”

“Not that kind of relationship—or not only. We tend to build up our sentences round verbs. That’s to say our central notions are notions of action. They accrete their words round particular roots which describe the relationship between the various parts of the accretion. Their central notion seems to be a notion of everything’s position in a very complicated network of relationships.”

“Isn’t cause and effect a relationship?”

“Yes, of course it is, but I didn’t say that they had ways of describing all possible relationships—only the ones that seem to matter to them. For instance they can use a single syllable to express a particular personal obligation which it would take us several sentences to attempt to describe. But the thing about cause and effect is that it’s a relationship of such enormous power—I mean for us it is the relationship—it’s what verbs are about—that if you admitted it into a system like the marshmen’s I think it would destroy it—destroy the language, and thus, ultimately, the way of life. I must admit that I find the whole problem of relation-roots absolutely fascinating.”

“I was telling you about the language—well, in fact the whole verbal culture is as rich and sophisticated as anything I’ve come across—certainly anything that exists among illiterate people. It’s not just the language, it’s the way they use it. I’ve never heard anything to touch the songs, which range all the way from little blessings for the birth of a calf to great chanted epics. Those are perfectly marvellous. You get a basic story, but inside it you get dramatic sections, and love lyrics, and witches’ spells—there’s a lot of witchcraft in the marshes—but it isn’t a hotch-potch, it’s shaped and coherent, quite fit to stand up beside anything I’ve read in Western

literature. Anyway, I'm quite certain that as soon as you started tampering with the culture, bringing in outside influences, pop music (I mean, look what's been happening in Java, for instance) Cairo radio, Bible societies, all that, you'd kill the culture dead in a generation and the language in two. Look, half the world these days seems to tear its hair out and beat its breast if a rather dull species of bird is in danger of extinction. It seems to me much more terrible to risk the death of a language."

One of the traditional adornments employed by the makers of the marsh songs was a patterned arrangement and modulation of the successive relation-roots; even an apparently artless lyric would on inspection turn out to contain, for instance, three sections, the outer two using a series of roots in the same order and the central one reversing them. There was none of that in the description of the duel. Word-group after word-group clustered round the same root, the strong (or willed) transitive. The groups themselves were unusually short, the nominal and adjectival elements always the commonest of many possible synonyms, inflected very straightforwardly—straightforwardly, that is, for a language in which it was possible to inflect the nominal element "cheese" so that three syllables meant "the first-pressing cheese made last drought from the milk of my elder brother's three-year-old buffalo". As the heroes closed, the language became drier still.

Morris thrilled to the grammatical surprise, though he was ready for it, the sudden, rare null-root, the expression of general and involuntary action, contorted almost to the end of the longest word-group for many minutes. He was quite sure that the effect was intentional: the fight itself had been a personal matter between two men, moving their own limbs at their own will; but now a different power stirred in Na!ar's dying mouth, as large and impersonal as the movement of the floodwaters or the return of day, for which the null-transitive root was invariably used.

Morris visits the marsh people

"People," he called, "I am a good-comer. Do not fear me."

He would have liked to add that they mustn't be afraid of Dinah, either, but the language had the wrong mesh to trap that thought; fear is a relationship between A and B, to be expressed by a full root then extended by syllables nominating the poles of the relationship, the whole then modified by various consonantal transfers to the placatory imperative; but the language, for all its richness, contained no word for chimpanzee, nor for any of the more general terms all the way up to "animal"; the only nominal extenders carrying the thought of "unknown living creature" were always applied to the horrors of the moon-world; while to incorporate Dinah's name in the phrase would have turned it into a piece of formal boasting, used normally as a step in the ritual of declaring a blood-feud. Morris swallowed twice, watching the motionless reeds, thinking feverishly of relationships which would not land him in claiming anything that a marshman would think impossible.

"My woman is also a good-comer," he called at last.

Well, Dinah, he thought. Now we're married. Don't worry—I'll divorce you as soon as we're out of this bloody marsh."

