Abstract. This paper addresses the question of the quasi-synonymity of the verbs tremble and quiver as reflected in the differences in the verbs’ collocational ranges. In the semantic content of the verbs, two tiers of components are identified, namely, the genetic tier and the physical tier. The two tiers do not have an autonomous status and neither are they mere clusters of features but represent hierarchically ordered structures. It is further demonstrated that the potential neutralization of the reference to the physical, outwardly manifested attributes of movement attests to the verbs’ evaluative status. The paper also deals with certain principled connections between the semantic content of the verbs and their syntactic behaviour: the use of the progressive, the rare but possible formation of causative transitive constructions and the recategorization of the semantic content of the verbs in figurative use.

The present paper offers a contrastive semantico-syntactic analysis of the verbs tremble and quiver, with special regard to oscillatory movements of the body or the body part(s).

These verbs are frequently put in contrast and labelled as near-synonyms. The features that are usually identified vary, depending on the respective author or the respective dictionary. In dictionaries the verbs are described, apart from expressing rapid oscillations, as sharing the feature ‘slightness’ (cf. Webster’s New Dictionary of Synonyms 1978: 729, Collins Cobuild English Dictionary 1988: 1180 and 1988: 1559, and New Shorter Oxford English Dictionary 1993: 2453 and 1993: 3382). The types of causes that underlie the movement are mentioned, too, but dictionaries differ considerably as to their repertory. Sometimes the same cause (e.g. fear or excitement) is used as a feature to discriminate between tremble and quiver, sometimes it is identified as a feature uniting the two verbs, i.e. as a feature that the two verbs have in common.

In Levin (1993: 223-224) the verbs tremble and quiver are adduced among the verbs of ‘body-internal states of existence’. Levin states that the verbs “typically take animate objects” and “describe a physical state of the subject that typically is a reflex of a particular psychological or physiological state” and that they may have “another sense involving an inanimate subject” (Levin 1993: 224). In the latter sense they are described as ‘verbs of modes of being involving motion’ (Levin 1993: 251). Faber and Mairal-Usón (1999: 280) mention explicitly neither tremble nor quiver. Nevertheless, within the class of verbs of movement, they identify a semantic subgroup which they define as “to move from side to side/back and forth/up and down repeatedly” and which comprises the verbs swing, rock

and *shake* (needless to say, oscillatory *shake* clearly belongs to the *tremble/quiver* class of verbs). Dixon (1991: 118-119) does not mention *tremble* and *quiver* either, but again, he classes the verb *shiver* as belonging to the group of ‘corporeal verbs’ denoting ‘bodily gestures’ and involving a “human role (which may be extended to higher animals)”. He states, too, that the *shiver* subgroup is constituted by verbs that cannot be used transitively, i.e. they cannot be followed by any NP. Snell-Hornby (1983: 155) classes *tremble* and *quiver* among verbs embodying movement ‘to and fro’, and characterizes *tremble* as indicating “especially fear, but also agitation or weakness”; the verb *quiver* involves “primarily a tremulous motion, as of the wings of a butterfly” and “with a human Veh can indicate anger”.

The present analysis is based on the British National Corpus. Each example is tagged with a symbol identifying the text sample from which the respective example is taken.

In the verbal semantic structure, two sets of components (two semantic tiers) can be identified. The first, genetic tier incorporates features that pertain to the genesis of the movement. The physical tier incorporates features that pertain to the physical, spatio-temporal domain of the movement.

Let us first discuss the genetic tier. This tier represents the non-visible domain and includes two components responsible for triggering the bodily movement, namely, will and a certain psychosomatic state. The operation of will is, needless to say, excluded in the oscillatory movements of the *tremble/quiver* type. Strictly speaking, the movements are uncontrollable not only in their instigation phase but also in their course (the person can, naturally, be aware of the oscillations). Consider:

(1) Jessamy discovered that she had began to tremble. (H8F)

(2) He lay back in his chair limply, and felt himself begin to tremble. (HGG)

(3) And despite herself her lip quivered, and her face began to crumple. (HE)

(4) She trembled involuntarily when she saw him. (FRC)

(5) Again she found that she was quivering slightly as she studied the picture of Richard Parsons. (G0P)

