

soul originating in it, causing [physical] strength to manifest itself. Again, when the color yellow is mingled with black, it acts as a stimulant, causing the production of phlegm, so that the soul's faculty of humility comes to the fore. A combination of black, red, yellow, and white reacts on the black gall and brings to the fore the soul's cowardice and sadness. Similarly, when the proportions in the mixture of these colors are increased or decreased, <317> corresponding effects are produced in the stimulation of the faculties of the soul.

The same applies to the single sound or musical intonation<sup>67</sup> or melody.<sup>68</sup> They arouse [in their simple state] only one of the impulses of the soul, and often their reaction upon the latter is injurious. When, however, they are blended together, they produce a harmonious effect on the emerging traits and faculties of the soul that make their appearance. Now it is necessary for thee to know what sort of impression they make individually because this, in turn, determines the effect they produce in combination.

Let me, therefore, say at this point that there are altogether eight distinct [rhythmic] modes,<sup>69</sup> each of which consists of measures derived from the beating.<sup>70</sup> The measure of the first of these modes is composed of three consecutive beats<sup>71</sup> and one quiescent<sup>72</sup> [beat].

The second, again, [is made up of] three consecutive beats<sup>71</sup> and one quiescent and one audible<sup>73</sup> [beat]. Both these modes stimulate the force of the blood and arouse the impulse to rule and dominate.

The measure of the third [mode] is composed of two consecutive beats, not separated by the time of a beat,<sup>74</sup> followed by a

67. Cf. Henry George Farmer, *Sādyyah Gaon on the Influence of Music* (London, 1943), p. 32.

68. "melody"—the Arabic text reads "melodies," which should, however, be emended as Farmer (*ibid.*) suggests.

69. Cf. *idem*, p. 31, literally "melodies."

70. "beating" literally "intoning" Cf. *idem*, pp. 30 ff.

71. "beats, literally "notes." Cf. *idem*, pp. 30 and 78 ff.

72. "quiescent"—cf. *idem*, p. 78 for the meaning.

73. "audible"—cf. *ibid.* for the meaning.

74. "beat." Cf. above, n. 71.

solitary<sup>75</sup> beat. Between the downward and upward strokes [of the plectrum<sup>76</sup> and the upward]<sup>77</sup> and downward stroke, moreover, is the time of a beat.<sup>78</sup> This one mode reacts on the yellow gall and thus arouses man's courage and boldness and the like.

The measure of the fourth [mode] consists of three consecutive beats<sup>79</sup> which are not separated from each other by the time of a beat,<sup>79</sup> although there is such an interval between each three beats.<sup>79</sup> This mode alone stimulates the production of phlegm and brings to the fore the soul's potentiality for baseness, submissiveness, cowardice, and the like.

The measure of the fifth [mode] is made up of a solitary beat,<sup>80</sup> followed by two consecutive<sup>81</sup> [beats] which are not separated by the interval of a beat.<sup>82</sup> Also between [the downward and upward stroke of the plectrum and] the upward and downward stroke<sup>83</sup> is the time of a beat.<sup>84</sup>

The measure of the sixth [mode] consists of three audible beats.<sup>85</sup>

The measure of the seventh is composed of two consecutive beats<sup>86</sup> that are not separated by the interval of a beat.<sup>87</sup> Between each two of these beats,<sup>88</sup> however, is the time of a beat.<sup>89</sup>

The measure of the eighth, finally, is composed of two consecu-

75. "solitary," so according to Farmer, *op. cit.*, p. 35, on the basis of the parallel of al-Kindi. Landauer's text and the two Hebrew versions read "quiescent."

76. Cf. *idem*, p. 82.

77. Cf. *idem*, p. 31.

78. Cf. above, n. 71.

79. Cf. above, n. 71.

80. "beat," Cf. above, n. 71.

81. "consecutive," so according to al-Kindi. Cf. Farmer, *op. cit.*, pp. 31 and 36. Our text reads "separate."

82. Cf. above, n. 71.

83. "downward . . . downward stroke." This is the correction suggested by Farmer, *op. cit.*, p. 36. The text reads: "upward and downward stroke." Cf. also above, n. 76.

84. Cf. n. 71.

85. Cf. above, n. 71.

86. Cf. above, n. 71.

87. Cf. above, n. 71.

88. Cf. above, n. 71.

89. Cf. above, n. 71.