He meets their leader, Qab

“Qab,” Morris said. “You hear me speak the words of your people. Kwan of the ninth clan taught me these words. They are not the words of my people and perhaps my tongue will stumble. When I speak unacceptable words, do not think that it is my own soul speaking . . .”

“You propose to tell me lies,” said Qab.

“No, no.”

“Speak then acceptable words. You came to our pastures in the night. You slept in the middle of Tek’s Lesser pond. We heard you calling in the dark. You rose unharmed in the dawn. The witches are your friends.”

Despite the lack of cause-and-effect constructions in the language it was possible to put together a fairly damning case by producing a series of short, unconnected sentences, or single-word accretions, as Qab had done. Morris half-rose until he could reach the roll at the furthest end of his bundles; he opened it and spread it out until Qab could see the ultra-fine mesh of the mosquito net.

“We slept beneath this cloth,” he said. “See how small are the holes. Not even the cleverest witch can pass through.”

Later he adds:

“There is not any witch.”

Briefly, Morris had constructed a phoneme-group which was grammatically (and therefore to marshmen logically) impossible, but at the same time was perfectly clear in its meaning. He said “khu//ralçutlangHo”—“khu//” negative relation-root “-r-” euphony insert “-al-” nominal qualifier ending, inapplicable to relation-roots, “-çu-” positive-identity relation-root, “-tlangHo” nominal qualifier of witchcraft. A rough English equivalent might be “Notness is witch.”

At the end, the author says:

The technical details in the “Note on Translation” at the start are, as far as I know, gibberish, but I was pleased to discover after I’d written the book that there are cultures that have no easy way to express cause and effect in their own language.

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On Dinah the chimpanzee and language use

Morris, the main character, interacts with Dinah

He backed off, extended his right hand palm up and flapped his fingers towards himself several times. He regarded manual sign language as unscientific, but for day-to-day living with a chimpanzee a quick way of saying “Give me that” is essential.

Dinah took hold of the door with both feet and one hand and rattled it hard. Morris made the give-me sign again. Dinah stopped shaking the door and hung considering. She obviously wanted to be let out of the cage, but realised that the dart she held had better bargaining power than that; she might even guess he was going to let her out anyway, so giving him the dart for nothing would be a waste. At any rate she smacked her huge lips together several times, returned the give-me sign, then stuck the fingers of one hand in her mouth: “Food.”

With a sigh Morris knelt by the door, unslung his satchel and spilt the coloured chips of plastic into its lid. Dinah panted with pleasure and squatted down inside the bars to join the game. Morris sorted deftly through the pile, chose the counters he needed and poked them through the door to form a line just in front of her.

large blue triangle: first conditional
white square: Dinah
yellow circle with hole: give
yellow square: thing with no name
blue square: (to) Morris
small blue triangle: second conditional
blue square: Morris
yellow circle with hole: give
green/blue striped square: banana
white square: (to) Dinah

Dinah peered at the symbols as though she were much more short-sighted than in fact she was, sniffing along the line of them in a rhythmic quick-time. She laid the dart down on the yellow square to confirm its identity, but kept a firm hold on it while she did so. (Morris had never cheated her in her life, and could hardly imagine circumstances in which he might be forced to do so, but the possibility seemed to remain vivid in her mind.) She chattered thoughtfully to herself for a few seconds, then made the give-me sign and gestured towards the satchel. Eagerly she picked out the blue/white striped square that meant grapes, then hunted fastidiously until she found the little black triangle they used for the connective conjunction. She added them right at the end of the line and studied her revised message; clearly she realised there was something wrong with it, but it took her some time to discover what, twelve symbols being near the limit of sentence-length she could cope with. At last she moved the second white square to the end of the sentence.