In the following example the operation of control over the instigation phase (or over the course of the movement) is implied. This, however, does not run counter to our above observation that oscillatory movements under investigation are not subject to the operation of will. True enough, under certain conditions will may bring them under control but this does not recategorize the movements as voluntary because the movements are, strictly speaking, triggered not by will but by some (internal or external) cause. Will can only prevent the movements from occurring or, when they do occur, terminate their progression. Such cases are, indeed, very rare:

(6) Oliver nodded, trying hard not to tremble. (FRK)
Seemingly paradoxically, the possibility of combining the verbs with expressions unequivocally indicating the involuntary status of the movements serves as a signal that the movements may be, under certain circumstances, brought under control (see example (7)). In example (8) *almost* signals the presence of a certain, however low, degree of control over the movement:

(7) The next second David was on his feet, crossing to his grandmother, who was trembling uncontrollably. (JY0)

(8) She could feel her nipples hardening beneath the touch of his fingers, and her body trembled almost uncontrollably. (JXX)

In example (9) the linguistic presentation of the facts of reality is clearly marked (the person exerts full control over the instigation of the movement), and this serves a specific narrative purpose:

(9) “Stand still!” Not daring to tremble, she saw the point of his sword coming towards her heart, and, sure that this time she would die, closed her eyes. (FRE)

As far as the types of cause underlying the movement are concerned, they may be either internal or external. Internal causes (e.g., fear, agitation, excitement, anger, cold, happiness, etc.) typically represent psychosomatic states of the person as the bearer of the motion. As to the external causes (the causes operating outside the person), they may be the movements of an entity outside the person that set the body or its part(s) into oscillatory motion. Consider:

(10) The loose skin of Vologsky’s cheeks and lower chin quivered under the increasing pull of the G-force and his entire body seemed to take on a couple of stone in extra weight. (CDA)

The prevailing type of cause is, naturally, the internal one because the movements denoted by *tremble* and *quiver* most typically function as manifestations of the inner state of the person. It should be stressed in this connection that even when the two verbs are used in sentences where no explicit cause is stated, the cause is still there: it can be deduced, with a varying degree of certainty, from the context:

(11) She was trembling perhaps because she’d suddenly remembered that the origin of the toast she had just drunk lay in the Viking custom of saluting each other by drinking from the skulls of their enemies. (HA5)

(12) They had kissed and caressed, but it was deeply frustrating. Surkov’s hand trembled as he lit another cigarette. (AE0)

Even in contexts in which the concrete type of cause cannot be inferred, it is evident that the movements are underlain by some (even if not clearly specified) psychosomatic
states of the person. That is, the occurrence of the verb *per se* is indicative of a decidedly psychosomatic causation of the movement. Consider, e.g.:

(13) A splatter of sparks fell like miniature stars, the light flickered for a fraction of a second, hissed venomously, and then splat again into darkness and silence. He was trembling now, his back still against the door, his eyes searching for the ill-formed contours within the room. “Got a match?” he asked. (ADA)

(14) “My dear, I can’t tell you how sorry I am.” She quivered, then his gaze travelled past her, and she was unable to say with quick energy, “Daddy’ll climb right up again, he always does. He’s a brilliant player.” (G0S)

In the light of this, oscillatory movements denoted by the verbs under investigation have an indexical function in that they point to some (although sometimes not further specified) psychosomatic states of the person. It can thus be maintained that both the verbs serve an evaluative presentation of reality and as such may be labelled as *evaluative verbs*. The evaluative status of the verbs clearly shows itself in cases where one and the same oscillatory movement is referred to by two verbs: it may either be the combination of trembling plus shaking, or the combination of quivering plus shaking (in example (18) the participating entity is an animal):

(15) He quivered, very slightly, all over, as though he were perished with cold. He simply sat there, shaking. (G0Y)

(16) Frozen with horror, Moore moved slowly across the room. He began to shake and tremble. His strength left him, and he was unable to move a muscle. (H9U)

(17) The king was now leaning forward. Wolsey just quivered in terror, shaking like one of the jellies his chefs had so recently served us. (HH5)

(18) We dread having to take her to the vets for her nails to be cut. She quivers and shakes and is terrified of the surgery. (ACM)

As can be seen, shaking (which is used here as a neutral verb as to the specification of both the cause and the physical character of the movement) presents the oscillation as a mere (objective) fact, while trembling (or quivering) presents the oscillation as an outcome of some psychosomatic state, i.e. as its outward manifestation.

In this connection let us recall the fact mentioned above, namely, that the verbs under investigation are sometimes differentiated according to the type of causes they can be combined with. Leech (1983: 17) states that *tremble* and *quiver* are quasi-synonyms and differ in their, using Lyons’s terminology (cf. Lyons 1996: 62), “collocational range” (one trembles with fear but quivers with excitement). However, both *tremble* and *quiver* can combine with both the causes (so one can tremble with fear or excitement and quiver with fear or excitement):
(19) She found she was trembling not with fear but with excitement. (CKD)

Our search for the difference in the collocational range of the verbs has not brought any positive results since both the verbs can combine with the same set of causes (e.g., anger, excitement, indignation, cold). Consider:

(20) They trembled not from fear, but from anger and resentment which had built up rapidly in the 24 hours since he had heard [...] (CDA)

(21) Sally began to quiver with anger. (BMW)

(22) Richards was trembling with indignation. (HRA)

(23) Herr Nordern’s voice quivered with indignation. (A7A)

(24) Her thin arms trembled in the cold. (FRE)

(25) His face was dark, his fists were clenched, his body quivered with fury. (JY9)

(26) Lady Roscarrock was quivering with the rage of one who is certain she has God on her side. (EWH)

(27) Myles’ body was trembling with anger and outrage. (B1X)

(28) Sara’s legs were trembling with exhaustion by the time she reached the stables. (A0R)

(29) She was trembling with anger and tiredness. (HA5)

(30) Her chin trembled with anxiety and her big, blue eyes looked far beyond Henry and [...] (ASS)

(31) I could not like him, in fact my whole body trembled with disgust when he touched me, but I had to protect him. (FPU)

Although I have not found a single combination of the verb quiver with exhaustion, tiredness, anxiety or disgust in the British National Corpus, native speakers do allow such combinations.

It shows, then, that the type of cause underlying the two movements is not the feature that differentiates between the verbs and that such a feature must be sought in the physical domain of the movements. (This tentative observation is also corroborated by the fact that the two verbs may occur in sentences in which no cause is explicitly stated.)

The physical tier includes features that pertain to the physical (we may say ‘visible’) domain of the movement. The features specify spatio-temporal characteristics of the movement.
Let us first define the spatial attributes of the movements under investigation. The verbs *tremble* and *quiver* imply movements consisting of a number of kinetic phases. (I define ‘kinetic quantum’ in its minimum sense, i.e. as the distance between the successive points along the path. I define ‘kinetic phase’ as a sequence of kinetic quanta that follow linear progression, i.e. as a sequence of quanta without an implied reversal of direction.) As to the physical character of the kinetic phases, they are of a homogeneous character in that they follow a more or less strict linear course and are of the same, i.e. more or less regular, length. (Let me mention, for the sake of comparison, that the verb *twitch* may, under specific conditions, denote a special type of oscillatory movement which is marked by a slightly heterogeneous spatial progression.)

As far as the temporal attributes are concerned, the movements denoted by *tremble* and *quiver* involve (a) short temporal intervals both between individual kinetic quanta and between individual kinetic phases (i.e. the movements are ‘quick’) and (b) temporal regularity (time intervals are more or less the same). The latter feature excludes irregularity as implied in, e.g., the verb *twitch* mentioned above. The specification ‘slight movement’, which is often adduced as a constitutive lexico-semantic feature of the two verbs under investigation, is thus a composite term covering a short length of the phases and their quick progression. (Needless to say, the perception of the movements as ‘quick’ is also facilitated by their relatively homogeneous, i.e. ‘not ragged’, spatial progression.)

There is one more feature that characterizes the two movements, namely, their unbounded duration, i.e. an unlimited number of kinetic phases. This feature is, naturally, a result of the uncontrollable nature of the movements. We may thus say that the genetic tier shapes certain aspects of the physical tier, so the two tiers do not represent two autonomous functional domains.