Immediately Morris snatched up a red circle, larger than most of the others, and slapped it down on the floor.

red circle: negative

She lurched away from the door and chattered up and down the wire mesh. On her second return to the door she sulkily removed the green/blue square and the black triangle. Morris considered a moment. He found a green circle and replied.

green circle: positive

Dinah meets the young prince Hadiq

“Dinah will get you some grapes if you ask her,” Morris said slowly.

“Yes, yes,” said the prince, suddenly thrilled. He was both jealous of and fascinated by Dinah.

Morris sorted the necessary symbols on to the coffee-table.

“What do they mean?” said the prince.

“You can say the words as we put them down.”

white crescent: please

white square: Dinah

yellow circle with hole: give

blue/white square: grapes

black square: (to) person other than Morris or Dinah

“The prince must say please to the ape?”

“Well . . .” said Morris, then shrugged.

“OK, OK,” said the prince charmingly. Morris clicked his fingers for Dinah’s attention and she climbed carefully down from her nest on top of the wardrobe, dangling from her left paw the forlorn skeleton of her bunch of grapes. The Prince arranged the symbols in a very precise line. The coffee-table was just the right height for Dinah to read from when she was on all fours, and she did so with her usual quick sniffing sound, as though she somehow smelt the meaning. The message puzzled her. She read it three times, then with a dubious gesture offered the grape-skeleton to the prince, who backed away as if it were something the Koran declared unclean. Morris sorted through the satchel again and made a second message.

yellow square: thing with no name

red circle with hole: negative verb

blue/white square: grapes

Dinah sniffed at the symbols, laid the grape-skeleton down on the yellow square and sniffed at the symbols again. She chattered a little to herself as she re-read the first message, then moved resolutely towards the kitchen door, where she stopped and glanced at Morris over her shoulder. He made a “Go” gesture to her. She looked back and Morris made the “Go” gesture again. With a nervous leap she was gone.

Morris works on the symbols

With a shrug he went to his little work-bench, unlocked a Dinah-proof drawer and took out a sheet of blue plastic. Marking out a precise row of blue crosses was soothing work, and as soon as his little jig-saw began to whine Dinah woke and filled his mind completely. She was always thrilled with excitement when Morris started to cut new symbols, and then unmanageable with disappointment if they merely turned out to be replacements for ones which she had lost or broken, or simply hidden (which happened frequently with the red circles.) She watched the cutting out with panting absorption until he gave her the first complete cross, untrimmed and unpolished, to play with. He stopped work and watched her carry it over to her toy-store. Her own collection of counters was kept in a leather bag; she shook them out on to the floor and, as usual, sorted eagerly through them just in case (Morris believed) one of the symbols meaning fruit had appeared among them. Then she set out a well-known practice sentence:

white square: Dinah

green circle with hole: go

yellow/white square: bed

She barely sniffed at this before flinging herself to the curtain-rail over the door, from there to the top of the bookshelf and from there with a crash and rattle into her nest, where she shook herself a couple of times and chattered while she studied the blue cross she still held in her left hand. Then she lowered herself gently to the floor and loped back to the symbols.

She tried the cross both at the beginning and end of her sentence, removed it, replaced it first with a blue triangle which turned the sentence into one half of a conditional clause, then with the blue square which meant Morris. Morris made a few notes and returned to his crosses.

Morris tells a new friend about his background

“Well, I’m not really a zoologist. My field is psycholinguistics . . .”

“Oh.”

“It’s rather a vague subject—it’s the study of the effect of language on the mind, and one way you can tackle it is by researching into the linguistic abilities of non-human creatures. Currently I’m setting up an experiment to investigate Dinah’s ability to cope with the idea of time.”

“Animals don’t have one.”

“So people say. We’ll see. If you’d asked me five years ago, I’d have said that animals couldn’t understand or construct conditional clauses, but Premack in California taught a chimpanzee called Sarah how to, and Dinah and I have duplicated his work. So why not time?”

“I see. What else?”

“Well, the Sultan is very anxious to make a breakthrough with an experiment for which he can claim some credit, and his idea is that Dinah should have a baby, and then we can see how much she teaches it of what she’s learnt from me.”