The analysis of the physical domain performed up to this point has not revealed much with regard to our search for the feature differentiating between the two verbs. However, a closer analysis of sentences in which the verbs are used with the same cause shows that the two verbs imply a slight difference in the physical make-up of the movement (see especially examples (20)–(23) and (26)–(27)). Native speakers regard trembling, as opposed to quivering, as suggesting somewhat ‘more vigorous’ movements which are, at the same time, ‘more relaxed’. The specification ‘vigorous’ can be taken to indicate that the kinetic phases are slightly longer and the specification ‘more relaxed’ can be taken to indicate the absence of nervous tension in the participating body (parts). By contrast, quivering is described as ‘lighter and faster’. We would rather say that the kinetic phases are shorter and that this fact enhances the perception of the movement as quicker. (In other words, shorter distances that are traversed by the body or the body parts enhance the perception of the temporal intervals between the kinetic quanta and between the kinetic phases as shorter.)¹

Trembling, then, involves a more violent shaking than quivering. Trembling is thus typically accompanied by the modificants of the *violently* or *badly* type, whereas quivering is often used with the modificants *slightly* or *gently* or with the verb *seem*, which signals that the movement is so slight that it is difficult to discern (for example, one’s nostrils or

¹ It seems that the decision on speed is more dependent on what might be called subjective (less objective, perception-conditioned) evaluation than the decision on the length of the path. One might speculate that the two basic components associated with physical motion, namely, progression in time and progression in space, are hierarchically structured and that speed assumes a secondary status.
one’s nose may quiver but not tremble because these body parts cannot be reasonably conceived of as capable of more pronounced oscillations). 2

Examples with tremble:

(32) His hands trembled so violently that he was unable to bring it to his lips. (H84)

(33) The blood from my wound ran over my back and chest, and the knife seemed to burn like hot iron. But I was trembling so badly that it shook the knife out of my skin, and I could move again. (FSJ)

(34) “How very predictable you can be at times.” Robyn was trembling so hard that she could barely breathe. (HGT)

(35) “Take the soap and lather it up,” she hissed, standing, arms folded, in the doorway. I was trembling so much I kept dropping the soap but I did what she said. (HJC)

Examples with quiver:

(36) And now, her face straight, her lips seeming to quiver, she went into the song; and so beautiful was her rendering of it […] (CFY)

(37) She nodded doubtfully, and he leaned closer to kiss her. She quivered slightly at his touch. (FRS)

The presence of more forcible oscillations in trembling is also corroborated by the fact that when inanimate entities are involved, trembling denotes more vigorous movements than quivering:

(38) Where some of us stood watching, aghast and spell-bound by the burning horror, the ground trembled and surged violently to and fro. (CLX)

(39) They dropped the catch as the door quivered under an enormous blow, again and again […] (BPA)

(40) The aircraft quivered when it penetrated the thin layers of cloud in its path. (CKE)

Consider also example (41), in which both the verbs occur. Trembling clearly indicates a more pronounced oscillation than quivering (this goes hand in hand with the type of entity involved in the motion):

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2 On badly as a manner/degree specification see Johansson 1995.
Although he had defied her before, it had only been in words but now the thought that he had the choice of putting those words into action and so set a new pattern, and in doing so break one of the threads that tied him to her, caused his whole body to tremble and his voice to quiver as he said, “Either you give me […]” (CFY)

However, it might come as a surprise to learn that not only the verb *tremble* but also the verb *quiver* can combine with the modifiers *violently, badly or hard*, all of which denote forcible oscillations:

(41) Although he had defied her before, it had only been in words but now the thought that he had the choice of putting those words into action and so set a new pattern, and in doing so break one of the threads that tied him to her, caused his whole body to tremble and his voice to quiver as he said, “Either you give me […]” (CFY)

(42) As she laid her hand on the little mare’s neck, she quivered violently, but didn’t move away. (CA0)

(43) His feet began to tap more and more loudly beneath the desk and his jaw quivered more and more violently as Blanche put her side of the story and pleaded for more time to finish the investigation. (G15)

And, conversely, trembling can be presented as involving slight oscillations (note the use of *slightly)*:

(44) She tucked her dark blue silk scarf more securely into the neck of the beige jumper she wore under her thick tweed jacket. Her hand trembled slightly, a measure of her anxiety for this unpleasable child. (APU)

(45) And Clara, overcome by the wonderful, felicitous acceptability of his offer, an offer so familiar to her, so marvelously manageable, trembled only most slightly as she said, staring down at the limp arrangements of her hands, “Qui, surement.” (EFP)

Sometimes the oscillation in trembling is so slight that, as is sometimes the case in quivering, it is difficult to discern:

(46) They looked at the radio, as if it would tell them something, and then their cold eyes settled on Bruno, who was not laughing any more. In fact he was trembling like a leaf, but they didn’t seem to notice. (G3B)

(47) As Mrs Lee opened the fourth one she cried out, recognizing her daughter’s face. As her cry rent the air, Mr Lee gazed at his daughter’s eyes and murmured, “I fancied I saw them tremble”. Mrs Lee felt the body, which was still warm. (B0G)

It seems that our search for the feature differentiating the two verbs has not proved successful so far. However, a closer inspection reveals that a proper analysis should take into consideration both the inner state of the participating person (his/her body parts) and the physical character of the motion itself. First let us recall the fact mentioned above, namely,
that the connection between the cause and the movements denoted by *tremble* and *quiver* is very tight. In fact, it is so tight that the movements are virtually conditioned by the cause. This is not to say, however, that the operation of the cause is less pronounced in quivering than it is in trembling just because quivering implies less vigorous movements. On the contrary, fear as the cause of the movement may operate with the same force in both quivering and trembling (this is, in fact, the reason why native speakers do not see any difference in the character of fear when combined with *tremble* and with *quiver*). However, native speakers regard quivering as ‘less relaxed’ than trembling. This evaluation suggests that quivering is accompanied by some inner tension (inner strain) in the person. The inner tension may be either mental or physical but, in any case, it is this attribute that is the strongest candidate for the feature differentiating between trembling and quivering. Note, e.g., the use of *suspense* in the following example:

(48) “Give me the pen,” she whispered. Sam quivered with suspense. What was she going to do? (AEB)

The presence of inner tension in quivering explains why the kinetic phases are perceived as shorter and faster: forcible oscillations are impeded by inner tension. The absence of tension in trembling enables the entity to traverse longer distances (the oscillation then appears to be more vigorous). In other words, inner tension (inner strain) accounts for the difference in the physical make-up of the two types of motion.

Seemingly paradoxically, it also explains why the two verbs do not have to follow the usual physical pattern. We know already that under specific circumstances trembling and quivering indicate slight oscillations and forcible vibrations, respectively. In any case, the feature that differentiates the two movements is, again, the presence (in quivering) and the absence (in trembling) of some inner strain. When quivering is presented as very vigorous (cf. examples (42)–(43)), the operation of the cause is, due to the presence of inner strain, foregrounded. In other words, inner strain adds to the force of the cause. And, conversely, when trembling is presented as very slight (cf. examples (44)–(45)), the absence of inner strain diminishes the operation of the cause.

The following two examples serve as, to my mind convincing, evidence that the presence (absence) of inner strain is precisely the feature differentiating between the two verbs. Consider:

(49) They were all empty, but rows of Moi females were seated along the other walls, banging the gongs and drums. All were naked to the waist, and their bodies quivered and trembled rhythmically to the beat of their instruments. (FUB)

(50) The softly murmured name was like a hand stroking over her flesh. She started to tremble deep inside, a nervous quivering that was beyond her control. The tremors increased when fitzAlan crossed the room and hunkered down beside her stool. (HH1)
In either example the verbs refer to one and the same movement. In example (49), the verb *quiver* renders the oscillatory motion as accompanied by some inner strain and the subsequently used verb *tremble* characterizes the concrete physical properties of the movement. In example (50), the order is reversed: first the occurrence of some kind of (inner) oscillation is brought onto the scene and only then is the oscillation specified (in this case it is accompanied by inner strain). At this point of our discussion, one more thing deserves attention. The fact that *tremble* and *quiver* do not necessarily have to differ with regard to the physical, outwardly manifested attributes of the movement but differ in their reference to inner states accompanying the movement, further confirms that the verbs have a primarily evaluative status.