Later

Dinah was having trouble with the concept of time. At first, though clearly puzzled by the blue cross being a different shape from any of the other nouns, she naturally attempted to identify the symbol with the egg-timer. Morris had anticipated this, and produced a square counter divided into blue and red along the diagonal.

Blue/red diagonal square: egg-timer.

He had also prepared a couple of other blue-diagonal squares, one for the clepsydra he intended to make out of a coffee-tin, and one for the kitchen timers he had sent for. He thought that Dinah's first move would probably be to try and use the blue cross as a general noun to cover all transparent objects—glass always fascinated her. That wouldn't be too hard to correct by producing the other gadgets—but then she would try to use the cross as a symbol for “gadget”.

Dinah reads for the sultan

“Let her fetch the spring-gun from Dyal and give it to me,” said the Sultan, and without waiting to ask whether this was practicable he called to Dyal to put the gun in front of him on the floor.

Morris laid out a message on the tiles.

white square: Dinah

green circle with hole: go

orange circle with hole: get/fetch/take

yellow square: thing with no name

She sniffed a couple of times at the message, which was a form they normally used for search-games, then set off towards Morris's office. Morris clicked and slapped down the red negative circle. She sniffed at it, then set off in the opposite direction, along the bleak corridor towards where the two guards set. Gaur shrank visibly from her, but Dyal laughed and when she picked up the spring-gun and returned he rose and followed her. She placed the spring-gun on the floor and dubiously compared it with the yellow square. Morris added a positive green circle to the message, and she immediately began to bounce up and down, eager for the banana, then chattered irritably as he spelt out a new message.

white square: Dinah

yellow circle with hole: give

yellow square: thing with no name

black square: (to) person other than Morris or Dinah

purple rectangle: qualifier “big”

“Honestly it was pretty good,” said Anne. “In fact it was marvellous. Only she gave it to the wrong person.”

“Exactly,” said the Sultan, clearly so angered by her intervention that Morris wondered whether his haphazard reading had included some potted Freud.

“Give her a chance,” said Morris. “She’s got a tiny vocabulary, with as few nouns in it as possible, because we’re more interested in her grasp of logical sentence-structure than just lists of words. I told her to give the bloody gun to a big man. That’s the nearest I could get. The language doesn’t contain a name for you.”

The Sultan is murdered mysteriously

To distract Dinah from her physical fidgets and him from his mental ones, Morris got out the plastic counters. Almost the first that spilled out into the lid of the wallet was the black square with the gold hand, which symbolized the Sultan.

He picked it up, stared at it and put it to one side. But Dinah leaned over and with a long arm snatched it back. She too stared at it for a while, panted a little and then prodded her fingers together. It was always exciting when she actually showed she wished to communicate, rather than merely demonstrating like a star pupil that she was able to, so Morris picked out the purple circle with the hole in the centre. Unhesitatingly she placed it to the right of the other:

black square with gold hand: Sultan
purple circle with hole: hurt/be hurt

Morris snapped his fingers encouragingly, made a quick note and then fished out more tokens. He already had quite a bit of evidence about Dinah’s memory processes, but this mostly concerned matters which she had learnt by repetition. There was not much about single events that had made enough impression to stay firm in her mind. She had evidently been impressed by the death of the Sultan.

She seemed to make up her mind:

black square: person other than Dinah, Morris, or Sultan
purple circle with hole: hurt
black square with gold hand: Sultan

She chattered at Morris, and looked with her brown, round eyes into his face, seeking what? Confirmation? Approval of her cleverness? Morris astonished her by rewarding her with a whole bunch of grapes, and while she ate them in her nest he sat quite still, pulling his lip and thinking.

A chimpanzee can communicate. A chimpanzee can be mistaken as to the facts it communicates. Can a chimpanzee lie? With the surface of his mind Morris began to sketch out a possible series of experiments to investigate this problem, but the work did not satisfy his deeper mind.