The fact that, in certain cases, the force of oscillation is irrelevant and that what matters is the implication of inner tension is evident in sentences with figurative uses of the verbs under investigation:

(51) “Marriage?” The question trembled on her tongue. “But you never got in touch […]” (HA5)

(52) I am afraid I did not pause to read my mother’s letter, but tore open the enclosure with spastic fingers. The words quivered on the page: “You will probably be surprised at this letter,” Leslie wrote. (AMC)

In both the examples the oscillatory movements indicate some kind of anticipation (or expectation), but the verb *quiver* (in example (52)) signals an additional feature, namely, the tension in the situation as felt by the person (note also the use of the expression *spastic* indicating the presence of inner tension).

Let us at this point come back to Leech’s observation mentioned above (cf. Leech 1983: 17), namely, that trembling collocates with fear and quivering collocates with excitement. Although, as we have seen, the two verbs may combine with either cause, Leech’s observation is justified on the grounds that the two causes may differ in their nature. This requires further clarification. As opposed to fear, excitement may be seen, by virtue of its nature, as more susceptible to be accompanied by some nervous strain, which facilitates its collocability with *quiver*. By the same token, fear, marked by the absence of inner tension, may be seen as more readily collocable with trembling. We should not forget, however, that neither trembling nor quivering relate to separate sets of causes and that the said collocability expresses no more than a mere tendency, underlain by the (possible but not necessary) compatibility of meaning.

It should also be noted that we cannot put an equation mark between inner tension and nervousness. This fact manifests itself not only in the collocability of *tremble* and *quiver* with expressions denoting nervousness but also in their collocability with pleasure, joy or happiness, i.e. with favourable states that might be devoid of nervous tension. Consider:

(53) She had bright, eager eyes like a bird, and her hands trembled nervously. She greeted Leithen warmly. (H9U)
(54) Beside him Ratagan was quivering like a nervous horse, his eyes on fire under the bristling brows, his hand clenched on the shaft of his axe. (GWF)

(55) The children like this part, when the mermaid comes back to life, they quiver with pleasure at the strong magic of it. (G0S)

(56) He loved his friend, the beauty of whose manly limbs made him tremble with pleasure. (A6D)

Oscillatory movements can be, by virtue of their nature, extended in time. Both *tremble* and *quiver* can thus occur both with the progressive (which profiles the temporal extension of the movement) and with the inchoative *begin* (which marks the onset of the movement). Consider for example:

(57) She was trembling now from head to foot. (CB5)

(58) Her voice was quivering beneath the pressure of tears. (H7A)

(59) He began to tremble as he stepped through the door and looked up at the dim stairway […] (ADA)

Since trembling is devoid of tension, it lends itself more readily to extension in time, cf. examples (60)–(63):

(60) In the near-total darkness Dong could not see the old coolie stretched out on the muddy floor beside them. He had been trembling violently for several hours but now no sound came from the place where he lay. (FU8)

(61) Or like Jenny’s mother, whose grey head trembled constantly, so that she reminded Winnie of a nodding Chinese doll she had owned as a child. (ASE)

(62) Oh, he was a man of great wealth but at night he would awake screaming about foul, bloody murder, his body coated in sweat. Sometimes he would tremble for at least an hour, but never once did he confide in me. (K95)

(63) Inside, she trembled continuously. (H94)

This is not to say, however, that trembling cannot be linguistically presented as covering a limited sequence of kinetic phases – see examples (64)–(66):

(64) Her lip trembled briefly as Tony hugged her and Maureen kissed her again before they left. (G16)

(65) She was holding herself so stiff that from time to time she trembled. (GWB)
(66) The sun trembled for an instant on the edge of the distant hills, then started to sink behind them. (H7W)

Tension as present in quivering naturally impedes the implication of considerable duration (I have not found a single combination of the verb quiver with a temporal specification of the type for several hours or constantly). Consider example (67), in which a bounded (though, of course, not precisely specified) sequence of kinetic phases is implied:

(67) Mrs Frizzel’s nose quivered as she caught the scent of change. (CDN)

It will have been noted that both tremble and quiver may occur both with the simple and with the progressive. The difference between the simple and the progressive is aspectual. The progressive form presents the oscillatory movement as more vivid. The upshot is that it drags, as it were, the hearer/reader into the situation. We might even say that the progressive serves an evaluative function: by profiling the progression of the movement it emphasises the oscillation and, in doing so, it enforces the forcible operation of the cause underlying the movement, cf.:

(68) “Look, I’m furious, I can barely contain my rage, every gram of flesh I have is quivering with anger. […]” (HWA)

The simple form, by contrast, presents the oscillatory movement as a fact that simply happened (although even here the ties of the movement with its cause are not loosened and the verb retains its evaluative status):

(69) His hands hung simply by his trouser pockets, ungloved, and Rudakov could see that they trembled. “More.” (CJT)

(70) “At least I won’t have to pawn myself every day to Hsiao Jen like this pig-brained cretin here!” Spatz trembled with rage. “Guards!” he yelled. (GUG)

Surprisingly enough, and contrary to the observations that the verbs do not occur in transitive constructions (cf. Levin 1993: 224 and Dixon 1991: 119), both the verbs can be employed in constructions in which the subject position is occupied by the cause and the object position by the person’s body or its parts:

(71) A slight smile quivered the ends of his mouth. (HGM)

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3 Needless to say, constructions with the causative make or cause are possible, too: Topaz gave him a smile which made him quiver pleasurably. (EVC)
Her schoolmaster father had been a disciplinarian who firmly believed that sparing the rod spoilt the child and whose memory caused many a local male heart to tremble. (ASE)
(72) [...] but Jane Ashton was now not only the first beautiful girl Killion had kissed good night, she was the first to kiss him in return, and kiss him as if she had a great deal to give as well as take. Even now the shock trembled him, and when she put her arm in his he was afraid to speak. (HRA)

(73) He rotated on his right heel and left toe and brought the left boot alongside the right with a delicate crash which trembled his pink jowls. (HRA)

The rare but possible formation of causative transitive constructions indicates that the facts of reality responsible for triggering the movements operate as direct causes, i.e. that they do not occupy a mere mediating position in a given causative chain.

The transitive construction, by placing the body (its part) in the object position, reinforces its passive, object-like interpretation. Although the affected status of the body (part) cannot be reasonably disputed, it is still impossible to form the passive (having, needless to say, a stative, resultative meaning): *His legs were trembled/quivered. This restriction results from the fact that the body (or its part) does not change its final localization, i.e. no displacement is involved. This is clearly reflected in the following example, in which ‘quivering’ is followed by ‘moving’:

(74) The bird, a small creature, abruptly fled. The thicket quivered, then moved. It dissolved into six human forms, each taking on the attributes of head and arms and limbs. (HTM)

There are signals that, in figurative use, the semantic content of certain verbs denoting bodily movements is recategorized. This fact, naturally, affects the verbs’ syntactic behaviour: the verbs can enter into syntactic constructions which are otherwise closed for them (cf. also Kudrnáčová 1996: 57). Due to their uncontrollable, nonvolitional nature, oscillatory movements of the kind discussed here do not occur in imperative sentences because, under standard circumstances, only those movements that are under the control of the agent can be commanded. Therefore, the imperative sentence “don’t tremble” in example (75) does not express a command (tremble is not used in its strictly physical sense), but a reassurance that the person need not be afraid (i.e. tremble is used here to refer to one’s inner state):

(75) Don’t tremble – for I am near. Come into my arms, darling. (CEV)

By way of concluding the paper, let me state the following. The analysis has shown that the two tiers (the genetic tier and the physical tier) as present in the semantic structures of the verbs tremble and quiver do not operate as autonomous domains. It has shown, furthermore, that the two tiers are not mere clusters of features but represent hierarchically ordered structures. The feature that is dominant in the genetic tier is the psychosomatic cause underlying the movement because it clearly overshadows the operation of will. The dominant position of the psychosomatic cause serves to corroborate the primarily evaluative status of the verbs. The feature that ranks highest in the physical domain is the inner strain: under standard circumstances (when quivering implies slighter oscillations than
trembling) it is this feature that decides on the physical make-up of the movement. When
the force of oscillation is irrelevant, it is the only feature that differentiates between the two
types of movement. The analysis has also pointed to certain aspects in the syntactic behav-
iour of the verbs under investigation that are a direct manifestation of their semantic struc-
tures.

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