Dinah gives her testimony in the Sultan’s court

“Now see,” said Morris. “Dinah cannot speak. Her mouth and tongue are not of human shape. She can make a few signs with her hands, as a deaf-and-dumb person does, and when we stood by the body of the Sultan she made a sign to me that the Sultan was hurt, thus.”

He prodded the tips of his fingers together and Dinah, looking up from her search among the counters for the blue/white square that meant grapes, copied him with a puzzled air.

“I am a scholar of languages,” said Morris. “I came to Q’Kut to study the language of the marshmen. But another part of my study is to see to what extent an ape can learn language. We use these little coloured counters for words. Thus.” Morris explained the meaning of each counter as he placed it in position.

white square: Dinah
orange circle with hole: get/fetch/find
black square: person
purple rectangle: (qualifier) big

Dinah sniffed eagerly at the array, looked round the assembly, poked a finger at the qualifier, scampered teasingly round the circle and finished by tugging triumphantly at Gaur’s white robe.

Morris clicked to Dinah who came rushing over for her reward; he showed her two small branches of grapes and gave her one which she ate while he explained the next sentence.

yellow circle: question
white square: Dinah
white circle: eat

green/blue square: banana
He laid the second branch of grapes beside it. Dinah sniffed rapidly, compared the grapes with the noun-square, snickered scornfully and snatched out of Morris’s hand the large red circle which meant “No.”

She watched Morris with dark, excited eyes as she ate the second lot of grapes, already thrilling to her thrilled audience. He explained a new sentence:

white square: Dinah
orange circle with hole: get/fetch/find
black square with gold hand: Sultan

He could see she was puzzled. She sniffed the message several times, turned the black square over, chattered a little, pouted, and loped off to inspect the audience. She paused momentarily at the throne, perhaps reminded of scenes where Hadiq had been present with his father; she also hesitated a short time over Gaur, and longer over the old fat sheikh. At any rate she came scampering back to Morris, prodding her finger-tips together, and then hunted through the counters for the purple circle with the hole. It didn’t take her long to arrange her two-word sentence.

black square with gold hand: Sultan
purple circle with hole: hurt/be hurt

Morris, rather than lose the momentum of the trial, had to ask her a leading question:

yellow circle: question
black square: person
purple circle with hole: hurt/be hurt
black square with gold hand: Sultan

Dinah considered the problem with a protruding lower lip, judiciously nodding her head up and down as if to shake her thoughts into a pattern. Morris offered her only the yes and no symbols, placing them equidistant from her; and though she was slow in coming to her conclusion her arm in the end snaked out with no hesitation and snatched up the large green circle. The room released its breath.

They had already used all the symbols Morris needed for his final question but he held them up again to explain their names and her eyes followed each one to its location in the line of meaning.

white square: Dinah
orange circle with hole: get/fetch/find
black square: person
purple circle with hole: hurt
black square with gold hand: Sultan

Relative clauses had once been a bugbear. A year ago Morris had been brooding on grammatical devices to obviate them; but suddenly, between session and session, Dinah had sorted the problem out for herself, poking the symbols out of the straight until the two halves of the sentence could be read along different lines. By now there was an established grammatical convention whereby relative sentences went at right-angles, the symbol on the corner (in this case the black square) containing in itself the relative link. Her discovery of this principle had been probably the most exciting moment in Morris's life, both for the logical beauty of it, and for the realisation that there might be no limit to her abilities.

So now he was perfectly confident that she would understand the message; he was less sure that her memory would be up to the task of recognition—after all, he well knew how long it takes a quite intelligent human to learn to distinguish one chimpanzee from another.

Very slowly, as if she herself was the hunted creature, her head swung back towards bin Zair, her left hand staying poised in the air for the next pace. She stared at him for one of those unmeasurable times that was probably only half a heartbeat; then she was darting across the floor to him, pulling at his robe, hooting with excitement. The murderer was found.